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INVESTING IN THE UNITS INVOLVES RISKS AND YOU SHOULD CAREFULLY CONSIDER THE RISKS DESCRIBED IN THE SECTION ENTITLED “RISK FACTORS” AS WELL AS INFORMATION CONTAINED ELSEWHERE IN THE ATTACHED PRELIMINARY PLACEMENT DOCUMENT BEFORE MAKING AN INVESTMENT DECISION.

Confirmation of Your Representation: You are accessing the attached Preliminary Placement Document on the basis that you have confirmed your representation, agreement and acknowledgement to each of the Investment Manager, the Sponsor, IndiGrid, the Trustee, Edelweiss Financial Services Limited, Axis Capital Limited and Citigroup Global Markets India Private Limited (the “**Global Co-ordinators and Book Running Lead Managers**”) and IndusInd Bank Limited (the “**Book Running Lead Manager**” and collectively with the Global Co-ordinators and Book Running Lead Managers, the “**Lead Managers**”) that (1) (i) you are not resident in the United States, as defined in Regulation S under the U.S. Securities Act of 1933, as amended (the “**Securities Act**”) and, to the extent you subscribe to or purchase the Units described in the attached Preliminary Placement Document, you will be doing so in an offshore transaction pursuant to Regulation S under the Securities Act; OR (ii) you are acting on behalf of, or you are, a qualified institutional buyer as defined in Rule 144A under the Securities Act; AND (2) you consent to delivery of the attached Preliminary Placement Document and any amendments or supplements thereto by electronic transmission.

The attached Preliminary Placement Document has been made available to you in electronic form. You are reminded that documents transmitted through this medium may be altered or changed during the process of transmission and consequently none of IndiGrid, the Investment Manager, the Sponsor, the Trustee and the Lead Managers or any of their respective directors, officers, employees, agents, representatives or affiliates accepts any liability or responsibility whatsoever in respect of any discrepancies between the Preliminary Placement Document distributed to you in electronic form and the physical copy. We will provide a physical copy to you upon request.

Restrictions: The attached Preliminary Placement Document is being furnished in connection with an offering exempt from registration under the Securities Act solely for the purpose of enabling you, as a Bidder, to consider the subscription to or purchase of the Units described in the Preliminary Placement Document. An investment decision should only be made on the basis of the Preliminary Placement Document. In making an investment decision, investors must rely on their own examination of the merits and risks involved. No representation or warranty, express or implied is made or given by or on behalf of any of the Lead Managers named herein, or any person who controls it or any director, officer, employee, agent or representative of it or affiliate of such person as to the accuracy, completeness or fairness of the information or opinions contained in the Preliminary Placement Document and such persons do not accept responsibility or liability for any such information or opinions.

THE UNITS HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE SECURITIES ACT, OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

Except with respect to eligible investors in jurisdictions where such issue is permitted by law, nothing in this electronic transmission constitutes an offer or an invitation or solicitation by or on behalf of either IndiGrid or the Investment Manager or the Sponsor or any of the Lead Managers to subscribe to or purchase, the Units described therein, and access has been limited so that it shall not constitute a general advertisement or solicitation in the United States or elsewhere. If a jurisdiction requires that the offering be made by a licensed broker or dealer and the Lead Managers or any of their affiliates is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by Lead Managers or their eligible affiliates on behalf of IndiGrid in such jurisdiction.

You are reminded that you have accessed the attached Preliminary Placement Document on the basis that you are a person into whose possession the Preliminary Placement Document may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located and you may not and you are not authorized to deliver or forward this document, electronically or otherwise, to any other person, other than to our affiliates and our and their respective members, directors, officers, employees, agents, advisors and funding sources (on a need to know basis). The materials relating to the offering of Units referred to in this Preliminary Placement Document do not constitute, and may not be used in connection with, an offer, invitation to offer or solicitation in any place where offers, invitations to offer or solicitations are not permitted by law. If you have gained access to this transmission contrary to the foregoing restrictions, you will be unable to subscribe to or purchase the Units described therein.

This e-mail and the attached Preliminary Placement Document are intended only for use by the addressee named herein and may contain legally privileged and/or confidential information. If you are not the intended recipient of this e-mail or the attached Preliminary Placement Document, you are hereby notified that any dissemination, distribution or copying of this e-mail or the attached Preliminary Placement Document is strictly prohibited. If you have received this e-mail and the attached Preliminary Placement Document in error, please immediately notify us by reply e-mail and destroy any printouts of the e-mail and this Preliminary Placement Document.

Actions that You May Not Take: You should not reply by e-mail to this announcement, and you may not subscribe to or purchase any Units by doing so. Any reply e-mail communications, including those you generate by using the “Reply” function on your e-mail software, will be ignored, rejected or deleted, except as specified above.

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(Registered in the Republic of India as an irrevocable trust under the Indian Trusts Act, 1882, on October 21, 2016, and as an infrastructure investment trust under the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014, on November 28, 2016, having registration number IN/InvIT/16-17/0005 at New Delhi)

Principal Place of Business: F-1, The Mira Corporate Suites, 1 & 2, Ishwar Nagar, Mathura Road, New Delhi 110 065
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E-mail: complianceofficer@indigrid.co.in; **Website:** www.indigrid.co.in



Issue of up to [●] units of India Grid Trust (“IndiGrid” and such units, the “Units”), at a price of ₹ [●] per Unit (the “Issue Price”), aggregating to approximately ₹ 25,600 million (the “Issue”).

PREFERENTIAL ISSUE IN RELIANCE UPON REGULATION 14(4)(b) OF THE SECURITIES AND EXCHANGE BOARD OF INDIA (INFRASTRUCTURE INVESTMENT TRUSTS) REGULATIONS, 2014, AS AMENDED, INCLUDING THE SEBI CIRCULAR DATED JUNE 5, 2018 ON GUIDELINES FOR PREFERENTIAL ISSUE OF UNITS BY INFRASTRUCTURE INVESTMENT TRUSTS (COLLECTIVELY, THE “INVIT REGULATIONS”)

IndiGrid’s outstanding Units are listed on BSE Limited (“BSE”) and National Stock Exchange of India Limited (“NSE”, together with BSE, the “Stock Exchanges”). The closing price of the outstanding Units on BSE as on April 25, 2019 was ₹ 84.35 and NSE as on April 26, 2019 was ₹ 82.01 per Unit, respectively. IndiGrid has received in-principle approvals for listing of the Units to be issued pursuant to the Issue, from BSE and NSE on April 30, 2019 and April 30, 2019, respectively. IndiGrid shall make applications to the Stock Exchanges for obtaining final listing and trading approvals for the Units to be issued pursuant to the Issue. The Stock Exchanges assume no responsibility for the correctness of any statements made, opinions expressed or reports contained herein. Admission of the Units to be issued pursuant to the Issue for trading on the Stock Exchanges should not be taken as an indication of the merits of IndiGrid or the Units.

INDIGRID HAS PREPARED THIS PRELIMINARY PLACEMENT DOCUMENT SOLELY FOR PROVIDING INFORMATION IN CONNECTION WITH THE PROPOSED ISSUE.

A copy of this Preliminary Placement Document and the Placement Document shall be delivered to the Stock Exchanges and a copy of the Placement Document shall be filed with Securities and Exchange Board of India (the “SEBI”). This Preliminary Placement Document has not been, and will not be, reviewed by the SEBI, the Stock Exchanges or any other regulatory or listing authority, and is intended only for use by Institutional Investors (as defined hereinafter). This Preliminary Placement Document has not been, and shall not be, registered as a prospectus and, shall not be circulated or distributed to the public in India or any other jurisdiction. The Issue shall not constitute a public offer in India or any other jurisdiction.

THE ISSUE AND DISTRIBUTION OF THIS PRELIMINARY PLACEMENT DOCUMENT IS BEING MADE TO INSTITUTIONAL INVESTORS IN RELIANCE UPON THE INVIT REGULATIONS AND THE RULES AND CIRCULARS PRESCRIBED THEREUNDER. THIS PRELIMINARY PLACEMENT DOCUMENT IS PERSONAL TO EACH BIDDER AND DOES NOT CONSTITUTE AN OFFER OR INVITATION OR SOLICITATION OF AN OFFER TO THE PUBLIC OR TO ANY OTHER BIDDER OR CLASS OF INVESTORS WITHIN OR OUTSIDE INDIA OTHER THAN INSTITUTIONAL INVESTORS.

YOU MAY NOT AND ARE NOT AUTHORISED TO: (1) DELIVER THIS PRELIMINARY PLACEMENT DOCUMENT TO ANY OTHER PERSON; OR (2) REPRODUCE THIS PRELIMINARY PLACEMENT DOCUMENT IN ANY MANNER WHATSOEVER; OR (3) RELEASE ANY PUBLIC ADVERTISEMENTS OR UTILISE ANY MEDIA, MARKETING OR DISTRIBUTION CHANNELS OR AGENTS TO INFORM THE PUBLIC AT LARGE ABOUT THE ISSUE. ANY DISTRIBUTION OR REPRODUCTION OF THIS PRELIMINARY PLACEMENT DOCUMENT IN WHOLE OR IN PART IS UNAUTHORISED. FAILURE TO COMPLY WITH THIS INSTRUCTION MAY RESULT IN A VIOLATION OF THE INVIT REGULATIONS OR OTHER APPLICABLE LAWS OF INDIA AND OF OTHER JURISDICTIONS.

INVESTMENTS IN UNITS INVOLVE A HIGH DEGREE OF RISK AND BIDDERS SHOULD NOT INVEST IN THE ISSUE UNLESS THEY ARE PREPARED TO TAKE THE RISK OF LOSING ALL OR PART OF THEIR INVESTMENT. BIDDERS ARE ADVISED TO CAREFULLY READ THE SECTION ENTITLED “RISK FACTORS” ON PAGE 58 BEFORE MAKING AN INVESTMENT DECISION RELATING TO THE ISSUE. EACH BIDDER IS ADVISED TO CONSULT ITS OWN ADVISORS ABOUT THE CONSEQUENCES OF AN INVESTMENT IN THE UNITS ISSUED PURSUANT TO THIS PRELIMINARY PLACEMENT DOCUMENT AND THE PLACEMENT DOCUMENT.

Invitation for subscription, offers and sales of Units to be issued pursuant to the Issue shall only be made pursuant to this Preliminary Placement Document, together with the Application Form, the Placement Document and the Confirmation of Allocation Note (each as defined herein). For further details, please see the section entitled “Issue Information” on page 252. The distribution of this Preliminary Placement Document or the disclosure of its contents without IndiGrid’s prior consent to any person other than Institutional Investors and persons retained by Institutional Investors to advise them with respect to their subscription to or purchase of Units is unauthorised and prohibited. Each Bidder, by accepting delivery of this Preliminary Placement Document, agrees to observe the foregoing restrictions and to make no copies of this Preliminary Placement Document or any documents referred to in this Preliminary Placement Document.

The Units have not been, and will not be registered under the U.S. Securities Act of 1933, as amended (the “Securities Act”) and may not be offered or sold within the United States or to, or for the account except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and applicable state securities laws. Accordingly, the Units are being offered and sold (a) in the United States to, or for the account or benefit of, “qualified institutional buyers” (as defined in Rule 144A under the Securities Act (“Rule 144A”) and referred to in this Preliminary Placement Document as “U.S. QIBs”) in transactions exempt from or not subject to the registration requirements of the Securities Act and (b) outside the United States in offshore transactions, in reliance on Regulation S under the Securities Act and the applicable laws of the jurisdictions where those offers and sales occur. The Units are transferable only in accordance with the restrictions described under the sections entitled “Selling Restrictions” and “Transfer Restrictions” on pages 262 and 267, respectively.

Except as stated in this Preliminary Placement Document, the information on the website of IndiGrid or any website directly or indirectly linked to the website of IndiGrid, or on the respective websites of the Investment Manager, Trustee, Sponsor and Lead Managers (as defined hereinafter) or of their respective affiliates, does not form part of this Preliminary Placement Document and Bidders should not rely on any such information contained in or available through any such websites for their investment in this Issue.

This Preliminary Placement Document is dated April 30, 2019.

GLOBAL CO-ORDINATORS AND BOOK RUNNING LEAD MANAGERS		
 Edelweiss Financial Services Limited	 Axis Capital Limited	 Citigroup Global Markets India Private Limited
 IndusInd Bank Limited		

The information in this Preliminary Placement Document is not complete and may be changed. The Issue is meant only for Institutional Investors under the InvIT Regulations and the SEBI Preferential Issue Guidelines on a private placement basis and is not an offer to the public or to any other class of investors to purchase the Units. This Preliminary Placement Document is not an offer to subscribe to or buy the Units in any jurisdiction where such offer, solicitation, sale or subscription is not permitted. This Preliminary Placement Document is being issued for the sole purpose of information or discussion relating to the Units may be Allotted pursuant to the Placement Document.

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NOTICE TO INVESTORS

The statements contained in this Preliminary Placement Document relating to IndiGrid and this Issue are, in all material respects, true and accurate and not misleading, and the opinions and intentions expressed in this Preliminary Placement Document with regard to IndiGrid and this Issue are honestly held, have been reached after considering all relevant circumstances and are based on reasonable assumptions and information presently available to the Investment Manager and the Sponsor. There are no material facts in relation to IndiGrid and this Issue, the omission of which would, in the context of the Issue, make any statement in this Preliminary Placement Document misleading in any material respect. Further, the Investment Manager and the Sponsor have made all reasonable enquiries to ascertain such facts and to verify the accuracy of all such information and statements.

Edelweiss Financial Services Limited, Axis Capital Limited and Citigroup Global Markets India Private Limited (collectively, the “**Global Co-ordinators and Book Running Lead Managers**”) and IndusInd Bank Limited (the “**Book Running Lead Manager**”, and collectively with the Global Co-ordinators and Book Running Lead Managers, the “**Lead Managers**”) have not separately verified all of the information contained in this Preliminary Placement Document (financial, legal or otherwise). Accordingly, none of the Lead Managers and their respective shareholders, employees, counsel, officers, directors, representatives, agents, associates or affiliates make any express or implied representation, warranty or undertaking, and no responsibility or liability is accepted by the Lead Managers or any of their respective shareholders, employees, counsel, officers, directors, representatives, agents, associates or affiliates as to the accuracy or completeness of the information contained in this Preliminary Placement Document or any other information supplied in connection with the Issue or subscription to the Units. The delivery of this Preliminary Placement Document at any time does not imply that the information contained in it is correct as of any time subsequent to its date.

No person is authorized to give any information or to make any representation not contained in this Preliminary Placement Document and any information or representation not so contained must not be relied upon as having been authorized by, or on behalf of, IndiGrid, the Investment Manager, the Sponsor or the Lead Managers.

The Units to be issued pursuant to the Issue have not been approved, disapproved or recommended by the U.S. Securities and Exchange Commission, any other federal or state authorities in the United States or the securities authorities of any non-U.S. jurisdiction or any other U.S. or non-U.S. regulatory authority. No authority has passed on, or endorsed, the merits of the Issue or the accuracy or adequacy of This Preliminary Placement Document. Any representation to the contrary is a criminal offence in the United States and may be a criminal offence in other jurisdictions.

Within the United States, this Preliminary Placement Document is being provided only to persons who are U.S. QIBs. Distribution of this Preliminary Placement Document to any person other than the offeree specified by the Lead Managers or their respective representatives, and those persons, if any, retained to advise such offeree with respect thereto, is unauthorised, and any disclosure of its contents, without prior written consent of IndiGrid, is prohibited. Any reproduction or distribution of this Preliminary Placement Document in the United States, in whole or in part, and any disclosure of its contents to any other person is prohibited. The communication of this Preliminary Placement Document and any other document or materials relating to the issue of the Units offered hereby is not being made, and such documents or materials have not been approved, by an authorised person for the purposes of section 21 of the United Kingdom’s Financial Services and Markets Act 2000, as amended (the “**FSMA**”). Accordingly, such documents and/ or materials are not being distributed to, and must not be passed on to, the general public in the United Kingdom. The communication of such documents and/ or materials as a financial promotion is only being made to those persons in the United Kingdom falling within the definition of investment professionals (as defined in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the “**Financial Promotion Order**”), or within Article 49(2)(a) to (d) of the Financial Promotion Order, or to any other persons to whom it may otherwise lawfully be made under the Financial Promotion Order (all such persons together being referred to as “**relevant persons**”). In the United Kingdom, the Units offered hereby are only available to, and any investment or investment activity to which this Preliminary Placement Document relates will be engaged in only with, relevant persons. Any person in the United Kingdom that is not a relevant person should not act or rely on this Preliminary Placement Document or any of its contents.

The distribution of this Preliminary Placement Document or the disclosure of its contents without the prior consent of the Investment Manager and the Sponsor to any person, other than Institutional Investors specified by the Lead Managers or their representatives, and those retained by such Institutional Investors to advise them with respect to their subscription to Units is unauthorized and prohibited. Each Bidder, by accepting delivery of this

Preliminary Placement Document, agrees to observe the foregoing restrictions and to make no copies of this Preliminary Placement Document or any documents referred to in this Preliminary Placement Document.

The distribution of this Preliminary Placement Document and the issue of Units may be restricted in certain jurisdictions by applicable laws. As such, this Preliminary Placement Document does not constitute, and may not be used for, or in connection with, an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorised or to any person to whom it is unlawful to make such offer or solicitation. In particular, no action has been taken by IndiGrid, the Trustee, the Investment Manager, the Sponsor or the Lead Managers which would permit an offering of the Units or distribution of this Preliminary Placement Document in any jurisdiction, other than India, where action for that purpose is required. Accordingly, the Units may not be offered or sold, directly or indirectly, and neither this Preliminary Placement Document, nor any offering material in connection with the Units may be distributed or published in or from any country or jurisdiction, except under circumstances that will result in compliance with any applicable rules and regulations of any such country or jurisdiction. For further details, please see the section entitled “*Selling Restrictions*” on page 262.

NOTICE TO BIDDERS IN THE UNITED STATES

The Units have not been recommended by any U.S. federal or state securities commission or regulatory authority. Furthermore, the foregoing authorities have not confirmed the accuracy or determined the adequacy of this Preliminary Placement Document or approved or disapproved the Units. Any representation to the contrary is a criminal offence in the United States. In making an investment decision, Bidders must rely on their own examination of IndiGrid and the terms of the Issue, including the merits and risks involved. The Units have not been and will not be registered under the Securities Act or any other applicable law of the United States and, unless so registered, may not be offered or sold within the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and applicable U.S. state securities laws. Accordingly, the Units are being offered and sold (a) in the United States only to U.S. QIBs in transactions exempt from the registration requirements of the Securities Act and (b) outside the United States in offshore transactions in reliance on Regulation S and the applicable laws of the jurisdiction where those offers and sales occur. The Units are transferable only in accordance with the restrictions described in the sections entitled “*Selling Restrictions*” and “*Transfer Restrictions*” on pages 262 and 267, respectively.

NOTICE TO BIDDERS IN THE EUROPEAN ECONOMIC AREA

This Preliminary Placement Document has been prepared on the basis that all offers of the Units will be made pursuant to an exemption under the Prospectus Directive, as implemented in Member States of the European Economic Area (“**EEA**”), from the requirement to produce a prospectus for offers of Units. The expression “*Prospectus Directive*” means Directive 2003/71/EC of the European Parliament and Council EC (and amendments thereto, including the 2010 PD Amending Directive and Prospectus Regulation (EU) 2017/1129, to the extent applicable and to the extent implemented in the Relevant Member State (as defined below)) and includes any relevant implementing measure in each Member State that has implemented the Prospectus Directive (each a “**Relevant Member State**”). Accordingly, any person making or intending to make an offer within the EEA of Units which are the subject of the placement contemplated in this Preliminary Placement Document should only do so in circumstances in which no obligation arises for IndiGrid or any of the Lead Managers to produce a prospectus for such offer. None of IndiGrid, the Trustee, the Investment Manager, the Sponsor and the Lead Managers have authorized, nor do they authorize, the making of any offer of the Units through any financial intermediary, other than the offers made by the Lead Managers which constitute the final placement of the Units contemplated in this Preliminary Placement Document.

INDIGRID WILL CONSTITUTE AN ALTERNATIVE INVESTMENT FUND FOR THE PURPOSE OF THE EUROPEAN UNION DIRECTIVE ON ALTERNATIVE INVESTMENT FUND MANAGERS (DIRECTIVE 2011/61/EU) (“**AIFMD**”). THE ALTERNATIVE INVESTMENT FUND MANAGER (THE “**AIFM**”) OF INDIGRID WILL BE THE INVESTMENT MANAGER.

UNITS MAY ONLY BE MARKETED TO BIDDERS WHICH ARE RESIDENT, DOMICILED OR HAVE A REGISTERED OFFICE IN A EEA MEMBER STATE (“**EEA MEMBER STATE**”) IN WHICH THE MARKETING OF UNITS HAS BEEN REGISTERED OR AUTHORIZED (AS APPLICABLE) UNDER THE RELEVANT NATIONAL IMPLEMENTATION OF ARTICLE 42 OF AIFMD, AND IN SUCH CASES, ONLY TO EEA PERSONS WHICH ARE “**PROFESSIONAL INVESTORS**” OR ANY OTHER CATEGORY OF PERSON TO WHICH SUCH MARKETING IS PERMITTED UNDER THE NATIONAL LAWS OF SUCH EUROPEAN ECONOMIC AREA MEMBER STATE (EACH AN “**EEA PERSON**”). THIS PRELIMINARY PLACEMENT DOCUMENT IS NOT INTENDED FOR, SHOULD NOT BE RELIED ON BY AND SHOULD

NOT BE CONSTRUED AS AN OFFER (OR ANY OTHER FORM OF MARKETING) TO ANY OTHER EEA PERSON.

A “PROFESSIONAL INVESTOR” FOR THE PURPOSES OF AIFMD IS AN INVESTOR WHO IS CONSIDERED TO BE A PROFESSIONAL CLIENT OR WHICH MAY, ON REQUEST, BE TREATED AS A PROFESSIONAL CLIENT WITHIN THE RELEVANT NATIONAL IMPLEMENTATION OF ANNEX II OF DIRECTIVE 2004/39/EC (MARKETS IN FINANCIAL INSTRUMENTS DIRECTIVE).

THE JURISDICTIONS IN WHICH THE INVESTMENT MANAGER OR INDIGRID HAVE BEEN REGISTERED OR AUTHORIZED (AS APPLICABLE) UNDER ARTICLE 42 OF AIFMD ARE LIMITED TO LUXEMBOURG, IRELAND AND THE UNITED KINGDOM. AS THE INVESTMENT MANAGER HAS NOT BEEN REGISTERED OR APPROVED IN ANY OTHER EEA MEMBER STATE TO MARKET UNITS, INDIGRID IS NOT BEING MARKETED TO ANY EEA PERSON AT SUCH DATE IN ANY OTHER EEA MEMBER STATE. TO THE EXTENT THAT AN AFFILIATE OF THE INVESTMENT MANAGER PROMOTES THE TRUST IN AN EEA MEMBER STATE, THEN SUCH PROMOTION IS BEING UNDERTAKEN FOR AND ON BEHALF OF THE INVESTMENT MANAGER IN SUCH CAPACITY.

Information to Distributors

Solely for the purposes of the product governance requirements contained within: (a) EU Directive 2014/65/EU on markets in financial instruments, as amended (“**MiFID II**”); (b) Articles 9 and 10 of Commission Delegated Directive (EU) 2017/593 supplementing MiFID II; and (c) local implementing measures (together, the “**MiFID II Product Governance Requirements**”), and disclaiming all and any liability, whether arising in tort, contract or otherwise, which any “manufacturer” (for the purposes of the MiFID II Product Governance Requirements) may otherwise have with respect thereto, the Units have been subject to a product approval process, which has determined that such Units are: (i) compatible with an end target market of retail investors and investors who meet the criteria of professional clients and eligible counterparties, each as defined in MiFID II; and (ii) eligible for distribution through all distribution channels as are permitted by MiFID II (the “**Target Market Assessment**”). Notwithstanding the Target Market Assessment, “distributors” (for the purposes of the MiFID II Product Governance Requirements) (“**Distributors**”) should note that: the price of the Units may decline and investors could lose all or part of their investment; the Units offer no guaranteed income and no capital protection; and an investment in the Units is compatible only with investors who do not need a guaranteed income or capital protection, who (either alone or in conjunction with an appropriate financial or other adviser) are capable of evaluating the merits and risks of such an investment and who have sufficient resources to be able to bear any losses that may result therefrom. The Target Market Assessment is without prejudice to the requirements of any contractual, legal or regulatory selling restrictions in relation to the Issue.

For the avoidance of doubt, the Target Market Assessment does not constitute: (a) an assessment of suitability or appropriateness for the purposes of MiFID II; or (b) a recommendation to any investor or group of investors to invest in, or purchase, or take any other action whatsoever with respect to the Units. Each Distributor is responsible for undertaking its own target market assessment in respect of the Units and determining appropriate distribution channels.

Disclaimer of the Stock Exchanges

As required, a copy of this Preliminary Placement Document has been submitted to each of the Stock Exchanges. The Stock Exchanges do not in any manner:

1. warrant, certify or endorse the correctness or completeness of the contents of this Preliminary Placement Document;
2. warrant that the Units will be listed or will continue to be listed on the Stock Exchanges; or
3. take any responsibility for the financial or other soundness of IndiGrid, its Sponsor, Trustee, Investment Manager, Project Manager or any project of IndiGrid,

and it should not for any reason be deemed or construed to mean that this Preliminary Placement Document has been cleared or approved by the Stock Exchanges. Every person who desires to apply for or otherwise acquire any Units may do so pursuant to an independent inquiry, investigation and analysis and shall not have any claim against the Stock Exchanges whatsoever, by reason of any loss which may be suffered by such person consequent to or in connection with, such subscription or acquisition, whether by reason of anything stated or omitted to be

stated herein, or for any other reason whatsoever.

Each Bidder of the Units in the Issue is deemed to have acknowledged, represented and agreed that it is an Institutional Investor as defined in Regulation 2(1)(ya) of the InvIT Regulations and is eligible to invest in India and in the Units under Indian laws, including the InvIT Regulations and is not prohibited by SEBI or any other regulatory authority from buying, selling or dealing in securities and Units. Each Bidder also acknowledges that it has been afforded an opportunity to request and review information pertaining to the Trust and the Units.

This Preliminary Placement Document contains summaries of certain terms of certain documents, which are qualified in their entirety by the terms and conditions of such documents and disclosures included in the section entitled "*Risk Factors*" on page 58.

Except as stated in this Preliminary Placement Document, the information on the website of IndiGrid or any website directly or indirectly linked to the website of IndiGrid, or on the respective websites of the Investment Manager, Trustee, Sponsor and Lead Managers or of their respective affiliates, does not form part of this Preliminary Placement Document and Bidders should not rely on any such information contained in or available through any such websites for their investment in this Issue.

REPRESENTATIONS BY INVESTORS

References herein to “you” or “your” is to the Bidders in the Issue.

By bidding for and/or subscribing to, any Units in the Issue, you are deemed to have represented, warranted, and acknowledged to and agreed to IndiGrid, the Investment Manager, Sponsor, Trustee and the Lead Managers, as follows, as on the date of this Preliminary Placement Document:

- You are an ‘Institutional Investor’ as defined in Regulation 2(1)(ya) of the InvIT Regulations, and undertake to acquire, hold, manage or dispose of any Units that are Allocated to you in accordance with the InvIT Regulations, and all other applicable laws, including any reporting obligations with respect to the Units;
- You are eligible to invest in India and in the units of IndiGrid under applicable laws, including the FEMA Regulations and have not been prohibited by the SEBI, RBI or any other regulatory authority from buying, selling or dealing in securities or Units or otherwise accessing the capital markets in India;
- You will make all necessary filings with appropriate regulatory authorities, including the RBI, as required pursuant to applicable laws;
- If you are Allotted Units pursuant to the Issue, you shall not, for a period of one year from the date of Allotment, sell the Units so acquired except on the floor of the Stock Exchanges. Please note additional restrictions apply if you are in the United States. For details, please see the section entitled “*Transfer Restrictions*” on page 262;
- You have made, or are deemed to have made, as applicable, the representations, warranties, acknowledgements and undertakings detailed in the sections entitled “*Selling Restrictions*” and “*Transfer Restrictions*” on pages 262 and 267 respectively;
- You are aware that this Preliminary Placement Document has not been, and will not be, registered as a prospectus under any law in force in India. You are aware that this Preliminary Placement Document has not been reviewed, verified or affirmed by the RBI, the SEBI, the Stock Exchanges or any other regulatory authority and is intended only for use by Institutional Investors;
- This Preliminary Placement Document shall be delivered to the Stock Exchanges, and the Placement Document shall be delivered to the Stock Exchanges and filed with SEBI, in each case, for record purposes only and this Preliminary Placement Document and the Placement Document will be displayed on the websites of IndiGrid and the Stock Exchanges with a disclaimer to the effect that it is connection with a preferential issue and that no offer to the public is being made to the public or any other investor;
- You are entitled to subscribe to, and acquire, the Units to be issued pursuant to the Issue, under the laws of all relevant jurisdictions that apply to you, and you have: (i) complied with such laws; (ii) the necessary capacity; and (iii) obtained all necessary consents, governmental or otherwise, and authorisations and complied with all necessary formalities, to enable you to commit to participation in the Issue and to perform your obligations in relation thereto (including, without limitation, in the case of any person on whose behalf you are acting, all necessary consents and authorisations to agree to the terms set out or referred to in this Preliminary Placement Document), and will honour such obligations;
- Neither IndiGrid, the Trustee, the Investment Manager, the Sponsor nor the Lead Managers or any of their respective shareholders, directors, officers, employees, counsels, representatives, agents, associates, or affiliates is making any recommendations to you or advising you regarding the suitability of the Issue and your participation in the Issue is on the basis that you are not, and will not, up to the Allotment, be a client of the Lead Managers. Neither the Lead Managers nor any of their respective shareholders, directors, officers, employees, counsel, representatives, agents, associates or affiliates have any duties or responsibilities to you for providing the protection afforded to their clients or customers or for providing advice in relation to the Issue and are not in any way acting in any fiduciary capacity;
- Subject to Paragraph 1 of the section entitled “*Issue Information - Issue Procedure*”, you confirm that, either: (i) you have not participated in, or attended, any investor meetings or presentations made by us or our agents (the “**Presentations**”) with regard to us or the Issue; or (ii) if you have participated in or attended any Presentations: (a) you understand and acknowledge that the Lead Managers may not have

knowledge of the statements that we, or our agents, may have made at such Presentations and are therefore unable to determine whether the information provided to you at such Presentations may have had any material misstatements or omissions, and, accordingly you acknowledge that the Lead Managers have advised you not to rely in any way on any information that was provided to you at such Presentation, and (b) you confirm that you have not been provided any material information relating to us and the Issue that was not publicly available;

- Subject to Paragraph 1 of the section entitled “*Issue Information - Issue Procedure*”, your decision to subscribe to the Units in the Issue has not been made on the basis of any information relating to IndiGrid which is not set forth in this Preliminary Placement Document;
- You are subscribing to the Units in the Issue in accordance with applicable laws and by participating in this Issue, you are not in violation of any applicable law, including but not limited to the Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015 and the Securities and Exchange Board of India (Prohibition of Fraudulent and Unfair Trade Practices relating to Securities Market) Regulations, 2003, as amended, subject to Paragraph 1 of the section entitled “*Issue Information - Issue Procedure*”;
- All statements other than statements of historical fact included in this Preliminary Placement Document, including, without limitation, those regarding IndiGrid’s financial position, business, strategy, plans and objectives for future operations, are forward-looking statements. Such forward-looking statements involve known and unknown risks, uncertainties and other important factors that could cause actual results to be materially different from future results, performance or achievements expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding our present and future business strategies and environment in which IndiGrid will operate in the future. You should not place reliance on forward-looking statements, which speak only as at the date of this Preliminary Placement Document. IndiGrid, the Trustee, the Investment Manager and the Sponsor assume no responsibility to update any of the forward-looking statements contained in this Preliminary Placement Document;
- You are aware and understand that the Units are being offered only to Institutional Investors, pursuant to the Issue, and are not being offered to the general public, and the Allotment of the same shall be at the discretion of the Investment Manager, in consultation with the Lead Managers;
- You have been provided a serially numbered copy of this Preliminary Placement Document and have read it in its entirety, including in particular, the section entitled “*Risk Factors*” on page 58;
- In making your investment decision in relation to the Issue, you have (i) relied on your own examination of IndiGrid, its Portfolio Assets, the Target Assets, the Units and the terms of the Issue, including the merits and risks involved; (ii) made your own assessment of IndiGrid, the Units and the terms of the Issue; (iii) consulted your own independent counsel and advisors or otherwise have satisfied yourself concerning, without limitation, the effects of local laws; (iv) relied solely on the information contained in this Preliminary Placement Document and no other disclosure or representation by the Investment Manager, the Sponsor, the Trustee, or any other party (including the Lead Managers), other than what is publicly available, as provided under Paragraph 1 of the section entitled “*Issue Information - Issue Procedure*”; (v) received all information that you believe is necessary or appropriate in order to make an investment decision in respect of IndiGrid and the Units; and (vi) relied upon your own investigation and resources in making a decision to invest in the Issue;
- Neither the Lead Managers nor any of their respective shareholders, directors, officers, employees, counsel, representatives, agents or affiliates have provided you with any tax advice or otherwise made any representations regarding the tax consequences of purchase, ownership and disposal of the Units (including but not limited to the Issue and the use of the proceeds from the Units). You will obtain your own independent tax advice from a reputable service provider and will not rely on the Lead Managers or any of their respective shareholders, directors, officers, employees, counsel, representatives, agents, associates or affiliates when evaluating the tax consequences in relation to the Units (including but not limited to the Issue and the use of the proceeds from the Units). You waive and agree not to assert any claim against IndiGrid, the Investment Manager, Sponsor, Trustee or the Lead Managers or any of their respective shareholders, directors, officers, employees, counsel, representatives, agents, associates or affiliates with respect to the tax aspects of the Units or as a result of any tax audits by tax authorities, wherever situated, except in relation to any incorrect disclosures made in this Preliminary Placement

Document, or any misleading information provided in this Preliminary Placement Document or any breach of applicable laws by such persons, in each case, as a part of the Issue;

- You are a sophisticated investor and have such knowledge and experience in financial, business and investment matters as to be capable of evaluating the merits and risks of an investment in the Units. You are experienced in investing in private placement transactions of securities and units which are issued by a business of similar nature and in similar jurisdictions. You and any accounts for which you are subscribing to the Units (i) are each able to bear the economic risk of your investment in the Units; (ii) will not rely on IndiGrid, the Investment Manager, the Sponsor, the Trustee or the Lead Managers or any of their respective shareholders, directors, officers, employees, counsel, representatives, agents, associates or affiliates for all or part of any such loss or losses that may be suffered in connection with the Issue; (iii) are able to sustain a complete loss on the investment in the Units; (iv) have no need for liquidity with respect to the investment in the Units and; (v) have no reason to anticipate any change in your or their circumstances, financial or otherwise, which may cause or require any sale or distribution by you or them of all or any part of the Units. You acknowledge that an investment in the Units involves a high degree of risk and that the Units are, therefore, a speculative investment. You are seeking to subscribe to the Units in the Issue for your own investment and not with a current view to resell or distribute;
- If you are acquiring the Units in the Issue for and to be held by one or more managed accounts, you represent and warrant that you are authorised in writing, by each such managed account to acquire such Units for each managed account and to make (and you hereby make) the representations, warranties, acknowledgements and agreements herein for and on behalf of each such account, reading the reference to “you” to include such accounts;
- You are not one of the Parties to IndiGrid or any of their respective related parties (as defined in the InvIT Regulations, other than mutual funds, insurance companies and pension funds) and your Application Form does not directly or indirectly represent any such party;
- In accordance with the SEBI Preferential Issue Guidelines, you will have no right to withdraw your Bid after the Bid/Issue Closing Date;
- You are eligible to Bid for and hold the Units Allotted to you together with any Units held by you prior to the Issue. Further, you confirm that your aggregate holding after the Allotment of the Units shall not exceed the level permissible as per any applicable laws;
- You agree not to undertake any trade in the Units credited to your beneficiary account until such time that the final listing and trading approvals for such Units are issued by the Stock Exchanges;
- You are aware that (i) applications for in-principle approvals, for the listing and trading of the Units to be issued pursuant to the Issue, on the Stock Exchanges, were made and in-principle approvals have been received from each of the Stock Exchanges; and (ii) the application for the final listing and trading approvals will be made only after Allotment. There can be no assurance that the final approvals for listing and trading of such Units on the Stock Exchanges will be obtained in time or at all. IndiGrid, the Investment Manager, the Sponsor, the Trustee and the Lead Managers shall not be responsible for any delay or non-receipt of such final approvals or any loss arising from such delay or non-receipt (other than as stipulated under applicable laws);
- You are aware and understand that the Lead Managers will have entered into a placement agreement with IndiGrid, Investment Manager, Sponsor, Project Manager and Trustee whereby the Lead Managers have, subject to the satisfaction of certain conditions set out therein, agreed severally and not jointly to manage the Issue and use reasonable efforts to procure subscriptions for the Units to be issued pursuant to the Issue, on the terms and conditions set forth therein;
- You understand that the Units to be allotted pursuant to the Issue will, when issued and allotted, rank *pari passu* in all respects with the existing Units including the right to receive all distributions declared, made or paid in respect of the Units after the date of allotment of the Units;
- You understand that the Lead Managers and their affiliates do not have any obligation to purchase or acquire all or any part of the Units subscribed to or purchased by you in the Issue or to support any losses

directly or indirectly sustained or incurred by you for any reason whatsoever in connection with the Issue, including non-performance by us or any of our respective obligations or any breach of any representations or warranties by us, whether to you or otherwise;

- You understand that the Units have not been, and will not be, registered under the Securities Act or with any securities regulatory authority of any state of the United States and accordingly, may not be offered or sold within the United States, except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and any applicable U.S. state securities laws;
- If you are within the United States, you are a U.S. QIB, and are acquiring the Units for your own account or for the account of an institutional investor who also meets the definition of a U.S. QIB, for investment purposes only, and not with a current view to, or for resale in connection with, the distribution (within the meaning of any United States securities laws) thereof, in whole or in part and are not currently an affiliate of IndiGrid or a person acting on behalf of such an affiliate (it being understood that Esoteric II Pte. Ltd. (“**Esoteric**”) and Electron IM Pte. Ltd. (“**Electron**”), each being an affiliate of Kohlberg Kravis Roberts & Co. L.P. (“**KKR**”), have entered into agreements with the Sponsor and the Investment Manager, respectively, as further described in this Preliminary Placement Document);
- If you are outside the United States, you are subscribing for the Units in an “offshore transaction” within the meaning of Regulation S under the Securities Act, and are not currently IndiGrid’s or the Lead Managers’ affiliate or a person acting on behalf of such an affiliate (it being understood that Esoteric and Electron, each being an affiliate of KKR, have entered into agreements with the Sponsor and the Investment Manager, respectively, as further described in this Preliminary Placement Document);
- You understand and agree that the Units are transferable only in accordance with the restrictions described under the sections entitled “*Selling Restrictions*” and “*Transfer Restrictions*” on pages 262 and 267, respectively. Particularly, you represent and agree that you will only reoffer, resell, pledge or otherwise transfer the Units only (A) (i) to a person whom the beneficial owner and/or any person acting on its behalf is a U.S. QIB in a transaction meeting the requirements of Rule 144A or (ii) in an offshore transaction complying with Rule 903 or Rule 904 of Regulation S under the Securities Act and (B) in accordance with all applicable laws, including the securities laws of the States of the United States;
- Each of the representations, warranties, acknowledgements and agreements set out above shall continue to be true and accurate at all times up to and including the Allotment and the listing and trading of the Units allotted in the Issue;
- The contents of this Preliminary Placement Document are exclusively the responsibility of the Investment Manager, the Trustee and the Sponsor and neither the Lead Managers nor any person acting on their behalf has or shall have any liability for any information, representation or statement contained in or omitted from this Preliminary Placement Document or any information previously published by or on behalf of the Trust and will not be liable for your decision to participate in the Issue based on any information, representation or statement contained in this Preliminary Placement Document or otherwise. By participating in the Issue, you agree to the same and confirm that you have neither received nor relied on any other information, representation, warranty or statement (other than what is publicly available as provided under Paragraph 1 of the section entitled “*Issue Information - Issue Procedure*”) made by or on behalf of the Investment Manager, the Sponsor, the Trustee, the Lead Managers or any other person in relation to the Issue and none of the Investment Manager, the Sponsor, the Trustee, the Lead Managers or any other person will be liable for your decision to participate in the Issue based on any other information, representation, warranty or statement that you may have obtained or received in relation to the Issue;
- You agree to indemnify and hold us and the Lead Managers or their respective employees, officers, directors, associates, representatives and affiliates harmless from any and all direct costs, claims, liabilities and expenses (including reasonable and documented out-of-pocket legal fees and expenses), arising out of any breach or alleged breach of the representations, warranties, acknowledgments, agreements and undertakings made by you in this Preliminary Placement Document to the extent such representations warranties, acknowledgments, agreements and undertakings made by you are applicable to the resale of Units;
- You have made, or are deemed to have made, as applicable, the representations set forth in this section entitled “Representations by Investors” and IndiGrid, the Investment Manager, the Sponsor, the Trustee,

the Lead Managers, and their respective affiliates will rely on the truth and accuracy of the foregoing representations, warranties, acknowledgements, agreements and undertakings, which are given to the Lead Managers on their own behalf and on behalf of IndiGrid, the Investment Manager, the Sponsor and the Trustee, and are irrevocable; and

- You agree that any dispute arising in connection with the Issue will be governed by, and construed in accordance with, the laws of the Republic of India, and the courts in Mumbai, India shall have sole and exclusive jurisdiction to settle any disputes which may arise out of, or in connection with, this Issue, this Preliminary Placement Document and the Placement Document.

DEFINITIONS AND ABBREVIATIONS

This Preliminary Placement Document uses the definitions and abbreviations provided below which you should consider when reading the information contained in this Preliminary Placement Document.

References to any legislation, act, regulations, rules, guidelines or policies shall be to such legislation, act, regulations, rules, guidelines or policies as amended, supplemented, or re-enacted from time to time and any reference to a statutory provision shall include any subordinate legislation made under that provision.

The words and expressions used in this Preliminary Placement Document, but not defined herein shall have the meaning ascribed to such terms under the InvIT Regulations, the Depositories Act, and the rules and regulations made thereunder.

Notwithstanding the foregoing, the terms not defined but used in the sections entitled “Special Purpose Combined Financial Statements”, “Projections of Revenue from Operations and Cash Flow from Operating Activities”, “Taxation” and “Litigation” on pages 288, 325, 270 and 239, respectively, shall have the meanings ascribed to such terms in those respective sections.

In this Preliminary Placement Document, unless the context otherwise requires, a reference to “we”, “us” and “our” refers to IndiGrid and the Portfolio Assets on a consolidated basis. For the sole purpose of the Special Purpose Combined Financial Statements, reference to “we”, “us” and “our” refers to BDTCL, JTCL, MTL, RTCL, PKTCL, PTCL, NTL and OGPTL on a combined basis.

IndiGrid Related Terms

Term	Description
Associate	‘associate’ as defined in Regulation 2(1)(b) of the InvIT Regulations
Auditors	S R B C & Co. LLP, Chartered Accountants, the statutory auditors of IndiGrid
BDTCL	Bhopal Dhule Transmission Company Limited
BDTCL TSA	Transmission services agreement dated December 7, 2010 entered into by BDTCL with LTTCs and a transmission services agreement dated November 12, 2013, entered into by BDTCL with PGCIL
Special Purpose Combined Financial Statements	Audited special purpose combined financial statements of BDTCL, JTCL, MTL, RTCL, PKTCL, PTCL, NTL and OGPTL, which comprise the combined balance sheets as at March 31, 2019, March 31, 2018 and March 31, 2017, and the related combined statements of profit and loss (including other comprehensive income), combined cash flow statements and combined statements of changes in equity for the years ended March 31, 2019, March 31, 2018 and March 31, 2017 and a summary of significant accounting policies and other explanatory information prepared in accordance with Ind AS and the Guidance Note on Combined and Carve-out financial statements issued by ICAI
ENICL	East-North Interconnection Company Limited
ENICL TSA	Transmission services agreement dated August 6, 2009 entered into by ENICL with LTTCs and a transmission services agreement dated January 28, 2013 entered into by ENICL with PGCIL
Framework Agreement	Framework agreement dated April 30, 2019 entered into between the Trustee, Sponsor and the Investment Manager
Framework Assets	NER, KTL and GPTL
GPTL	Gurgaon Palwal Transmission Limited
GPTL TSA	Transmission services agreement dated March 4, 2016, entered into by GPTL with LTTCs and a transmission services agreement dated April 27, 2017 entered into by GPTL with PGCIL
GTTPL	Goa-Tamnar Transmission Project Limited
GTTPL TSA	Transmission services agreement dated June 28, 2017 entered into by GTTPL with LTTCs and a transmission services agreement dated December 27, 2018, entered into by GTTPL with PGCIL
Holdco	Holding company, as defined under Regulation 2(1)(sa) of the InvIT Regulations
IndiGrid or the Trust	India Grid Trust

Term	Description
Inter-se Sponsor Agreement	Inter-se sponsor agreement dated April 30, 2019, entered into by the Sponsor and Esoteric II Pte. Ltd.
Investment Management Agreement	Investment management agreement dated November 10, 2016, and (i) the amendment agreement dated December 1, 2016, entered into between the Trustee (on behalf of IndiGrid), the Investment Manager, SGL1, BDTCL and JTCL; (ii) the amendment agreement dated February 14, 2018, entered into between the Trustee (on behalf of IndiGrid), the Investment Manager, SGL1, BDTCL, JTCL, MTL, RTCL and PKTCL; and (iii) the amendment agreement dated August 31, 2018, entered into between the Trustee (on behalf of IndiGrid), the Investment Manager, SGL1, BDTCL, JTCL, MTL, RTCL, PKTCL and PTCL
Investment Manager or SIML	Sterlite Investment Managers Limited
InvIT Assets	InvIT assets as defined under Regulation 2(l)(zb) of the InvIT Regulations, in this case being the Portfolio Assets
JTCL	Jabalpur Transmission Company Limited
JTCL TSA	Transmission services agreement dated December 1, 2010 entered into by JTCL with LTTCs and a transmission services agreement dated November 12, 2013 entered into by JTCL with PGCIL
KTL	Khargone Transmission Limited
KTL TSA	Transmission services agreement dated March 14, 2016, entered into between KTL and LTTCs and a transmission services agreement dated April 27, 2017 entered into by KTL with PGCIL
MTL	Maheshwaram Transmission Limited
MTL Amendment Agreement	Amendment agreement dated April 30, 2019 in relation to the 2018 MTL Share Purchase Agreement, entered into between SGL2, SGL1, the Trustee, Investment Manager, Sponsor and MTL
MTL TSA	Collectively, the transmission services agreement dated June 10, 2015, entered into by MTL with LTTCs and a transmission services agreement dated April 27, 2017 entered into by MTL with PGCIL
NER	NER II Transmission Limited
NER TSA	Transmission services agreement dated December 27, 2016 entered into by NER TL with the LTTCs and a transmission services agreement dated November 15, 2017 entered into by NER with PGCIL
NTL	NRSS XXIX Transmission Limited
NTL Share Purchase Agreement	Share purchase agreement dated April 30, 2019 entered into between the Trustee, Sponsor, the Investment Manager, SGL2 and NTL
NTL TSA	Transmission services agreement dated January 2, 2014 entered into by NTL with the LTTCs and a transmission services agreement dated December 22, 2015 entered into by NTL with PGCIL
OGPTL	Odisha Generation Phase - II Transmission Limited
OGPTL Share Purchase Agreement	Share purchase agreement dated April 30, 2019 entered into between the Trustee, Sponsor, the Investment Manager, SGL3 and OGPTL
OGPTL TSA	Collectively the transmission services agreement dated November 20, 2015 entered into by OGPTL with the LTTCs and a transmission services agreement dated April 27, 2017 entered into by OGPTL with PGCIL
Parties to IndiGrid	The Sponsor, the Trustee, the Investment Manager and the Project Manager
PGCIL	Power Grid Corporation of India Limited
PKTCL	Purulia & Kharagpur Transmission Company Limited
PKTCL Amendment Agreement	Amendment agreement dated April 30, 2019 in relation to the 2018 PKTCL Share Purchase Agreement, entered into between SGL2, SGL1, the Trustee, Investment Manager, Sponsor and PKTCL
PKTCL TSA	Transmission services agreement dated August 6, 2013, entered into by PKTCL with the LTTCs and a transmission services agreement dated December 22, 2015 entered into by PKTCL with PGCIL
Portfolio Assets	Unless the context otherwise requires, SGL1, BDTCL, JTCL, MTL, RTCL, PKTCL and PTCL and/or their power transmission projects, as applicable
Project Implementation and Management Agreement	Project implementation and management agreement dated November 10, 2016, and (i) the amendment agreement dated April 25, 2017 entered into between the

Term	Description
	Trustee (on behalf of IndiGrid), the Project Manager, the Investment Manager, SGL1, BDTCL and JTCL; (ii) the amendment agreement dated February 14, 2018 entered into between the Trustee (on behalf of IndiGrid), the Project Manager, the Investment Manager, SGL1, BDTCL, JTCL, MTL, RTCL and PKTCL; and (iii) the amendment agreement dated August 31, 2018 entered into between the Trustee (on behalf of IndiGrid), the Project Manager, the Investment Manager, SGL1, BDTCL, JTCL, MTL, RTCL, PKTCL and PTCL
Project Manager or SPGVL	Sterlite Power Grid Ventures Limited
Projections of Revenue from Operations and Cash Flow from Operating Activities	Projections of revenue from operations and cash flow from operating activities of IndiGrid (consisting of IndiGrid, BDTCL, JTCL, MTL, RTCL, PKTCL, PTCL, NTL and OGPTL) for the years ending March 31, 2020, March 31, 2021 and March 31, 2022 along with the basis of preparation and other explanatory information and significant assumptions
PTCL	Patran Transmission Company Limited
Related Party	Related Party, as defined under Regulation 2(1)(zv) of the InvIT Regulations, and shall also include (i) Parties to IndiGrid; and (ii) the promoters, directors and partners of the Parties to IndiGrid
ROFO Asset	ENICL
ROFO Deed	(i) Deed of Right of First Offer dated May 5, 2017, entered into between the Sponsor, the Investment Manager, SPTL and the Trustee (on behalf of IndiGrid); and (ii) the deed of amendment dated April 30, 2019 entered into between the Sponsor, the Investment Manager, SPTL and the Trustee (on behalf of IndiGrid)
RTCL or RAPP	RAPP Transmission Company Limited
RTCL Second Amendment Agreement	Second amendment agreement dated April 30, 2019 in relation to the 2018 RTCL Share Purchase Agreement, entered into between SGL2, SGL1, the Trustee, Investment Manager, Sponsor and RTCL
RTCL TSA	Transmission services agreement dated July 24, 2013 entered into by RTCL with the LTTCs and a transmission services agreement dated December 22, 2015 entered into by RTCL with PGCIL
SGL1	Sterlite Grid 1 Limited
SGL2	Sterlite Grid 2 Limited
SGL3	Sterlite Grid 3 Limited
SGL4	Sterlite Grid 4 Limited
SGL5	Sterlite Grid 5 Limited
SIML SPA	Share subscription and purchase agreement dated April 30, 2019, entered into by SPTL, the Investment Manager and Electron IM Pte. Ltd.
SIML SHA	Shareholders' agreement dated April 30, 2019, entered into by SPTL, the Investment Manager and Electron IM Pte. Ltd.
Sponsor or SPGVL	Sterlite Power Grid Ventures Limited
SPTL	Sterlite Power Transmission Limited
SPV(s)	Special purpose vehicles, as defined under Regulation 2(1)(zy) of the InvIT Regulations
Sterlite group companies	Subsidiaries, associates or affiliates of Sterlite Power Transmission Limited
STL	Sterlite Technologies Limited
Target Assets	NTL and OGPTL
Trust Deed	Trust deed dated October 21, 2016, entered into between the Sponsor and the Trustee
Trustee	Axis Trustee Services Limited
Unit	An undivided beneficial interest in IndiGrid, and such Units together represent the entire beneficial interest in IndiGrid
Unitholders	Any person who holds Units upon making a defined contribution as determined by the Trustee
Valuation Report	Valuation report issued by the Valuer, which sets out their opinion as to the fair enterprise value of NTL and OGPTL as on March 31, 2019
Valuer	Haribhakti & Co. LLP
2017 Securities Purchase Agreement	A binding securities purchase agreement dated May 8, 2017, entered into between the Sponsor, the Trustee (on behalf of, and acting in its capacity as the trustee to, IndiGrid), the Investment Manager and SGL1

Term	Description
2018 PKTCL Share Purchase Agreement	A binding share purchase agreement dated February 14, 2018, entered into between SGL2, SGL1, the Trustee (on behalf of, and acting in its capacity as the trustee to, IndiGrid), the Investment Manager and PKTCL, as amended by the PKTCL Amendment Agreement
2018 RTCL Share Purchase Agreement	A binding share purchase agreement dated February 14, 2018, entered into between SGL2, SGL1, the Trustee (on behalf of, and acting in its capacity as the trustee to, IndiGrid), the Investment Manager and RTCL as amended by amendment agreement dated March 28, 2019 and the RTCL Second Amendment Agreement
2018 MTL Share Purchase Agreement	A binding share purchase agreement dated February 14, 2018, entered into between SGL3, SGL1, the Trustee (on behalf of, and acting in its capacity as the trustee to, IndiGrid), the Investment Manager and MTL, as amended by the MTL Amendment Agreement
2018 PTCL Share Purchase Agreement	A binding share purchase agreement dated February 19, 2018, entered into between Techno Power Grid Company Limited, Techno Electric & Engineering Company Limited, the Trustee (on behalf of, and acting in its capacity as the trustee to, IndiGrid), the Investment Manager and PTCL

Issue Related Terms

Term	Description
Allocated/ Allocation	The allocation of Units by the Investment Manager following the determination of the Issue Price to successful Bidders on the basis of the Application Form submitted by them, in consultation with the Lead Managers and in compliance with the InvIT Regulations, including the SEBI Preferential Issue Guidelines
Allot/ Allotment/ Allotted	Unless, the context otherwise requires, the issue and allotment of Units pursuant to the Issue
Allottees	Bidders to whom Units are issued and Allotted pursuant to the Issue
Application Form/ Application	The form (including any rectifications of errors therein) pursuant to which an Eligible Investor shall submit a Bid for the Units in the Issue
Bid(s)	Indication of interest of a Bidder, including all permitted including any rectifications of errors therein and modifications thereto, as provided in the Application Form, to subscribe for the Units to be issued pursuant to the Issue
Bid/Issue Closing Date	May 4, 2019, which is the last date up to which the Application Forms shall be accepted by the Lead Managers on behalf of the Investment Manager
Bid/Issue Opening Date	April 30, 2019, which is the first date from which acceptance of the Application Forms shall have commenced by the Lead Managers on behalf of the Investment Manager
Bid/Issue Period	Period between the Bid/Issue Opening Date and the Bid/Issue Closing Date, inclusive of both days, during which Bidders can submit their Bids
Bidder	Any prospective investor, being an Institutional Investor (as defined in the InvIT Regulations), who makes a Bid pursuant to the terms of the Preliminary Placement Document and the Application Form
Book Running Lead Manager	IndusInd Bank Limited
CAN or Confirmation of Allocation Note	Note or advice to successful Bidders confirming Allocation of Units to such successful Bidders after determination of the Issue Price and requiring payment for the entire applicable Issue Price for all Units Allocated to such successful Bidders
Cash Escrow Accounts	The accounts entitled “India Grid Trust Escrow A/c QIP-2019” and “India Grid Trust Escrow A/c QIP-2019” opened with HDFC Bank Limited and IndusInd Bank Limited, respectively, with regard to any money received or to be received towards the subscription of the Units, subject to the terms of the Escrow Agreement
Closing Date	The date on which Allotment of Units pursuant to the Issue shall be made, i.e. on or about [●], 2019
Eligible Investor	‘Institutional Investor’ as defined in Regulation 2(1)(ya) of the InvIT Regulations

Term	Description
Escrow Collection Banks	HDFC Bank Limited and IndusInd Bank Limited
Escrow Agreement	The escrow agreement dated April 30, 2019 entered into amongst the Investment Manager, Trustee, Sponsor, Lead Managers and the Escrow Collection Banks for collection of the Bid Amounts and for remitting refunds, if any, of the amounts collected, to the Bidders
Floor Price	The floor price of ₹ 83.89 per Unit, which has been calculated in accordance with Clause 4 of the SEBI Preferential Issue Guidelines
Global Co-ordinators and Book Running Lead Managers	Edelweiss Financial Services Limited, Axis Capital Limited and Citigroup Global Markets India Private Limited
Issue Size	The issue of up to [●] Units aggregating up to approximately ₹ 25,600 million
Lead Managers	The Global Co-ordinators and Book Running Lead Managers and the Book Running Lead Manager
Pay-In Date	The last date specified in the CAN for payment of subscription monies by the Eligible Investors into the Cash Escrow Accounts
Placement Agreement	The placement agreement dated April 30, 2019 entered into amongst the Investment Manager, Trustee, SPGVL (in its capacity as the Sponsor and Project Manager) and the Lead Managers
Placement Document	The placement document dated April 30, 2019 to be issued by the Investment Manager and the Trustee in accordance with the InvIT Regulations
Preliminary Placement Document	This preliminary placement document dated April 30, 2019 issued by the Investment Manager and the Trustee in accordance with the InvIT Regulations
Pricing Date	The date of determination of the Issue Price and the number of Units to be allotted pursuant to the Issue
Relevant Date	April 30, 2019 which is the date of the meeting of the committee of the board of directors of the Investment Manager deciding to open the Issue

Technical and Industry related terms

Term	Description
ARR	Aggregate Revenue Requirement
BOOM	Build, own, operate and maintain
BPC	Bid process co-ordinator
D/C	Double Circuit
DC	Direct Current
DIC	Designated inter-state transmission system customers
DISCOM	Distribution companies
GW	Giga watt
HVDC	High Voltage Direct Current
ISTS	Inter State Transmission Systems
LTTC	Long term transmission customer
MoP	Ministry of Power
MVA	Mega Volt Ampere
MW	Mega watt
PFC	Power Finance Corporation of India Limited
PGCIL	Power Grid Corporation of India Limited
PoC	Point of Connection
POSOCO	Power System Operation Corporation Limited
REC	Rural Electrification Corporation of India Limited
RLDC	Regional Load Dispatch Centre
RSA	Revenue Sharing Agreement
SEB(s)	State Electricity Boards
SLDC	State Load Dispatch Centre
TBCB	Tariff Based Competitive Bidding
TSA	Transmission Services Agreement
TSP	Transmission Service Provider

Abbreviations

Term	Description
ACSR	Aluminium Conductor Steel Reinforced
BOCW Act	The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996
BSE	BSE Limited
CCI	Competition Commission of India
CDSL	Central Depository Services (India) Limited
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
Companies Act	Companies Act, 1956 and/or the Companies Act, 2013, as applicable
Companies Act, 1956	Companies Act, 1956, as amended (without reference to the provisions thereof that have ceased to have effect upon the notification of the Notified Sections)
Companies Act, 2013	Companies Act, 2013, as amended, to the extent in force pursuant to the notification of the Notified Sections
Competition Act	Competition Act, 2002
CRISIL	CRISIL Limited
CRISIL Report	“Opportunities in power transmission in India”, March 2019, prepared by CRISIL Research
Depository	A depository registered with SEBI under the Securities and Exchange Board of India (Depositories and Participants) Regulations, 1996
DIN	Director Identification Number
EHS	Environment, Occupational Health and Safety
FEMA Regulations	FEMA (Transfer or Issue of Security by a Person Resident Outside India) Regulations, 2017
Financial Year or Fiscal Year or Fiscal	Period of 12 months ended March 31 of that particular year, unless otherwise stated
GAAR	General Anti-Avoidance Rules
GoI or Government	Government of India
Ind AS	Companies (Indian Accounting Standards) Rules, 2015, notified on February 19, 2015 by the MCA, including any amendments or modifications thereto
Indian GAAP	Accounting Standards specified under section 133 of the Companies Act, 2013 read with Rule 7 of the Companies (Accounts) Rule 2014 (as amended)
Indian GAAS	Generally Accepted Auditing Standards in India
InvITs	Infrastructure Investment Trusts
InvIT Regulations	Securities and Exchange Board of India (Infrastructure Investment Trust) Regulations, 2014 including the rules, circulars and guidelines issued thereunder, including the SEBI Preferential Issue Guidelines
IRDAI	Insurance Regulatory and Development Authority of India
MoEF	Ministry of Environment, Forest and Climate Change
NEFT	National Electronic Funds Transfer
Notified Sections	The sections of the Companies Act, 2013 that have been notified by the Ministry of Corporate Affairs, Government of India
NSDL	National Securities Depository Limited
NSE	The National Stock Exchange of India Limited
PAN	Permanent account number
RBI	Reserve Bank of India
Regulation S	Regulation S under the Securities Act
Rs./Rupees/INR/₹	Indian Rupees
RTGS	Real Time Gross Settlement
Rule 144A	Rule 144A under the Securities Act
SCR (SECC) Regulations	Securities Contract (Regulation) (Stock Exchanges and Clearing Corporations) Regulations, 2018
SEBI	Securities and Exchange Board of India constituted under the SEBI Act
SEBI Act	The Securities and Exchange Board of India Act, 1992
SEBI FPI Regulations	Securities and Exchange Board of India (Foreign Portfolio Investors) Regulations, 2014

Term	Description
SEBI ICDR Regulations	Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018
SEBI Insider Trading Regulations	Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015
SEBI Preferential Issue Guidelines	SEBI circular dated June 5, 2018 on Guidelines for Preferential Issue of Units by Infrastructure Investment Trusts (InvITs)
Securities Act	U.S. Securities Act of 1933, as amended
SERC	State Electricity Regulatory Commission
Sharing of Charges and Losses Regulations	Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010
Stock Exchanges	Together, the BSE and the NSE
Tariff Regulations	Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019
U.S./U.S.A/United States	United States of America
USD/US\$	United States Dollars

PRESENTATION OF FINANCIAL DATA AND OTHER INFORMATION

Certain Conventions

All references in this Preliminary Placement Document to “India” are to the Republic of India.

Unless stated otherwise, all references to page numbers in this Preliminary Placement Document are to the page numbers of this Preliminary Placement Document.

Financial Data

Unless the context requires otherwise, the financial information in this Preliminary Placement Document in relation to IndiGrid, is derived from the audited special purpose combined financial statements of BDTCL, JTCL, MTL, RTCL, PKTCL, PTCL, NTL and OGPTL, which comprise the combined balance sheets as at March 31, 2019, March 31, 2018 and March 31, 2017 and the related combined statements of profit and loss (including other comprehensive income), combined cash flow statements and combined statements of changes in equity for the financial years ended March 31, 2019, March 31, 2018 and March 31, 2017, and a summary of significant accounting policies and other explanatory information prepared in accordance with Ind AS and the Guidance Note on Combined and Carve-out financial statements issued by ICAI (“**Special Purpose Combined Financial Statements**”). The Special Purpose Combined Financial Statements have been prepared in accordance with the basis of preparation as set out in note 2.1 to the Special Purpose Combined Financial Statements. Please see the section entitled “*Special Purpose Combined Financial Statements*” on page 288.

This Preliminary Placement Document also includes projections of revenue from operations and cash flow from operating activities of IndiGrid consisting of IndiGrid, BDTCL, JTCL, MTL, RTCL, PKTCL, PTCL, NTL and OGPTL, for the financial years ended March 31, 2020, March 31, 2021 and March 31, 2022, prepared in accordance with the basis of preparation as set out in note 2 of projections of revenue from operations and cash flow from operating activities (the “**Projections of Revenue from Operations and Cash Flow from Operating Activities**”). Please see the section entitled “*Projections of Revenue from Operations and Cash Flow from Operating Activities*” on page 325. Further, in relation to the risks relating to our business, please see the section entitled “*Risk Factors*” on page 58.

Further, this Preliminary Placement Document includes summary financial statements of the (i) Sponsor, on a consolidated basis, as of, and for the financial years ended, March 31, 2018, March 31, 2017 and March 31 2016; and (ii) Investment Manager, on a standalone basis as of, and for the financial years ended, March 31, 2019, March 31, 2018 and March 31, 2017, derived respectively from the consolidated financial statements of the Sponsor as of such dates and such periods and from the standalone financial statements of the Investment Manager as of such dates and such periods, which were prepared in accordance with Ind AS and the Companies Act, except for the consolidated financial statements of the Sponsor for the financial year ended March 31, 2016 which were prepared in accordance with the Accounting Standards specified under Section 133 of the Companies Act, read with Rule 7 of the Companies (Accounts) Rules, 2014. For further details, please see the sections entitled “*Summary Financial Information of the Sponsor*” and “*Summary Financial Information of the Investment Manager*” on pages 40 and 48, respectively.

The degree to which the financial information included in this Preliminary Placement Document will provide meaningful information is entirely dependent on the reader’s level of familiarity with Indian accounting policies and practices, the Companies Act, Ind AS, Indian GAAP and the InvIT Regulations. Any reliance by persons not familiar with Indian accounting policies and practices on the financial disclosures presented in this Preliminary Placement Document should accordingly be limited.

The financial year for IndiGrid and Parties to IndiGrid commences on April 1 and ends on March 31 of the next year; accordingly, all references to a particular financial or fiscal year, unless stated otherwise, are to the 12 months ended on March 31 of that year.

In this Preliminary Placement Document, any discrepancies in any table between the total and the sums of the amounts listed are due to rounding off. All figures in decimals and all percentage figures have been rounded off to two decimal places. Certain other operational data, including route length of transmission lines in ckms and the number of years under the term of a TSA, have been rounded off to whole numbers.

Currency and Units of Presentation

All references to:

- “Rupees” or “₹” or “INR” or “Rs.” are to Indian Rupee, the official currency of the Republic of India; and
- “USD” or “US\$” are to United States Dollar, the official currency of the United States.

Except otherwise specified, certain numerical information in this Preliminary Placement Document have been presented in “million” units. One million represents 1,000,000 and one billion represents 1,000,000,000.

Unless the context requires otherwise, any percentage amounts, as set forth in this Preliminary Placement Document, have been calculated on the basis of the Special Purpose Combined Financial Statements, and the summary financial statements of the Sponsor on a consolidated basis and the Investment Manager on a standalone basis, as applicable.

Exchange Rates

This Preliminary Placement Document contains conversion of certain other currency amounts into Indian Rupees. These conversions should not be construed as a representation that these currency amounts could have been, or can be converted into Indian Rupees, at any particular rate.

The following table provides, for the dates indicated, information with respect to the exchange rate between the Rupee and the US\$ (in Rupees per US\$):

Currency	March 31, 2019 ⁽¹⁾	As on (in ₹)			
		December 31, 2018	March 31, 2018 ⁽²⁾	March 31, 2017	March 31, 2016
1 US\$	69.17	69.79	65.04	64.84	66.33

Source: www.rbi.org.in and www.fbil.org.in

⁽¹⁾ Exchange rate as on March 29, 2019, as Exchange Rate is not available for March 31, 2019 and March 30, 2019, being a Sunday and Saturday respectively.

⁽²⁾ Exchange rate as on March 28, 2018, as RBI Reference Rate is not available for March 31, 2018, March 30, 2018 and March 29, 2018 being a Saturday and two public holidays, respectively.

Industry and Market Data

Unless stated otherwise, industry and market data used in this Preliminary Placement Document has been obtained or derived from “*Opportunities in power transmission in India*” issued by CRISIL Research (“**CRISIL Report**”), publicly available information as well as industry publications and other sources. For details, please see the section entitled “*Industry Overview*” on page 129.

Industry publications generally state that the information contained in such publications has been obtained from publicly available documents and from various sources believed to be reliable but their accuracy and completeness are not guaranteed and their reliability cannot be assured. Accordingly, no investment decisions should be based on such information. Although the Investment Manager and the Sponsor believe that the industry and market data used in this Preliminary Placement Document is reliable, it has not been independently verified by the Investment Manager, the Sponsor, the Trustee or the Lead Managers, or any of their affiliates or advisors. The data from these sources may have been re-classified by us in certain cases for the purposes of presentation. Data from these sources may also not be comparable. Such data involves risks, uncertainties and numerous assumptions and is subject to change based on various factors, including those disclosed in the section entitled “*Risk Factors*” on page 58 of this Preliminary Placement Document. Accordingly, investment decisions should not be based on undue reliance on such information.

The extent to which the market and industry data used in this Preliminary Placement Document is meaningful, depends on the readers’ familiarity with and understanding of the methodologies used in compiling such data. There are no standard data gathering methodologies in the industry in which business of IndiGrid is conducted, and methodologies and assumptions may vary widely among different industry sources.

Disclaimer of CRISIL Research

CRISIL Research, a division of CRISIL Limited (CRISIL) has taken due care and caution in preparing this report (Report) based on the Information obtained by CRISIL from sources which it considers reliable (Data). However, CRISIL does not guarantee the accuracy, adequacy or completeness of the Data/Report and is not responsible for any errors or omissions or for the results obtained from the use of Data/Report. This Report is not a recommendation to invest/disinvest in any entity covered in the Report and no part of this Report should be construed as an expert advice or investment advice or any form of investment banking within the meaning of any law or regulation. CRISIL especially states that it has no liability whatsoever to the subscribers/users/transmitters/distributors of this Report. Without limiting the generality of the foregoing, nothing in the Report is to be construed as CRISIL providing or intending to provide any services in jurisdictions where CRISIL does not have the necessary permission and/or registration to carry out its business activities in this regard. India Grid Trust and Sterlite Investment Managers Limited will be responsible for ensuring compliances and consequences of non-compliance for use of the Report or part thereof outside India. CRISIL Research operates independently of, and does not have access to information obtained by CRISIL's Ratings Division/CRISIL Risk and Infrastructure Solutions Ltd (CRIS), which may, in their regular operations, obtain information of a confidential nature. The views expressed in this Report are that of CRISIL Research and not of CRISIL's Ratings Division/CRIS. No part of this Report may be published/ reproduced in any form without CRISIL's prior written approval.

FORWARD-LOOKING STATEMENTS

Certain statements contained in this Preliminary Placement Document that are not statements of historical fact constitute “forward-looking statements”. Bidders can generally identify forward-looking statements by terminology such as “aim”, “anticipate”, “believe”, “continue”, “can”, “could”, “estimate”, “expect”, “intend”, “may”, “objective”, “plan”, “potential”, “propose”, “project”, “pursue”, “seek to”, “shall”, “should”, “will”, “would”, or other words or phrases of similar import. Similarly, statements that describe the strategies, objectives, plans or goals of IndiGrid and projections of revenue from operations and cash flow from operating activities are also forward-looking statements and accordingly, should be read together with such assumptions and notes thereto. However, these are not the exclusive means of identifying forward-looking statements.

All statements regarding IndiGrid’s expected financial condition, results of operations and cash flows, business plans and prospects including the Projections of Revenue from Operations and Cash Flow from Operating Activities are forward-looking statements. These forward-looking statements include statements as to IndiGrid’s business strategy, planned projects, acquisition or investment revenue and profitability (including, without limitation, any financial or operating projections or forecasts), new business and other matters discussed in this Preliminary Placement Document that are not historical facts. Further, please note that the Projections of Revenue from Operations and Cash Flow from Operating Activities included in this Preliminary Placement Document are based on a number of assumptions. For further details, please see the section entitled “*Projections of Revenue from Operations and Cash Flow from Operating Activities*” on page 325.

The Valuation Report included in this Preliminary Placement Document, is based on certain projections and accordingly, should be read together with assumptions and notes thereto. For further details, please see the “*Valuation Report*” attached as Annexure A.

Actual results may differ materially from those suggested by the forward-looking statements or financial projections due to certain known or unknown risks or uncertainties associated with the Investment Manager’s expectations with respect to, but not limited to, the actual growth in the power transmission sector, the Investment Manager’s ability to successfully implement the strategy, growth and expansion plans, cash flow projections, the outcome of any legal, regulatory or tax changes, the future impact of new accounting standards, regulatory changes pertaining to the power transmission sector in India and our ability to respond to them, and general economic and political conditions in India which have an impact on our business activities or investments, changes in competition and the Project Manager’s ability to operate and maintain the Portfolio Assets and successfully implement any technological changes. By their nature, certain of the market risk disclosures are only estimates and could be materially different from what actually occurs in the future. As a result, actual future gains, losses or impact on net interest income and net income could materially differ from those that have been estimated.

Factors that could cause actual results, performance or achievements of IndiGrid to differ materially include, but are not limited to, those discussed in the sections entitled “*Risk Factors*”, “*Industry Overview*”, “*Our Business*” and “*Management’s Discussion and Analysis of Factors by the Directors of the Investment Manager affecting the Financial Condition, Results of Operations and Cash Flows*”, on pages 58, 129, 161 and 208, respectively. Some of the factors that could cause IndiGrid’s actual results, performance or achievements to differ materially from those in the forward-looking statements and financial information include, but are not limited to, the following:

- A significant portion of the Units offered and sold in this Issue may be allotted to a few investors who have indicated an interest in purchasing Units;
- we have entered into definitive agreements which, if fully completed, will result in a change of control of the Investment Manager and a transfer of a significant Unitholding in IndiGrid from our Sponsor to an affiliate of KKR;
- the completion of the KKR Transaction is subject to the receipt of approval from Unitholders and SEBI, which may impose conditions that could have an adverse effect on us, if not obtained, and could prevent completion of the KKR Transaction;
- we may be unable to operate and maintain our power transmission projects to achieve the prescribed availability;
- we may lose tariff revenues and incur significant repair and replacement costs in the event our power transmission projects are rendered inoperable due to force majeure events;
- substantially all our revenues are derived from tariff payments received from LTTCs and a delay in payments of point of connection charges to the Central Transmission Utility by users and customers may adversely affect our cash flows and results of operations;
- as the terms and conditions, including the tariff structure under our TSAs are generally fixed, we may not be

able to offset increases in costs, including operation and maintenance costs, solely from tariffs payable to us under the TSAs;

- we intend to acquire the Target Assets with the proceeds with this issue and any failure to acquire these assets could have a material adverse effect on our business, financial condition and results of operations;
- the ability of our Project Manager to ensure that our power transmission systems are fully operational at all times may be subject to the limitations of the power grid, existing equipment or operational risks outside of their control; and
- the Portfolio Assets and Target Assets may not achieve the projected financial performance referred to in the financial projections, which could adversely affect our ability to meet our projected distributions to our Unitholders.

Forward-looking statements and financial projections reflect current views as of the date of this Preliminary Placement Document and are not a guarantee of future performance or returns to Bidders. These statements and projections are based on certain beliefs and assumptions, which in turn are based on currently available information. Although the Sponsor and Investment Manager believe that the expectations and the assumptions upon which such forward-looking statements are based, are reasonable at this time, it cannot assure Bidders that such expectations will prove to be correct or accurate. The Projections of Revenue from Operations and Cash Flow from Operating Activities have been prepared for inclusion in this Preliminary Placement Document for the purposes of this Issue, using a set of assumptions that include hypothetical assumptions about future events and management's actions that are not necessarily expected to occur, and have been approved by the board of directors of the Investment Manager. Consequently, Bidders are cautioned that the Projections of Revenue from Operations and Cash Flow from Operating Activities may not be appropriate for purposes other than that described above. Given these uncertainties, Bidders are cautioned not to place undue reliance on such forward-looking statements and Projections of Revenue from Operations and Cash Flow from Operating Activities. In any event, these statements speak only as of the date of this Preliminary Placement Document or the respective dates indicated in this Preliminary Placement Document, as applicable. IndiGrid, the Trustee, the Investment Manager, the Sponsor and the Lead Managers or any of their affiliates or advisors, undertake no obligation to update or revise any of them, whether as a result of new information, future events or otherwise after the date of this Preliminary Placement Document. If any of these risks and uncertainties materialize, or if any of the Investment Manager's underlying assumptions prove to be incorrect, the actual results of operations or financial condition or cash flow of IndiGrid could differ materially from that described herein as anticipated, believed, estimated or expected. All subsequent forward-looking statements attributable to IndiGrid are expressly qualified in their entirety by reference to these cautionary statements.

ENFORCEMENT OF CIVIL LIABILITIES

IndiGrid is an infrastructure investment trust under the laws of India and each of the Trustee and the Investment Manager is a limited liability company incorporated under the laws of India. The enforcement by investors of civil liabilities outside India, including the ability to effect service of process and to enforce judgments of courts outside India may be affected adversely by the fact that all of IndiGrid's assets and the executive officers and directors of the Trustee and the Investment Manager are residents of India, unless specified otherwise. As a result, it may not be possible or may be difficult for investors to effect service of process upon IndiGrid and these other persons or entities in jurisdictions outside India or to enforce against them in courts in India, judgments obtained in courts outside India, including judgments predicated upon the civil liability provisions of the securities laws of jurisdictions outside India.

Recognition and enforcement of foreign judgments is provided for under Section 13 and Section 44A of the Code of Civil Procedure, 1908, as amended (the "**Civil Procedure Code**"). Section 13 of the Civil Procedure Code provides that a foreign judgment shall be conclusive regarding any matter directly adjudicated upon between the same parties or parties litigating under the same title, except: (i) where the judgment has not been pronounced by a court of competent jurisdiction; (ii) where the judgment has not been given on the merits of the case; (iii) where it appears on the face of the proceedings that the judgment is founded on an incorrect view of international law or a refusal to recognise the law of India in cases in which such law is applicable; (iv) where the proceedings in which the judgment was obtained were opposed to natural justice; (v) where the judgment has been obtained by fraud; or (vi) where the judgment sustains a claim founded on a breach of any law then in force in India.

India is not a party to any international treaty in relation to the recognition or enforcement of foreign judgments. However, Section 44A of the Civil Procedure Code provides that a foreign judgment rendered by a superior court (within the meaning of that section) in any jurisdiction outside India which the Government has by notification declared to be a reciprocating territory, may be enforced in India by proceedings in execution as if the judgment had been rendered by a competent court in India. However, Section 44A of the Civil Procedure Code is applicable only to monetary decrees not being in the nature of any amounts payable in respect of taxes or other charges of a like nature or in respect of a fine or other penalties and does not include arbitration awards.

Amongst other jurisdictions, the United Kingdom of Great Britain and Northern Ireland, Republic of Singapore and Hong Kong have been declared by the Government to be reciprocating territories for the purposes of Section 44A of the Civil Procedure Code, but the United States of America has not been so declared. A judgment of a court in a jurisdiction which is not a reciprocating territory may be enforced only by a fresh suit upon the judgment and not by proceedings in execution. The suit must be brought in India within three years from the date of the foreign judgment in the same manner as any other suit filed to enforce a civil liability in India. Accordingly, a judgement of the courts in the United States may be enforced only by a fresh suit upon the foreign judgement and not by proceedings in execution. It is unlikely that a court in India would award damages on the same basis as a foreign court if an action is brought in India. Furthermore, it is unlikely that an Indian court would enforce foreign judgments if it viewed the amount of damages awarded as excessive or inconsistent with public policy of India. Further, any judgment or award in a foreign currency would be converted into Rupees on the date of such judgment or award and not on the date of payment. A party seeking to enforce a foreign judgment in India is required to obtain approval from the RBI to repatriate outside India any amount recovered, and any such amount may be subject to income tax in accordance with applicable laws. IndiGrid cannot predict whether a suit brought in an Indian court will be disposed of in a timely manner or be subject to considerable delays.

THE ISSUE

The following is a general summary of the terms of this Issue. This summary should be read in conjunction with, and is qualified in its entirety by, the detailed information appearing elsewhere in this Preliminary Placement Document:

Issue	Issue of up to [●] units of IndiGrid aggregating to approximately ₹ 25,600 million
Floor Price	₹ 83.89
Minimum Bid Size	₹ 1 million
Issue Opening Date	April 30, 2019
Issue Closing Date	May 4, 2019
Sponsor	Sterlite Power Grid Ventures Limited
Trustee	Axis Trustee Services Limited
Investment Manager	Sterlite Investment Managers Limited
Project Manager	Sterlite Power Grid Ventures Limited
Authority for this Issue	This Issue was authorised, and approved by the board of directors of the Investment Manager on April 24, 2018 and by the Unitholders on July 26, 2018
Tenure of IndiGrid	IndiGrid shall remain in force perpetually until it is dissolved or terminated in accordance with the Trust Deed. For details, please see the section entitled “Parties to IndiGrid” on page 97
Units issued and outstanding as of the date of the Preliminary Placement Document	283,799,200
Units issued and outstanding immediately after this Issue	[●]
Distribution	Please see the section entitled “Distribution” on page 205
Indian Taxation	Please see the section entitled “Taxation” on page 270
Use of proceeds	Please see the section entitled “Use of Proceeds” on page 199
Listing	In-principle approvals for listing of the Units have been received from BSE and NSE on April 30, 2019 and April 30, 2019, respectively. The Investment Manager shall apply to the Stock Exchanges for the final listing and trading approvals, after the Allotment and after the credit of the Units to the beneficiary accounts with the Depository Participants
Closing Date	The date on which Allotment of the Units pursuant to this Issue shall be made, i.e. on or about [●]
Ranking	The Units being issued shall rank <i>pari passu</i> in all respects with the existing Units, including rights in respect of distribution from the date of Allotment. Please see the section entitled “Rights of Unitholders” on page 249
Lock-in and Rights of Unitholders	For details, please see the sections entitled “Information Concerning the Units” and “Rights of Unitholders” on pages 195 and 249, respectively
Risk Factors	Prior to making an investment decision, Bidders should consider carefully the matters discussed in the section entitled “Risk Factors” on page 58
ISIN:	INE219X23014

The Units, upon Allotment, shall be traded only in the dematerialized segment of the Stock Exchanges.

In accordance with the InvIT Regulations, no Unitholder shall enjoy superior voting or any other rights over another Unitholder. Further, there shall not be multiple classes of Units.

The Sponsor may subscribe to Units in the Issue to comply with the requirements of Regulation 12(3) of the InvIT Regulations.

For further details in relation to this Issue, including the method of application, please see the section entitled “Issue Information” on page 252.

OVERVIEW OF INDIGRID

The following overview is qualified in its entirety by, and is subject to, the more detailed information contained in, or referred to elsewhere, in this Preliminary Placement Document. Statements contained in this summary that are not historical facts may be forward-looking statements. Such statements are subject to certain risks, uncertainties and assumptions that could cause actual results of IndiGrid to differ materially from those forecasted or projected in this Preliminary Placement Document. Under no circumstances should the inclusion of such information herein be regarded as a representation, warranty or prediction of the accuracy of the underlying assumptions by IndiGrid, the Parties to IndiGrid or the Lead Managers or any other person or that these results will be achieved or are likely to be achieved. Investment in Units involves risks. Bidders are advised not to rely solely on this overview, and should read this Preliminary Placement Document in its entirety and, in particular, the section entitled “Risk Factors” on page 58.

Structure and description of IndiGrid

The Sponsor settled IndiGrid on October 21, 2016, as an irrevocable trust, pursuant to the Trust Deed, under the provisions of the Indian Trusts Act, 1882. IndiGrid was registered with SEBI on November 28, 2016 as an infrastructure investment trust under Regulation 3(1) of the InvIT Regulations having registration number IN/InvIT/16-17/0005. The Sponsor has settled IndiGrid for an initial sum of ₹ 10,000.

For details of the registered office and contact person of the Sponsor, please see the section entitled “General Information” on page 92.

Further, SIML has been appointed as the Investment Manager, and SPGVL has been appointed as the Project Manager to IndiGrid. For further details, please see the section entitled “Parties to IndiGrid” on page 97.

Investment Objectives

The investment objectives of IndiGrid are to undertake activities as an infrastructure investment trust in accordance with the provisions of the InvIT Regulations and the Trust Deed. Any investment by IndiGrid shall only be in infrastructure special purpose vehicles or infrastructure projects or securities of Indian companies in accordance with the provisions of the InvIT Regulations and the investment strategy as detailed in the section entitled “Our Business” on page 161. Investments by IndiGrid shall be in compliance with the provisions of the InvIT Regulations.

As on the date of this Preliminary Placement Document, IndiGrid is not permitted to undertake any activity which is prohibited under the InvIT Regulations.

Subject to the restrictions prescribed under, and requirements of, applicable law, IndiGrid may not carry on any other principal activity.

Fee and expenses

Annual Expenses

The expenses in relation to IndiGrid, other than such expenses incurred in relation to operations of Portfolio Assets, broadly include fee payable to: (i) the Trustee; (ii) the Investment Manager; (iii) the Project Manager; (iv) the Auditor; (v) the Valuer; and (iv) other intermediaries and consultants.

Further, in relation to the fees payable to the Trustee, Investment Manager and Project Manager, please see below.

Trustee fee

The Trustee is entitled to an annual fee of ₹ 2.00 million, and any out of pocket expenses, exclusive of any taxes. The annual fee is subject to revision every two years from the date of the Trust Deed, subject to a cap of 10%. The fee paid to the Trustee for the Fiscal 2019 amounted to ₹ 2.16 million.

Investment Manager fee

The Investment Manager is entitled to a fee aggregating to 1.75% of the difference between revenue from operations and operating expenses (other than the fee of the Investment Manager) of each Portfolio Asset, per annum. For this purpose, the operating expenses do not include depreciation, finance cost and income tax expense. This fee is exclusive of all taxes. For each Financial Year, such fee shall be payable every six months, based on actuals, within a period of 15 days from the date of declaration of financial results by IndiGrid (being the period ended March 31 and September 30, respectively, of each financial year). The fee paid to the Investment Manager for Fiscal 2019 amounted to ₹ 130.53 million.

Project Manager fee

The Project Manager is entitled to a fee amounting to 10% of the gross expenditure incurred by each Portfolio Asset in relation to operation and maintenance costs, per annum. IndiGrid, or any or all of the Portfolio Assets, as the case may be, shall bear any service tax and other applicable taxes payable on the fee and any other payments made to the Project Manager in terms of the Project Implementation and Management Agreement, provided that the Project Manager shall be liable to pay income tax on such fee and payments. For each Financial Year, the fee shall be payable every six months, based on actuals, within a period of 15 days from the date of declaration of financial results by IndiGrid (being the periods ending March 31 and September 30, respectively, of each financial year). The fee paid to the Project Manager for Fiscal 2019 amounted to ₹ 39.54 million.

Allotment of additional Units to the Project Manager in accordance with the PIMA

During the course of execution of the transmission projects, the project cost for the projects undertaken by JTCL and BDTCL, respectively, had escalated due to force majeure events and change in law as described in the section entitled “*Our Business – Bhopal Dhule Transmission Company Limited*” and “*Our Business – Jabalpur Transmission Company Limited*” on pages 175 and 173, respectively. In order to ensure completion of the projects, the Project Manager, in its capacity as the holding company of BDTCL and JTCL, had contributed capital towards such additional costs. To compensate for the additional costs incurred and the hardship faced by the Project Manager during the course of execution of the projects, JTCL filed a petition dated December 18, 2015 for quantification and award of compensation seeking, amongst others, an increase of ₹ 803.70 million per annum in the levelised transmission charges (“**JTCL Petition**”). The CERC through its order dated May 8, 2017 in the JTCL Petition (the “**JTCL CERC Order**”) had allowed an increase of 9.8903% per annum on the quoted non-escalable charges of the respective years from the date of commercial operation of the respective transmission lines on account of change in law, resulting in increase in the cost of project by ₹ 1,699.90 million (the “**JTCL Approved Cost Escalation**”).

In accordance with the Project Implementation and Management Agreement, the Project Manager was allotted 13,599,200 Units on October 26, 2017 for an amount equivalent to ₹ 1,359.92 million pursuant to the JTCL CERC Order, which is 80% of the JTCL Approved Cost Escalation.

As on the date of this Preliminary Placement Document, no additional allotment of Units has been made as compensation to the Project Manager for the additional costs incurred and the hardship faced by the Project Manager during the course of execution of the projects undertaken by BDTCL.

Issue Expenses

The total expenses of this Issue are estimated to be approximately ₹ 400 million. For details in relation to the issue expenses for this Issue, please see the section entitled “*Use of Proceeds*” on page 199.

Details of credit ratings

IndiGrid has been assigned ‘CRISIL AAA/ Stable’ while reaffirming Corporate Credit Rating AAA/ Stable’ by CRISIL on February 11, 2019, ‘IND AAA’/Stable by India Ratings on February 12, 2019 and “IrAAA” (pronounced as IR triple A) with stable outlook by ICRA on April 27, 2018, the rationale for which will be available on their respective websites.

DESCRIPTION OF PORTFOLIO ASSETS

Details of Portfolio Assets

IndiGrid's assets comprise BDTCL, JTCL, MTL, RTCL and PKTCL, which are held by SGL1 and PTCL, which is held by IndiGrid, details of which are provided below.

1. *Sterlite Grid 1 Limited*

SGL1 was incorporated on March 30, 2010 under the Companies Act, 1956. Its registered office is situated at 4th Floor, Godrej Millennium, 9 Koregaon Road, Pune 411 001.

Capital structure of SGL1

Particulars	Number of equity shares of ₹ 10 each on a pre-Issue and post-Issue basis as on March 31, 2019	Number of preference shares of ₹ 10 each on a pre-Issue and post-Issue basis as on March 31, 2019
Authorised capital	17,673,250	27,066,750
Issued, subscribed and paid-up capital	17,673,250	27,062,475

Pursuant to the 2017 Securities Purchase Agreement, IndiGrid holds 100% of the issued, subscribed and paid-up share capital of SGL1 as on the date of this Preliminary Placement Document.

2. *Bhopal Dhule Transmission Company Limited*

BDTCL was incorporated on September 8, 2009 under the Companies Act, 1956 as a special purpose vehicle. Its registered office is situated at F-1, The Mira Corporate Suites, 1 & 2 Ishwar Nagar, Mathura Road, New Delhi 110 065.

Capital structure of BDTCL

Particulars	Number of equity shares of ₹ 10 each on a pre-Issue and post-Issue basis as on March 31, 2019
Authorised capital	2,000,000
Issued, subscribed and paid-up capital	600,000*

**99% of the equity shares of BDTCL have been pledged by SGL1 in favour of lenders of BDTCL, and shall continue to be pledged in favour of India Infrastructure Finance Company (UK) Limited and in relation to the NCDs issued by BDTCL.*

Pursuant to the 2017 Securities Purchase Agreement, IndiGrid indirectly holds 100% of the issued, subscribed and paid-up share capital of BDTCL as on the date of this Preliminary Placement Document.

3. *Jabalpur Transmission Company Limited*

JTCL was incorporated on September 8, 2009 under the Companies Act, 1956 as a special purpose vehicle. Its registered office is situated at F-1, The Mira Corporate Suites, 1 & 2 Ishwar Nagar, Mathura Road, New Delhi 110 065.

Capital structure of JTCL

Particulars	Number of equity shares of ₹ 10 each on a pre-Issue and post-Issue basis as on March 31, 2019
Authorised capital	2,000,000
Issued, subscribed and paid-up capital	550,000*

**51% of the equity shares of JTCL have been pledged by SGL1 in favour of lenders of IndiGrid.*

Pursuant to the 2017 Securities Purchase Agreement, IndiGrid indirectly holds 100% of the issued, subscribed and paid-up share capital of JTCL as on the date of this Preliminary Placement Document.

4. *Maheshwaram Transmission Limited*

MTL was incorporated on August 14, 2014 under the Companies Act, 2013. Its registered office is situated at F-1, The Mira Corporate Suites, 1 & 2 Ishwar Nagar, Mathura Road, New Delhi 110 065.

Capital structure of MTL

Particulars	Number of equity shares of ₹ 10 each on a pre-Issue and post-Issue basis as on March 31, 2019
Authorised capital	1,000,000
Issued, subscribed and paid-up capital	470,000*

* 48.99% of the equity shares of MTL have been pledged by SGLI in favour of lenders of IndiGrid.

Pursuant to the 2018 MTL Share Purchase Agreement, IndiGrid indirectly holds 49% of the issued, subscribed and paid-up share capital of MTL as on the date of this Preliminary Placement Document.

5. RAPP Transmission Company Limited

RTCL was incorporated on December 20, 2012 under the Companies Act, 1956. Its registered office is situated at F-1, The Mira Corporate Suites, 1 & 2 Ishwar Nagar, Mathura Road, New Delhi 110 065.

Capital structure of RTCL

Particulars	Number of equity shares of ₹ 10 each on a pre-Issue and post-Issue basis as on March 31, 2019
Authorised capital	5,000,000
Issued, subscribed and paid-up capital	4,771,110*

* 51% of the equity shares of RTCL have been pledged by SGLI in favour of lenders of IndiGrid.

Pursuant to the 2018 RTCL Share Purchase Agreement, IndiGrid indirectly holds 74% of the issued, subscribed and paid-up share capital of RTCL as on the date of this Preliminary Placement Document.

6. Purulia & Kharagpur Transmission Company Limited

PKTCL was incorporated on December 15, 2012 under the Companies Act, 1956. Its registered office is situated at F-1, The Mira Corporate Suites, 1 & 2 Ishwar Nagar, Mathura Road, New Delhi 110 065.

Capital structure of PKTCL

Particulars	Number of equity shares of ₹ 10 each on a pre-Issue and post-Issue basis as on March 31, 2019
Authorised capital	7,000,000
Issued, subscribed and paid-up capital	6,754,300*

* 51% of the equity shares of PKTCL have been pledged by SGLI in favour of lenders of IndiGrid.

Pursuant to the 2018 PKTCL Share Purchase Agreement, IndiGrid indirectly holds 100% of the issued, subscribed and paid-up share capital of PKTCL as on the date of this Preliminary Placement Document.

7. Patran Transmission Company Limited

PTCL was incorporated on December 19, 2012 under the Companies Act, 1956. Its registered office is situated at F-1, The Mira Corporate Suites, 1 & 2 Ishwar Nagar, Mathura Road, New Delhi 110 065

Capital structure of PTCL

Particulars	Number of equity shares of ₹ 10 each on a pre-Issue and post-Issue basis as on March 31, 2019
Authorised capital	50,000,000
Issued, subscribed and paid-up capital	50,000,000

Pursuant to the 2018 PTCL Share Purchase Agreement, IndiGrid directly holds 74% of the issued, subscribed and paid-up share capital of PTCL as on the date of this Preliminary Placement Document.

Except as disclosed in the section entitled “Our Business - Insurance”, the Trustee confirms that adequate insurance for the Portfolio Assets has been obtained. For further details in relation to the Portfolio Assets, please see the section entitled “Our Business” on page 161.

IndiGrid, acting through the Trustee, proposes to utilise the Issue Proceeds for, amongst others, acquiring 100%

of the issued, subscribed and paid-up equity share capital of: (i) SGL2, which, in turn, holds 100% of the issued, subscribed and paid-up equity share capital of NTL, and (ii) SGL3, which, in turn, holds 100% of the issued, subscribed and paid-up equity share capital of OGPTL. For further details of securities purchase agreements entered into in this regard, please see the section entitled “*Related Party Transactions*” on page 228. Details of SGL2, NTL, SGL3 and OGPTL are provided below.

1. *Sterlite Grid 2 Limited*

SGL2 was incorporated on May 11, 2005 under the Companies Act, 1956. Its registered office is situated at E-1, MIDC Waluj, Aurangabad 431 136.

Capital structure of SGL2

Particulars	Number of equity shares of ₹ 10 each on a pre-Issue and post-Issue basis as on March 31, 2019
Authorised capital	90,000,000
Issued, subscribed and paid-up capital	87,300,000

2. *NRSS XXIX Transmission Limited*

NTL was incorporated on July 29, 2013 under the Companies Act, 2013. Its registered office is situated at F-1, The Mira Corporate Suites, 1 & 2, Ishwar Nagar, Mathura Road, New Delhi 110 065.

Capital structure of NTL

Particulars	Number of equity shares of ₹ 10 each on a pre-Issue and post-Issue basis as on March 31, 2019
Authorised capital	25,000,000
Issued, subscribed and paid-up capital	21,387,144

3. *Sterlite Grid 3 Limited*

SGL3 was incorporated on August 14, 2014 under the Companies Act, 2013. Its registered office is situated at 4th Floor, Godrej Millennium, Koregaon Road 9, Pune 411 001.

Capital structure of SGL3

Particulars	Number of equity shares of ₹ 10 each on a pre-Issue and post-Issue basis as on March 31, 2019
Authorised capital	50,000
Issued, subscribed and paid-up capital	50,000

4. *Odisha Generation Phase - II Transmission Limited*

OGPTL was incorporated on April 17, 2015 under the Companies Act, 2013. Its registered office is situated at F-1, The Mira Corporate Suites, 1 & 2, Ishwar Nagar, Mathura Road, New Delhi 110 065.

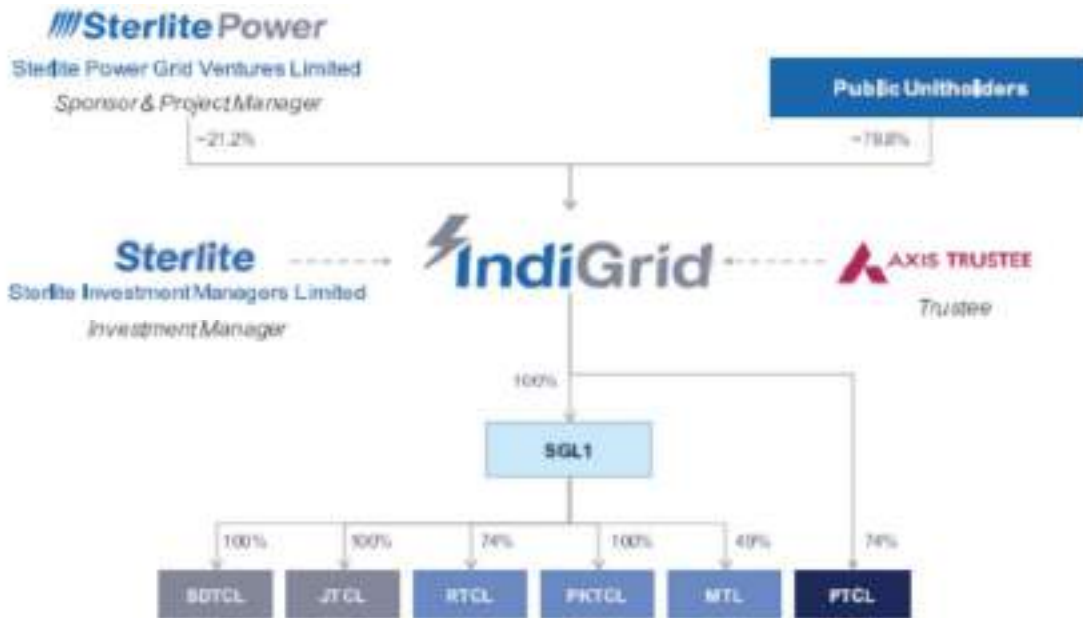
Capital structure of OGPTL

Particulars	Number of equity shares of ₹ 10 each on a pre-Issue and post-Issue basis as on March 31, 2019
Authorised capital	1,500,000*
Issued, subscribed and paid-up capital	1,403,510

*The authorised share capital of OGPTL was increased on July 25, 2018 from ₹ 13,200,000 divided into 1,320,000 equity shares of ₹ 10 each to ₹ 15,000,000 divided into 1,500,000 equity shares of ₹ 10 each.

Structure of IndiGrid

The following structure illustrates the relationship between IndiGrid, the Trustee, the Sponsor, the Investment Manager, the Project Manager and the Unitholders as on the date of this Preliminary Placement Document:



* The percentage details above represent the equity shareholding of IndiGrid in the Portfolio Assets.

SUMMARY CONSOLIDATED FINANCIAL INFORMATION

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India Grid Trust
Summary Consolidated Statement of Assets and Liabilities

(Rs. in million)

Particulars		As at	
		31 March 2019	31 March 2018
A	EQUITY AND LIABILITIES		
1	Equity		
	Unit capital	28,380.00	28,380.00
	Other equity		
	Retained earnings / (Accumulated deficit)	-1,613.89	252.56
	Total Unitholders' Equity	26,766.11	28,632.56
2	Non- Current liabilities		
	Financial liabilities		
	i. Borrowings	25,902.00	19,112.50
	ii. Other financial liabilities	156.72	579.50
		26,058.72	19,692.00
3	Current liabilities		
	Financial liabilities		
	i. Borrowings	-	4,230.00
	ii. Trade payables	161.96	130.17
	iii. Other financial liabilities	462.98	1,088.51
	Other current liabilities	12.42	13.70
	Provision	0.07	-
		637.43	5,462.38
	TOTAL EQUITY AND LIABILITIES	53,462.26	53,786.94
B	ASSETS		
1	Non-current assets		
	Property, plant and equipment	49,827.62	50,264.53
	Financial assets		
	i. Other non-current financial assets	3.57	12.79
	Other non current assets	192.25	150.21
		50,023.44	50,427.53
2	Current assets		
	Financial assets		
	i. Investments	75.72	-
	ii. Trade receivables	1,140.61	1,061.89
	iii. Cash and cash equivalents	1,603.66	1,672.92
	iv. Bank balances other than (iii) above	19.66	10.50
	v. Other financial assets	553.26	498.85
	Other current assets	45.91	115.25
		3,438.82	3,359.41
	TOTAL ASSETS	53,462.26	53,786.94

India Grid Trust
Summary Consolidated Statement of Profit and Loss

(Rs. in million)

Particulars	As at	
	31 March 2019	31 March 2018
INCOME		
Revenue from contract with customers	6,655.70	4,475.69
Dividend income on investment in mutual fund	48.64	49.94
Interest income on investment in fixed deposit	22.63	0.86
Other income	12.08	78.51
Total income (I)	6,739.05	4,605.00
EXPENSES		
Transmission infrastructure maintenance charges	175.57	107.58
Insurance expenses	87.00	65.92
Legal and professional fees	82.34	41.55
Rates and taxes	34.68	33.43
Investment Manager fees (refer note 33)	130.53	87.54
Project Manager fees (refer note 33)	39.54	26.44
Vehicle hire charges	7.26	5.20
Valuation expenses	3.70	4.06
Trustee Fee	2.16	2.94
Payment to auditors (including for subsidiaries)		
- Statutory Audit	4.74	3.48
- Other services (including certification)	4.78	1.21
Other expenses	59.24	19.99
Depreciation expense	1,809.22	1,157.41
Impairment of property, plant and equipment	456.96	-
Finance costs	2,295.83	1,012.57
Total expenses (II)	5,193.55	2,569.33
Profit before tax (I-II)	1,545.50	2,035.68
Tax expense		
- Current tax	6.08	-
- Deferred tax	-	-
- Income tax for earlier years	0.28	-67.82
Profit for the year	1,539.14	2,103.50
Other comprehensive income		
Other comprehensive income to be reclassified to profit or loss in subsequent periods	-	-
Other comprehensive income not to be reclassified to profit or loss in subsequent periods	-	-
Total Comprehensive income	1,539.14	2,103.50
Earnings per unit (Computed on the basis of profit for the year)		
- Basic	5.42	7.41
- Diluted	5.32	7.25

India Grid Trust
Summary Consolidated Cash Flow Statements

(Rs. in million)

Particulars	As at	
	31 March 2019	31 March 2018
A. Cash flow from operating activities		
Net profit as per statement of profit and loss	1,539.14	2,103.50
Adjustment for taxation	6.36	(67.82)
Profit before tax	1,545.50	2,035.68
Non-cash adjustment to reconcile profit before tax to net cash flows		
- Depreciation expenses	1809.22	1,157.41
- Impairment on property, plant and equipment	456.96	-
- Reversal of prepayment charges	(2.37)	(63.85)
Finance cost	2295.83	1,012.57
Dividend income on mutual fund investments	(48.64)	(49.94)
Interest income on investment in fixed deposit	(22.63)	(0.86)
Gain on Sale of Property, plant and equipment	(7.00)	-
Operating profit before working capital changes	6,026.87	4,091.01
Movements in working capital:		
- Increase/(Decrease) in trade payables	31.83	106.32
- Increase/(Decrease) in other current financial liabilities	5.10	72.99
- Increase/(Decrease) in other current liabilities	(9.41)	13.71
- Increase/(Decrease) in non-current financial liabilities	-	-
- Decrease/(Increase) in trade receivables	(236.38)	101.45
- Decrease/(Increase) in other non current financial asset	9.45	(7.90)
- Decrease/(Increase) in other current financial asset	(50.54)	(49.40)
- Decrease/(Increase) in other non-current assets	6.79	-
- Decrease/(Increase) in other current assets	22.73	4.37
Change in working capital	(220.43)	241.54
Cash generated from operations	5,806.44	4,332.55
Direct taxes paid (net of refunds)	(6.29)	-
Cash flow from operating activities	5,800.15	4,332.55
B. Cash flow from investing activities		
Acquisition of property, plant and equipment	(2,252.05)	(44,740.74)
Acquisition of other assets (net of other liabilities)	(51.69)	(1,551.21)
Acquisition of mutual fund investments	-	(7,904.77)
Purchase of mutual fund investments	(11,309.26)	(11,636.16)
Redemption of mutual fund investments	11,233.54	19,540.93
Proceeds from sale of property, plant and equipment	8.40	-
Interest income on fixed deposits	18.76	3.27
Dividend income on current investment	48.64	49.94
Net cash flow used in investing activities (B)	(2,303.67)	(46,238.74)
C. Cash flow from financing activities		
Proceeds from issue of unit capital	-	22,500.00
Proceeds from issue of debentures/ long term borrowings	6,850.00	14,230.00
Acquisition of borrowings	1,675.00	42,345.56
Repayment of borrowings	(6,520.21)	(32,546.46)
Finance costs	(2,170.70)	(1,099.05)
Distribution to unit holders	(3,399.84)	(1,850.94)
Net cash flow from / (used in) financing activities (C)	(3,565.75)	43,579.11
Net increase / (decrease) in cash and cash equivalents (A + B + C)	(69.26)	1,672.92
Cash and cash equivalents as at beginning of the year	1672.92	-
Cash and cash equivalents as at year end	1,603.66	1,672.92
Components of Cash and cash equivalents:		
Balances with banks:		
- On current accounts	519.10	1,672.92
- Deposits with original maturity of less than three months	1,084.56	-
Total cash and cash equivalents	1,603.66	1,672.92

India Grid Trust
Summary Consolidated Statement of Change in Equity

A. Unit capital	No. in Million	Rs. in Million
As at April 01, 2017	-	-
Units issued during the year	283.80	28,380.00
Balance as at 31 March 2018	283.80	28,380.00
Issued during the year	-	-
Balance as at 31 March 2019	283.80	28,380.00

B. OTHER EQUITY

Particulars	(Rs. in million)
	Retained Earnings/(Accumulated deficit)
As at April 01, 2017	-
Profit for the year	2,103.50
Other comprehensive income	-
Less: Distribution during the year	-1,850.94
As at 31 March 2018	252.56
Profit for the year	1,539.14
Other comprehensive income	-
Less: Distribution during the year	-3,405.59
As at 31 March 2019	-1,613.89

SUMMARY SPECIAL PURPOSE COMBINED FINANCIAL INFORMATION

The following tables set forth the summary financial information derived from the Special Purpose Combined Financial Statements.

The Special Purpose Combined Financial Statements referred to above are presented under the section entitled “Special Purpose Combined Financial Statements” on page 288. The summary financial information presented below should be read in conjunction with these financial statements, the notes thereto and the sections entitled “Special Purpose Combined Financial Statements” and “Management’s Discussion and Analysis of Factors by the Directors of the Investment Manager affecting the Financial Condition, Results of Operations and Cash Flows” on pages 288 and 208, respectively.

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SPV Group

Summary Combined Statement of Assets and Liabilities

(Rs. in million)

Particulars		As at		
		31 March 2019	31 March 2018	31 March 2017
A	EQUITY AND LIABILITIES			
1	Equity			
	Equity share capital	859.36	856.75	856.75
	Other equity			
	Securities premium	7,431.89	7,162.57	7,162.57
	Retained earnings	-6,548.84	-2,896.49	-2,465.96
	Other reserves	75.24	-	-
	Adjustment on combination of SPVs	5,755.93	5,969.19	-
	Total equity	7,573.58	11,092.02	5,553.36
2	Non- Current liabilities			
	Financial Liabilities			
	i. Borrowings	84,037.89	64,884.65	43,778.52
	Deferred tax liabilities (net)	236.55	88.76	68.11
		84,274.44	64,973.41	43,846.63
3	Current liabilities			
	Financial liabilities			
	i. Borrowings	1,811.42	9,951.69	11,861.08
	ii. Trade payables	189.91	129.03	110.37
	iii. Other financial liabilities	4,006.49	5,410.86	11,553.28
	Current Tax Liability	-	6.43	4.06
	Other current liabilities	532.69	31.98	33.16
		6,540.51	15,529.99	23,561.95
	Total liabilities	90,814.95	80,503.40	67,408.58
	TOTAL EQUITY AND LIABILITIES	98,388.53	91,595.42	72,961.94
B	ASSETS			
1	Non-current assets			
	Property, plant and equipment	77,516.07	55,793.42	46,616.10
	Capital work-in-progress	11,227.41	28,945.71	18,964.65
	Financial assets			
	Other non-current financial assets	3.99	12.89	3.48
	Deferred tax assets (net)	-	-	16.27
	Other non current assets	280.03	3,878.86	3,818.30
		89,027.50	88,630.88	69,418.80
2	Current assets			
	Financial assets			
	i. Loans	2,757.62	-	-
	ii. Investments	1,383.63	210.03	812.01
	iii. Trade receivables	1,983.43	1,235.34	1,070.93
	iv. Cash and cash equivalents	367.83	750.49	630.33
	v. Bank Balances other than (iv) above	23.47	70.36	30.58
	vi. Other current financial assets	2,731.30	597.11	783.76
	Other current assets	113.75	101.21	215.53
		9,361.03	2,964.54	3,543.14
	TOTAL ASSETS	98,388.53	91,595.42	72,961.94

SPV Group
Summary Combined Statement of Profit and Loss

(Rs. in million)

Particulars	As at		
	31 March 2019	31 March 2018	31 March 2017
INCOME			
Revenue from contracts with customers	9,905.19	7,487.27	6,209.48
Other income	4.35	69.43	10.03
Total income (I)	9,909.54	7,556.70	6,219.51
EXPENSES			
Employee benefits expense	-	0.22	37.76
Other expenses	741.54	500.63	323.55
Total expenses (II)	741.54	500.85	361.31
Earning before interest, tax, depreciation and amortisation (EBITDA) (I) - (II)	9,168.00	7,055.85	5,858.20
Depreciation and amortisation expense	2,364.62	1,798.07	1,619.11
Impairment of property, plant and equipment	991.57	287.81	2,474.06
Finance costs	7,978.58	5,321.42	3,477.88
Finance income	-94.96	-64.12	-32.19
Loss before tax	-2,071.81	-287.33	-1,680.66
Tax expense			
Current tax	154.23	155.03	163.47
Less: MAT credit entitlement	-154.23	-216.54	-52.63
Net current tax expense	-	-61.51	110.84
Deferred tax	297.45	253.46	289.75
Income tax for earlier years	0.12	-48.75	-
Income tax expense	297.57	143.20	400.59
Loss for the year	-2,369.38	-430.53	-2,081.25
Other comprehensive income			
Other comprehensive income to be reclassified to profit or loss in subsequent periods	-	-	-
Other comprehensive income not to be reclassified to profit or loss in subsequent periods	-	-	-
Other comprehensive income for the year	-	-	-
Total comprehensive income for the year	-2,369.38	-430.53	-2,081.25

SPV Group
Summary Combined Cash Flow Statements

(Rs. in million)

Particulars	As at		
	31 March 2019	31 March 2018	31 March 2017
A. Cash flow from operating activities			
Net loss as per statement of profit and loss	-2,369.38	-430.53	-2,081.25
Adjustment for taxation	297.57	143.20	400.59
Loss before tax	-2,071.81	-287.33	-1,680.66
Non-cash adjustment to reconcile loss before tax to net cash flows			
- Depreciation and amortisation expense	2364.62	1798.07	1,619.11
- Deposits written off	12.79	-	-
- Impairment of property plant & equipment	991.57	287.81	2,474.06
- Liabilities no longer required written back	(2.37)	(67.75)	-
Finance cost	7,978.56	5,321.41	3,477.88
Finance income	(94.97)	(64.12)	(32.18)
Operating profit before working capital changes	9,178.39	6,988.09	5,858.21
Movements in working capital:			
- Increase/(Decrease) in trade payables	59.98	64.85	(123.58)
- Increase/(Decrease) in other current financial liabilities	66.75	(284.19)	161.16
- Increase/(Decrease) in other current liabilities	496.76	(0.97)	(11.38)
- Decrease/(Increase) in trade receivables	(759.34)	(164.40)	(450.34)
- Decrease/(Increase) in other non current financial asset	(0.04)	(0.04)	(0.71)
- Decrease/(Increase) in other current financial asset	(2,133.01)	186.30	(254.23)
- Decrease/(Increase) in other non-current assets	(42.57)	(115.68)	-
- Decrease/(Increase) in other current assets	(27.03)	89.46	(60.90)
Change in working capital	(2,338.50)	(224.67)	(739.98)
Cash generated from operations	6,839.89	6,763.42	5,118.23
Direct taxes paid (net of refunds)	(191.04)	(151.68)	(156.95)
Net cash flow from operating activities (A)	6,648.85	6,611.74	4,961.28
B. Cash flow from investing activities			
Purchase of property plant & equipment, including capital work-in-progress and capital advances	(3,851.00)	(18,102.63)	(14,511.56)
Interest income	4.01	28.66	10.57
Dividend income on current investment	45.42	35.88	20.12
Investment in bank fixed deposit having maturity for more than 3 months but less than 12 months	(0.33)	(49.11)	(13.86)
Redemption of fixed deposits	55.80	-	-
Investment in mutual funds	(1157.59)	(14860.28)	(789.47)
Loan given to related party	(2757.62)	0.00	-
Proceeds from mutual funds	28.61	15,462.60	-
Net cash used in investing activities (B)	(7,632.70)	(17,484.88)	(15,284.20)
C. Cash flow from financing activities			
Proceeds from issue of non-convertible debentures	-	7,350.00	-
Proceeds of borrowings from banks and financial institutions	15,343.62	18,041.85	14,915.05
Repayment of borrowings from banks and financial institutions	(6,761.58)	(31,527.24)	(1,948.96)
(Repayment)/Proceeds of loan from holding company (net)	(3,638.34)	(6,400.45)	1,004.50
Loan taken from India Grid Trust	6,059.70	32,757.60	-
Loan repaid to India Grid Trust	(303.37)	(1,709.61)	-
Loan repaid to fellow subsidiary	-	(25.00)	-
Issue of equity share capital (including premium)	-	-	1,250.37
Interim dividend paid (including DDT)	(1,207.73)	-	-
Finance costs	(8891.11)	(7493.85)	(4,496.60)
Net cash flow from financing activities (C)	601.19	10,993.30	10,724.36
Net increase/(decrease) in cash and cash equivalents (A + B + C)	(382.66)	120.16	401.44
Cash and cash equivalents as at beginning of the year	750.49	630.33	228.89
Cash and cash equivalents as at year end	367.83	750.49	630.33
Components of cash and cash equivalents:			
Balances with banks:			
- On current accounts	367.83	750.49	630.33
Total cash and cash equivalents	367.83	750.49	630.33

Summary Combined Statement of Change in Equity

Equity Share capital	Number of shares (in million)	Amount (Rs. in million)
Equity shares of Rs 10 each issued, subscribed and fully paid		
As at 01 April 2016		82.79
Issued during the year	2.88	28.83
As at 31 March 2017		85.68
Issued during the year	-	-
As at 31 March 2018		85.68
Issued during the year	-	-
Issued during the year (conversion of loan into equity share capital)	0.26	2.61
As at 31 March 2019		85.94

Other equity

Particulars	(Rs. in million)				
	Convertible loan classified as equity	Securities premium	Retained earnings	Debenture redemption reserve	Total
Balance as at 01 April 2016	11,060.71	4,731.03	-384.71	-	15,407.03
Loss for the year	-	-	-2,081.25	-	-2,081.25
Other comprehensive income	-	-	-	-	-
	-	-	-2,081.25	-	-2,081.25
Conversion of loan into equity share capital	-1,210.00	-	-	-	-1,210.00
Premium on issue of shares	-	2,431.54	-	-	2,431.54
Convertible loan reclassified to liability during the year	-9,850.71	-	-	-	-9,850.71
Balance as at 31 March 2017	-	7,162.57	-2,465.96	-	4,696.61
Loss for the year	-	-	-430.53	-	-430.53
Other comprehensive income	-	-	-	-	-
	-	-	-430.53	-	-430.53
Balance as at 31 March 2018	-	7,162.57	-2,896.49	-	4,266.08
Loss for the year	-	-	-2,369.38	-	-2,369.38
Less: Interim dividend declared and paid for the year ended 31 March 2019: Rs. 46.84 per share (year ended 31 March 2018: Rs. Nil per share; year ended 31 March 2017: Rs. Nil per share)	-	-	-1,001.77	-	-1,001.77
Less: Dividend distribution tax on interim dividend	-	-	-205.96	-	-205.96
Less: Transfer to debenture redemption reserve	-	-	-75.24	75.24	-
Other comprehensive income	-	-	-	-	-
	-	-	-3,652.35	75.24	-3,577.11
Conversion of loan into equity share capital at premium	-	269.32	-	-	269.32
Balance as at 31 March 2019	-	7,431.89	-6,548.84	75.24	958.29

SUMMARY FINANCIAL INFORMATION OF THE SPONSOR

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Sterlite Power Grid Ventures Limited
Summary Consolidated Statement of Assets and Liabilities

(Rs. in million)

Particulars		As at	
		31 March 2018	31 March 2017
A	EQUITY AND LIABILITIES		
1	Equity		
	Equity share capital	12,435.31	0.52
	Other equity		
	Compulsorily convertible preference shares classified as equity	-	12,434.79
	Securities premium	45.53	45.53
	Retained earnings	-5,134.43	-7,954.63
	Others	493.87	439.47
	Total equity	7,840.28	4,965.68
2	Non- Current liabilities		
	Financial liabilities		
	Borrowings	43,870.02	41,822.98
	Other financial liabilities	9.39	-
	Employee benefit obligations	23.44	22.82
	Deferred tax liabilities (net)	110.81	63.24
		44,013.66	41,909.04
3	Current liabilities		
	Financial liabilities		
	Borrowings	13,149.30	2,283.91
	Trade payables	26.72	34.34
	Other financial liabilities	7,145.11	7,486.68
	Other liabilities	191.09	420.88
	Employee benefit obligations	23.72	15.73
	Current tax liability	7.57	71.29
	Liabilities directly associated with assets classified as held for sale	-	26,072.19
		20,543.51	36,385.02
	Total liabilities	64,557.17	78,294.06
	TOTAL EQUITY AND LIABILITIES	72,397.45	83,259.74
B	ASSETS		
1	Non-current assets		
	Property, plant and equipment	13,954.61	19,375.02
	Capital work-in-progress	35,562.09	18,718.42
	Goodwill	42.67	122.45
	Other intangible assets	19.71	12.96
	Investment in associate	5,932.66	-
	Financial assets		
	Loans	8,214.29	15.21
	Other financial assets	25.05	25.33
	Other non-current assets	4,113.33	2,821.17
	Deferred tax assets (net)	1,885.13	781.15
	Assets classified as held for sale	-	5,879.92
		69,749.54	47,751.63
2	Current assets		
	Inventories	8.81	-
	Investments	389.66	795.20
	Trade receivables	449.10	651.27
	Cash and cash equivalents	465.18	474.41
	Other bank balances	59.74	30.51
	Loans	2.29	-
	Other financial assets	804.32	401.17
	Other current assets	468.81	411.45
	Assets classified as held for sale	-	32,744.10
		2,647.91	35,508.11
	TOTAL ASSETS	72,397.45	83,259.74

Sterlite Power Grid Ventures Limited
Summary Consolidated Statement of Profit and Loss

(Rs. in million)

Particulars	As at	
	31 March 2018	31 March 2017
INCOME		
Revenue from operations	4,726.00	7,522.29
Other income	4,138.67	12.61
Total income (I)	8,864.67	7,534.90
EXPENSES		
Contract expenses	274.72	-
Employee benefits expense	215.59	93.47
Other expenses	1,150.17	689.28
Total expenses (II)	1,640.48	782.75
Earning before interest, tax, depreciation and amortisation (EBITDA) (I) - (II)	7,224.19	6,752.15
Depreciation and amortisation expense	1,070.02	2,053.03
Impairment of goodwill and other non-current assets	-	1,509.18
Finance costs	2,532.29	6,199.29
Finance income	-238.28	-70.01
Profit/(loss) before share of profit of an associate and tax expense	3,860.16	-2,939.34
Share of profit of an associate	435.85	-
Profit/(loss) before tax	4,296.01	-2,939.34
Tax expense:		
Current tax	1,269.92	469.02
Less: MAT credit entitlement	-216.54	-52.66
Net current tax expense	1,053.38	416.36
Deferred tax	-315.28	-274.28
Income tax for earlier years	5.49	-
Income tax expense	743.59	142.08
Profit (Loss) for the period (A+B)	3,552.42	-3,081.42
Other comprehensive income		
Other comprehensive income to be reclassified to profit or loss in subsequent periods:		
Exchange differences on translation of foreign operations	0.04	-
Net movement on cash flow hedges	-431.48	-1.50
Income tax effect	146.12	0.53
Net other comprehensive income to be reclassified to profit or loss in subsequent periods	-285.32	-0.97
Other comprehensive income not to be reclassified to profit or loss in subsequent periods:		
Re-measurement gain/(loss) on defined benefit plans	2.99	0.31
Income tax effect	-1.04	-0.11
Net other comprehensive income not to be reclassified to profit or loss in subsequent periods	1.95	0.20
Other comprehensive income for the year	-283.37	-0.77
Total comprehensive income for the year	3,269.05	-3,082.19
Earnings per equity share		
Basic (Rupees/share)	2.86	-2.48
Diluted (Rupees/share)	2.25	-2.48

Sterlite Power Grid Ventures Limited
Summary Consolidated Cash Flow Statements

(Rs. in million)

Particulars	As at	
	31 March 2018	31 March 2017
A. Cash flow from operating activities		
Net profit/(loss) as per consolidated statement of profit and loss	3,552.42	(3,081.42)
Adjustment for taxation	743.60	142.08
Profit/(loss) before tax	4,296.02	(2,939.34)
Non-cash adjustment to reconcile loss before tax to net cash flows		
- Depreciation and amortisation expenses	1070.02	2,054.35
- Impairment expense	-	1,507.85
- Provision for employees stock appreciation rights	53.75	(6.25)
Finance income	(238.28)	(70.01)
Finance costs	2,532.29	6,199.29
Share of profit of an associate	(435.85)	-
Gain on sale of investments	(4,117.20)	-
	(1,135.27)	9,685.23
Operating profit before working capital changes	3,160.75	6,745.89
Movements in working capital:		
Increase/(decrease) in trade payables	(7.62)	37.90
Increase/(decrease) in employee benefit obligation	11.61	5.47
Increase/(decrease) in other current liabilities	(226.50)	(44.86)
Increase/(decrease) in other financial liabilities	107.80	(2.73)
(Increase)/decrease in trade receivables	(296.08)	(303.41)
(Increase)/decrease in inventories	(8.81)	-
(Increase)/decrease in other current financial assets	(741.94)	(302.02)
(Increase)/decrease in other non-current financial assets	0.29	3.75
(Increase)/decrease in other non-current assets	(26.54)	(20.82)
(Increase)/decrease in other current assets	(113.99)	(249.53)
Change in working capital	(1,301.78)	(876.25)
Cash generated from operations	1,858.97	5,869.64
Direct taxes paid (net of refunds)	(1,329.38)	(296.76)
Cash flow from operating activities	529.59	5,572.87
B. Cash flow from investing activities		
Purchase of fixed assets, including capital work-in-progress and capital advances	(20,048.26)	(15,680.76)
Proceeds from sale of investments in subsidiaries *	11,426.46	-
Purchase of equity shares of subsidiaries	(1.00)	(20.66)
(Purchase)/proceeds of current investments (net)	(7039.13)	(860.74)
Investment in bank deposits (having original maturity of more than three months)	(100.99)	(22.41)
Interest and dividend on investment	476.38	10.84
Loans repayment received	12.93	-
Loan given to holding company	(9,200.00)	-
Net cash used in investing activities	(24,473.61)	(16,573.72)
C. Cash flow from financing activities		
Proceeds of long term borrowings	27,873.32	17,607.84
Repayment of long term borrowings	(375.00)	(1,471.91)
Proceeds/(repayment) of short term borrowings (net)	2,347.94	(1,218.10)
Finance costs paid	(5,911.47)	(3,482.36)
Net cash flow from financing activities	23,934.79	11,435.47
Net increase/(decrease) in cash and cash equivalents (A + B + C)	(9.23)	434.61
Cash and cash equivalents as at beginning of the year	474.41	271.20
Cash and cash equivalents classified under assets held for sale	-	(231.40)
Cash and cash equivalents as at year end	465.18	474.41
Components of cash and cash equivalents:		
Components of cash and cash equivalents at the end of year:		
Balances with banks:		
- On current accounts	421.49	474.41
- Deposit with original maturity of less than 3 months	43.69	-
Total cash and cash equivalents	465.18	474.41

Sterlite Power Grid Ventures Limited
Summary Consolidated Statement of Change in Equity

A. EQUITY SHARE CAPITAL	No. in million	Rs. in million
Equity shares of Rs.10 each issued, subscribed and fully paid		
At 01 April 2016	0.05	0.52
Issued during the year	-	-
At 31 March 2017	0.05	0.52
Add: Conversion of compulsorily convertible preference shares into equity shares	1,243.48	12,434.79
At 31 March 2018	1,243.53	12,435.31

B. OTHER EQUITY

Particulars	Equity component of compulsorily convertible preference shares	Contribution from parent	Reserves and surplus				Items of OCI		Total equity
			Securities premium	Retained earnings	Debenture redemption reserve	Statutory reserve	Foreign currency translation reserve	Cash flow hedge reserve	
Balance as at 01 April 2016	12,434.79	-	45.53	(4,432.96)	-	-	-	(4.60)	8,042.76
Loss for the period	-	-	-	(3,081.42)	-	-	-	-	(3,081.42)
Other comprehensive income	-	-	-	0.20	-	-	-	(0.97)	(0.77)
Total Comprehensive income	-	-	-	(3,081.22)	-	-	-	(0.97)	(3,082.19)
Transferred to debenture redemption reserve	-	-	-	(440.45)	440.45	-	-	-	-
Reclassified to statement of profit and loss	-	-	-	-	-	-	-	4.60	4.60
Balance as at 31 March 2017	12,434.79	-	45.53	(7,954.63)	440.45	-	-	(0.97)	4,965.17
Profit for the period	-	-	-	3,552.42	-	-	-	-	3,552.42
Other comprehensive income	-	-	-	1.95	-	-	0.04	(285.35)	(283.36)
Total Comprehensive income	-	-	-	3,554.37	-	-	0.04	(285.35)	3,269.06
Conversion of CCPS into equity shares of the Group	(12,434.79)	-	-	-	-	-	-	-	(12,434.79)
Contribution from parent for hedge contracts entered on behalf of subsidiary	-	339.36	-	-	-	-	-	-	339.36
Equity component of loan given to holding company	-	-	-	(734.17)	-	-	-	-	(734.17)
Addition during the year (statutory reserve of Brazilian Subsidiaries)	-	-	-	-	-	0.35	-	-	0.35
Balance as at 31 March 2018	-	339.36	45.53	(5,134.43)	440.45	0.35	0.04	(286.32)	(4,595.02)

Sterlite Power Grid Ventures Limited*
Summary Consolidated Statement of Assets and Liabilities

(Rs. in million)

Particulars		As at
		31 March 2016
A	EQUITY AND LIABILITIES	
1	Shareholders' funds	
	Share capital	16,980.84
	Reserves and surplus	-652.82
		16,328.02
2	Non-current liabilities	
	Long-term borrowings	41,049.77
	Long-term provisions	13.94
		41,063.71
3	Current liabilities	
	Short-term borrowings	3,497.65
	Trade payables	29.92
	Other current liabilities	5,333.85
	Short-term provisions	19.33
		8,880.75
	TOTAL (A)	66,272.48
B	ASSETS	
1	Non-current assets	
	(a) Fixed assets	52,881.73
	Tangible assets	
	Intangible assets (including goodwill on consolidation)	719.61
	Capital work-in-progress	7,830.11
	Intangible assets under development	1.78
	(b) Deferred tax asset (net)	262.23
	(c) Long-term loans and advances	1,853.30
	(d) Other non-current assets	269.89
		63,818.65
2	Current assets	
	Current investments	336.00
	Trade receivables	822.37
	Cash and bank balances	279.30
	Short-term loans and advances	245.30
	Other current assets	770.86
		2,453.83
	TOTAL (B)	66,272.48

* For year ended 31 March 2016, the Company prepared its financial statements in accordance accounting standards notified under the section 133 of the Companies Act 2013, read together with paragraph 7 of the Companies (Accounts) Rules, 2014 (Indian GAAP). The financial statements for the year ended 31 March 2017 is the first time the Company has prepared in accordance with Ind AS.

Sterlite Power Grid Ventures Limited*
Summary Consolidated Statement of Profit and Loss

(Rs. in million)

Particulars	As at
	31 March 2016
INCOME	
Revenue from operations	4975.18
Other income	81.81
Total income (I)	5056.99
EXPENSES	
Employee benefits expense	108.68
Other expenses	481.11
Total expenses (II)	589.79
Earning before interest, tax, depreciation and amortisation (EBITDA) (I) - (II)	4467.20
Finance costs	3830.53
Depreciation and amortisation expense	1644.22
Loss before tax	-1007.55
Tax expense:	
Current tax	0.00
Deferred tax	-143.32
Loss for the period	-864.23
Earnings per equity share	
Basic (Rupees/share)	-16619.81
Diluted (Rupees/share)	-16619.81

* For year ended 31 March 2016, the Company prepared its financial statements in accordance accounting standards notified under the section 133 of the Companies Act 2013, read together with paragraph 7 of the Companies (Accounts) Rules, 2014 (Indian GAAP). The financial statements for the year ended 31 March 2017 is the first time the Company has prepared in accordance with Ind AS.

Sterlite Power Grid Ventures Limited*
Summary Consolidated Cash Flow Statements

(Rs. in million)

Particulars	As at
	31 March 2016
A. Cash flow from operating activities	
Net profit/(loss) as per consolidated statement of profit and loss	(864.23)
Adjustment for taxation	(143.32)
Profit/(loss) before tax	(1,007.55)
Non-cash adjustment to reconcile loss before tax to net cash flows	
- Depreciation and amortisation expenses	1644.22
- Dividend of current investments	(41.87)
- Provision for employees stock appreciation rights	18.23
- Diminution in value of asset held for sale	11.97
- Finance costs	3,830.53
- Interest income	(36.20)
Operating profit before working capital changes	4,419.33
<u>Movements in working capital:</u>	
Increase in trade payables	23.90
Increase in long-term provisions	4.25
Increase in short-term provisions	10.03
Increase in other current liabilities	285.37
Increase in trade receivable	(500.19)
(Increase)/Decrease in long-term loans and advances	1.93
(Increase)/Decrease in short-term loans and advances	(119.97)
Increase in other current assets	(399.96)
Change in working capital	(694.64)
Cash generated from operations	3,724.69
Direct taxes paid (net of refunds)	2.66
Cash flow from operating activities	3,727.35
B. Cash flow from investing activities	
Purchase of fixed assets, including capital work-in-progress and capital advances	(12,598.52)
Purchase of equity shares of subsidiaries	(0.50)
(Purchase)/proceeds of current investments (net)	(299.31)
Investment in bank deposits (having original maturity of more than twelve months)	(4.24)
Investment of bank deposits (having original maturity of more than three months but less than twelve months)	4.59
Dividend received on current investments	41.87
Interest received on fixed deposits	35.49
Net cash used in investing activities	(12,820.58)
C. Cash flow from financing activities	
Proceeds of issue of Optionally Convertible Preference Shares (including premium)	500.00
Proceeds of issue of Compulsorily Convertible Preference Shares (including premium)	500.00
Proceeds of long term borrowings	39,565.63
Repayment of long term borrowings	(31,143.85)
Proceeds/(repayment) of short term borrowings (net)	3,368.92
Finance costs paid	(4,419.11)
Net cash flow from financing activities	8,371.59
Net increase/(decrease) in cash and cash equivalents	(721.66)
Cash and cash equivalents as at beginning of the year	992.86
Cash and cash equivalents as at year end	271.20
Components of cash and cash equivalents:	
- Balance with bank on current accounts	271.20
- Cheques in hand	-
Total cash and cash equivalents (refer note 14)	271.20

* For year ended 31 March 2016, the Company prepared its financial statements in accordance accounting standards notified under the section 133 of the Companies Act 2013, read together with paragraph 7 of the Companies (Accounts) Rules, 2014 (Indian GAAP). The financial statements for the year ended 31 March 2017 is the first time the Company has prepared in accordance with Ind AS.

SUMMARY FINANCIAL INFORMATION OF THE INVESTMENT MANAGER

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Sterlite Investment Managers Limited
Summary Standalone Statement of Assets and Liabilities

(Rs. in million)

Particulars		As at		
		31 March 2019	31 March 2018	31 March 2017
A	EQUITY AND LIABILITIES			
1	Equity			
	Equity share capital	28.13	28.13	28.13
	Other Equity			
	Equity component of redeemable preference shares	27.17	21.22	15.23
	Retained earnings	-32.74	-32.58	-33.11
	Total equity	22.56	16.77	10.25
2	Non-current liabilities			
	Financial liabilities			
	i. Borrowings	85.54	84.42	81.66
	Deferred tax liabilities (net)	4.24	4.54	6.35
	Total non-current liabilities	89.78	88.96	88.01
3	Current liabilities			
	Financial liabilities			
	i. Trade payables	61.79	58.55	0.33
	ii. Other Financial liabilities	7.64	4.88	1.46
	Other current liabilities	7.83	8.35	-
	Total current liabilities	77.26	71.78	1.79
	Total liabilities	167.04	160.75	89.79
	TOTAL EQUITY AND LIABILITIES (A)	189.60	177.51	100.05
B	ASSETS			
1	Non-Current assets			
	Property, Plant & Equipment	1.71	-	-
	Other non current assets	19.79	-	-
	Total Non-Current assets	21.50	-	-
2	Current assets			
	Financial assets			
	i. Investments	108.38	100.56	-
	ii. Trade receivables	51.19	41.01	-
	iii. Cash and cash equivalents	0.66	14.52	100.00
	iv. Other financial assets	2.68	0.01	-
	Other current assets	5.19	21.41	0.05
	Total current assets	168.10	177.51	100.05
	TOTAL ASSETS (B)	189.60	177.51	100.05

STERLITE INVESTMENT MANAGERS LIMITED
Summary Standalone Statement of Profit and loss

(Rs. in million)

Particulars	As at		
	31 March 2019	31 March 2018	31 March 2017
INCOME			
Revenue from contracts with customers	110.62	74.19	-
Total Income (I)	110.62	74.19	-
EXPENSES			
Other expenses	109.69	70.51	2.09
Total expenses (II)	109.69	70.51	2.09
Earning before interest, tax, depreciation and amortisation (EBITDA) (I) - (II)	0.93	3.68	-2.09
Depreciation	0.00*	-	-
Finance costs	9.17	9.80	5.23
Finance income	-5.94	-3.92	-0.52
Loss before tax	-2.30	-2.20	-6.80
Tax Expense			
Current tax	0.24	0.12	-
Deferred tax	-2.38	-2.85	-1.71
Total tax expenses	-2.14	-2.73	-1.71
Profit/(loss) for the year	-0.16	0.53	-5.09
Other comprehensive income			
Other comprehensive income to be reclassified to profit or loss in subsequent periods	-	-	-
Other comprehensive income not to be reclassified to profit or loss in subsequent periods	-	-	-
Other comprehensive income for the year, net of tax	-	-	-
Total comprehensive income for the year, net of tax	-0.16	0.53	-5.09
Earnings per equity share			
Basic (Rupees/share)	-0.00	0.00	-0.05
Diluted (Rupees/share)	-0.00	0.00	-0.05

* Amounts less than Rs. 0.01 million

STERLITE INVESTMENT MANAGERS LIMITED
Summary Standalone Statement of Cash Flows

(Rs. in million)

Particulars	As at		
	31 March 2018	31 March 2018	31 March 2017
A. Cash flow from operating activities			
Net profit/(loss) as per the statement of profit and loss	-0.16	0.53	-5.09
Adjustment for Taxation	-2.14	-2.73	-1.71
Loss before tax	-2.30	-2.20	-6.80
Non-cash adjustments to reconcile loss before tax to net cash flows:			
Depreciation Expense	0.00	-	-
Finance cost	9.17	9.80	5.23
Finance Income	-5.94	-3.92	-0.52
Operating profit/(loss) before working capital changes	0.93	3.68	-2.09
Change in assets and liabilities :			
-Decrease/(increase) in other current assets	7.25	-12.43	-
-Decrease/(increase) in other current financial assets	-2.68	-0.01	-
-Decrease/(increase) in trade receivables	-10.17	-41.01	-
-Increase/(decrease) in trade payables	3.24	58.22	-2.30
-Increase/(decrease) in other current financial liability	2.76	3.41	1.03
-Increase/(decrease) in other current liability	-0.52	8.34	-0.01
Change in working capital	-0.12	16.51	-1.28
Direct taxes paid	-11.08	-9.03	-0.05
Net cash flow from/(used in) operating activities (A)	-10.27	11.16	-3.42
B. Cash flow from investing activities			
Interest received on bank deposit/ Dividend income on Mutual Fund	5.94	3.92	0.52
Investment in bank deposits	-	-	-100.00
Redemption of bank deposits	-	-	100.00
Investment in mutual fund	-7.82	-100.56	-
Purchase of property, plant and equipment	-1.71	-	-
Net cash flow generated/(invested) from/in investing activities (B)	-3.59	-96.64	0.52
C. Cash flow from financing activities			
Repayment of loans to holding company	-	-	-23.70
Proceeds from issue of redeemable preference share	-	-	100.00
Proceeds from called up capital	-	-	26.83
Finance cost	-	-	-0.29
Net cash flow from financing activities (C)	-	-	102.84
Net increase/(decrease) in cash and cash equivalents (A + B + C)	-13.86	-85.48	99.94
Cash and cash equivalents as at beginning of the year	14.52	100.00	0.06
Cash and cash equivalents as at end of the year	0.66	14.52	100.00
Components of cash and cash equivalents at the end of year:			
Balances with banks:			
On current accounts	0.66	14.52	100.00
	0.66	14.52	100.00

Sterlite Investment Managers Limited
Summary Standalone Statement of Change in Equity

A. EQUITY SHARE CAPITAL	No. in Million	Rs. in Million
Equity shares of Rs. 2 each issued, subscribed and partly paid		
Balance as at 1 April 2016	112.50	1.30
Issued during the year	-	-
Money called during the year Rs. 0.24 per share	-	26.83
Balance as at 31 March 2017	112.50	28.13
Issued during the year	-	-
Balance as at 31 March 2018	112.50	28.13
Issued during the year	-	-
Balance as at 31 March 2019	112.50	28.13

B. OTHER EQUITY

Particulars	Retained earnings	Equity component of redeemable preference shares	Total
Balance as at 1 April 2016	-28.02	-	-28.02
Loss for the year	-5.09	-	-5.09
Add: Equity component of 8.98% redeemable preference shares	-	15.23	15.23
Balance as at 31 March 2017	-33.11	15.23	-17.88
Profit for the year	0.53	-	0.53
Add: Equity component of 8.98% redeemable preference shares	-	5.99	5.99
Balance as at 31 March 2018	-32.58	21.22	-11.36
Loss for the year	-0.16	-	-0.16
Add: Equity component of 8.98% redeemable preference shares	-	5.95	5.95
Balance as at 31 March 2019	-32.74	27.17	-5.57

SUMMARY OF INDUSTRY

The Indian Power Sector

India is the third largest consumer and producer of electricity in the world with a global share of 5.5% and 5.6% for electricity consumption and production, respectively, in fiscal 2016. The total installed generation capacity in India as of March 2018 was 344 GW, of which approximately 121 GW of capacity was added in the past five years (over fiscal 2013 to fiscal 2018). Coal-based power generation has maintained its dominant position and accounts for approximately 55% of the installed capacity as of January 2019. Renewable energy installations have also witnessed robust growth over the past few years, and have reached approximately 74 GW capacity in January 2019, compared with 25 GW in March 2012, constituting approximately 21% of total installed generation capacity as of date.

There are significant investment opportunities in the power sector in India. Total investment in India's power sector has increased from approximately \$1 trillion in fiscal 2012 to approximately \$1.6 trillion in fiscal 2018. With urbanisation and industrialization, demand for power has increased, encouraging private sector participation in the sector. As the per capita electricity consumption closely follows the growth pattern of per capita GDP, it is expected that strong growth in power demand should follow the approximately 8% growth expected in GDP in the medium term.

The power sector value chain comprises generation, transmission and distribution segments. The following figure provides a snapshot of the value chain. The power generation installed capacity is expected to increase from 199 GW in fiscal 2012 to 440 GW in fiscal 2022 (approximately 8.3% CAGR) and the share of inter-regional transmission capacity is expected to increase from 13.9% in fiscal 2012 to 27% in fiscal 2022 (inter-regional transmission capacity as a fraction of total installed generation capacity) resulting in three times growth of investment in the power transmission sector.

Power Transmission and Distribution Sector in India

The transmission segment plays a key role in transmitting power continuously from the generation plants to various distribution entities. Transmission and sub-transmission systems supply power to the distribution system, which, in turn, supplies power to end consumers. In India, the T&D system is a three-tier structure comprising distribution networks, state grids and regional grids. The distribution networks and state grids are primarily owned and operated by the respective state transmission utilities or state governments (through state electricity departments). Most inter-state and inter-regional transmission links are owned and operated by the Power Grid Corporation of India Limited (PGCIL), which facilitates the transfer of power between different regions.

The government's focus on providing electricity to rural areas has led to the T&D systems being extended to remote villages. The total length of transmission lines in the country has increased from 407,569 ckm in fiscal 2010 to 604,193 ckm in fiscal 2018.

There has been strong growth in the transmission system at higher voltage levels and substation capacities. This is a result of an increase in the demand for transmission networks to carry bulk power over longer distances and at the same time optimize the right of way, minimize losses and improve grid reliability. The total length of the '220 kV and above' transmission lines in the country has increased from 257,481 ckm in fiscal 2012 to 407,291 ckm in January 2019.

With the government's focus on alleviating congestion, transmission capacities are expected to witness robust growth. It is expected that the transmission segment share in total power sector investments will rise sharply to 36% over fiscals 2019 to 2023 from 29% over fiscals 2014 to 2018. With such large additions, the estimated investment in the transmission sector is expected to be Rs. 3.3-3.4 trillion over 2019-23. Investments in the sector are expected to be driven by the need for robust and reliable inter and intra state transmission system, to support continued generation addition, a strong push for renewable energy sector and rural electrification.

The electricity sector in India has undergone significant structural changes, particularly over the last decade, with the enactment of The Electricity Act 2003. The act lowered barriers to private participation in the transmission sector and established competitive bidding for certain transmission projects under the TBCB scheme, with both public utilities and private businesses being allowed to participate in the bidding for these projects, either individually or through joint ventures. The Act also gave CERC and the state regulatory boards the mandate to grant licenses for the construction, maintenance and operation of transmission lines.

Market Share Under TBCB

As on February 2019, 39 interstate (1 project scrapped) transmission projects have been awarded through the TBCB system, of which almost 27 are won by private players while the remaining 11 are won by PGCIL. Among private developers, SPGVL is the leading market player with a market share of 31%. Based on the transmission assets under operation, SPGVL is operating maximum line length of approximately 7,875 ckms and approximately 14,800 MVA of transformation capacity across 15 states. Some of the other major players include Adani Transmission and Essel Infra.

SUMMARY OF BUSINESS

We are an infrastructure investment trust (“**InvIT**”) established to own inter-state power transmission assets in India. IndiGrid was established on October 21, 2016 by our Sponsor, Sterlite Power Grid Ventures Limited and is registered with SEBI pursuant to the InvIT Regulations. Sterlite Power Grid Ventures Limited also serves as the Project Manager with the responsibility of operating and managing our power transmission assets and is one of the leading independent power transmission companies operating in the private sector, with extensive experience in bidding, designing, financing, constructing and maintaining power transmission projects across India.

We are focused on providing stable and sustainable distributions to our Unitholders. We believe that we are well positioned to take advantage of the growth potential of India’s power transmission industry given the quality of our power transmission assets and our financial position, support from our Sponsor and the robust regulatory framework for power transmission in India.

We believe the infrastructure necessary to transmit and deliver electricity is vital to India’s continued economic advancement given the inter-regional power deficit in India resulting from a mismatch between power generation and load centers and the demand-supply deficit which is expected to result from India’s projected GDP growth. For further details, see “*Industry Overview*” on page 129.

We own six fully commissioned projects, BDTCL, JTCL, PKTCL, RAPP and MTL that we acquired from our Sponsor in fiscal 2018, and PTCL that we acquired for a third party in fiscal 2019 (together the “**Portfolio Assets**”). These assets have a total network of 13 power transmission lines of approximately 3,362 ckms across nine states and three substations having 7,000 MVA of transformation capacity across three states in India.

Our Sponsor is one of the leading independent power transmission companies operating in the private sector in India. Our Sponsor has developed 12 inter-state power transmission projects with a total network of 38 power transmission lines of approximately 8,001 ckms and 10 substations having 14,995 MVA of transformation capacity in India. Some of these projects have started commercial operations and were transferred to us in fiscal 2018, while others are at different stages of development. Recently, our Sponsor has won bids for ten transmission projects in Brazil with a total network of approximately 4,424 ckms having 7,890 MVA of transformation capacity, in auctions conducted by the Brazilian electricity regulatory authority, Agência Nacional de Energia Elétrica. Presently, under the InvIT Regulations, we are not permitted to acquire transmission projects outside of India, including the Sponsor’s projects in Brazil. Our Sponsor generated consolidated total income of ₹8,864.67 million in fiscal 2018 and had total consolidated assets of ₹69,749.54 million as of March 31, 2018.

Pursuant to the Framework Agreement among the Sponsor, the Trustee and the Investment Manager, IndiGrid has agreed to acquire three additional projects, GPTEL, KTL and NER from our Sponsor (the “**Framework Assets**”), and pursuant to the ROFO Deed, as amended, we have a ‘right of first offer’ to acquire one project, ENICL from our Sponsor (**ROFO Asset**). IndiGrid has agreed to acquire, two projects, NTL and OGPTL, which were part of the ROFO Deed (the “**Target Assets**”) from our Sponsor, with the proceeds of this Issue, for which we have executed definitive share purchase agreements with our Sponsor on April 30, 2019. For further details, see “*Use of Proceeds*” on page 199. For further details on the Framework Agreement, the ROFO Deed and the share purchase agreements, see “*Related Party Transactions*” on page 228.

The Portfolio Assets, other than PTCL, were originally awarded to our Sponsor under the “tariff based competitive bidding” mechanism (“**TBCB**”) on a “build-own-operate-maintain” (“**BOOM**”) basis. The power transmission projects earn revenue pursuant to long-term transmission services agreements (“**TSAs**”) and tariff orders passed by CERC in accordance with the Electricity Act, 2003 (“**Tariff Orders**”). These projects receive availability-based tariffs under the TSAs irrespective of the quantum of power transmitted through the line. The tariff for inter-state power transmission projects in India, including the Portfolio Assets, is contracted for the period of the TSA, which is up to 35 years from the scheduled commission date of the asset, which may be renewed in accordance with the TSA and the Electricity Act, 2003. With periodic maintenance, transmission assets enjoy a longer asset life of approximately 50 years compared to other infrastructure projects, according to CRISIL. For further details on the TBCB and the Indian electricity transmission industry, see “*Industry Overview*” on page 129.

Tariffs under these TSAs are billed and collected pursuant to the “point of connection” (“**PoC**”) mechanism, a regulatory payment pooling system offered to Inter State Transmission Systems (“**ISTS**”) such as the systems operated by the Portfolio Assets. Under the PoC mechanism, payments are made to a central payment pool and the proceeds are distributed proportionately to all transmission services providers, such as the Portfolio Assets.

The availability-based tariffs and PoC payment mechanism enable a stable and certain cash flow stream. For further details, see “*Industry Overview*” on page 129.

While infrastructure investment trusts are required to distribute at least 90% of their net distributable cash flows to unitholders once at least every six months in every financial year, according to the InvIT Regulations, we have adopted a quarterly distribution policy. For further details on our distribution policy, see “*Distribution*” on page 205. We believe our power transmission assets, financial position and business model will enable us to offer stable distributions to our Unitholders.

We have been given a corporate credit rating of AAA/Stable by CRISIL, “IND AAA”/Stable by India Ratings and “ICRA AAA” (pronounced as ICRA triple A) with stable outlook by ICRA. Following the utilization of the Issue Proceeds, our aggregate consolidated borrowings and deferred payments (net of cash and cash equivalents) will not exceed 49% of the total value of our assets. We may increase our aggregate consolidated borrowings and deferred payments (net of cash and cash equivalents) from the current level up to the maximum permitted limit under the InvIT Regulations of 70% of the total value of our assets. The industry standard debt to equity ratio for inter-state power transmission projects is 70% debt, according to CRISIL.

Total income on a combined basis was ₹9,909.54 million in fiscal 2019 and EBITDA on a combined basis was ₹9,168.00 million for fiscal 2019 as per the Special Purpose Combined Financial Statements.

On the basis of our strengths and through the implementation of our strategies, we believe that we are well-positioned to capitalize on the growth potential of India’s power transmission industry.

Recent Developments

Prior to this Issue, the Trustee, our Sponsor and our Investment Manager have entered into definitive agreements with affiliates of KKR, which, if fully completed, will result in a change of control of the Investment Manager and a transfer of a significant Unitholding in IndiGrid from our Sponsor to an affiliate of KKR following receipt of approvals for its designation as a sponsor of IndiGrid (collectively, the “**KKR Transaction**”). Pursuant to these agreements, Electron, an affiliate of KKR has agreed to acquire up to 74% of the share capital of the Investment Manager in a series of transactions. Upon the purchase of 19.99% of such shares at the initial closing expected to occur on the Closing Date, Electron will have the right to appoint a director on the board of directors of the Investment Manager and obtain certain affirmative voting rights with respect to certain matters such as amendments to charter documents of the Investment Manager, transfer of assets and declaration of dividends, and, upon the change of control, Electron will have the right to appoint three out of ten directors to the board of directors of the Investment Manager and the right to recommend candidates for the appointment of three other directors. In addition, we have received a commitment letter from Esoteric, another affiliate of KKR, indicating an interest in purchasing up to an aggregate of approximately ₹ 10,800 million of the Units to be allotted in this Issue, representing approximately 42.2% of the Units offered and to be allotted in this Issue. If Esoteric determines to subscribe to, and our Trustee and the Investment Manager determine to so allot, all of these Units, Esoteric will hold, after the completion of this Issue, approximately 21.86% of our issued and outstanding Units. In addition Esoteric has also agreed to acquire up to 15% of our issued and outstanding Units on a post-Issue basis and to be designated as a “Sponsor” of IndiGrid together with our Sponsor, subject to unitholders approval. If these transactions are completed, KKR, through its affiliate, will hold approximately 36.87% of the issued and outstanding Units of IndiGrid on a post-Issue basis.

The completion of these transactions is subject to a number of conditions precedent, including, among others, the approval by Unitholders and the receipt of approval from SEBI, in accordance with the InvIT Regulations. The Investment Manager has scheduled an extraordinary general meeting of our Unitholders to be held on May 24, 2019 to evaluate the proposed KKR Transaction. However, there is no assurance that the Unitholders of IndiGrid and SEBI will approve the proposed KKR Transaction.

For more details on the transaction, see “*Key Developments related to IndiGrid and the Issue*” on page 224, “*Risk Factors—A significant portion of the Units offered and sold in this Issue may be allotted to a few investors who have indicated an interest in purchasing Units*” on page 58, “*Risk Factors—We have entered into definitive agreements which, if fully completed, will result in a change of control of the Investment Manager and a transfer of a significant Unitholding in IndiGrid from our Sponsor to an affiliate of KKR*” on page 59 and “*Risk Factors—The completion of the KKR Transaction is subject to the receipt of approval from Unitholders and SEBI, which may impose conditions that could have an adverse effect on us, if not obtained, and could prevent completion of the KKR Transaction*” on page 59.

RISK FACTORS

An investment in the Units involves a high degree of risk. Before investing in the Units, you should pay particular attention to the fact that IndiGrid, the Trustee, our Portfolio Assets, the Target Assets, our Sponsor, the Project Manager, the Investment Manager and each of their activities are governed by the legal, regulatory and business environment in India, which differs from that which prevails in other countries. You should carefully consider the risks described below as well as other information as disclosed in this Preliminary Placement Document before making an investment in the Units. The risks described in this section are those that IndiGrid, our Sponsor and the Investment Manager consider to be the most significant to our business, prospects, financial condition, results of operations and cash flows and are not the only risks and uncertainties that we face. Additional risks and uncertainties not presently known to IndiGrid, our Sponsor and/or the Investment Manager or that they currently believe to be immaterial may also have an adverse effect on our business, prospects, financial condition, results of operations and cash flows. If any or a combination of the following events occur, or if other risks that are not currently known or are now deemed immaterial give rise to similar events, our business, prospects, financial condition, results of operations and cash flows could materially suffer, the value of the Units could decline and you may lose all or part of your investment. Unless specified or quantified in the relevant risk factors below, IndiGrid, our Sponsor and the Investment Manager are not in a position to quantify the financial or other implication of any of the risks mentioned herein.

This Preliminary Placement Document contains forward-looking statements (including, the Projections of Revenue from Operations and Cash Flow from Operating Activities) that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the considerations described below and elsewhere in this Preliminary Placement Document.

To obtain a complete understanding, prospective investors should read this section together with the sections “Our Business” on page 161 and “Management’s Discussion and Analysis of Factors by the Directors of the Investment Manager affecting the Financial Condition, Results of Operations and Cash Flows” on page 208, as well as the other financial and statistical information contained in this Preliminary Placement Document.

In making an investment decision, you must rely upon your own examination and the terms of the Issue, including the merits and the risks involved. You should consult your tax, financial and legal advisors about the particular consequences of investing in the Issue.

In this section, unless the context otherwise requires, a reference to “we”, “us” and “our” refers to IndiGrid or to the Portfolio Assets and the Target Assets, and may be interchangeably used. Furthermore, unless the context otherwise requires, the financial information used in this section is derived from our Special Purpose Combined Financial Statements prepared under IndAS and the Guidance Note on Combined and Carve-out financial statements issued by ICAI.

RISKS RELATED TO THE CHANGE OF CONTROL TRANSACTION

- 1. A significant portion of the Units offered and sold in this Issue may be allotted to a few investors who have indicated an interest in purchasing Units.*

We have received commitment letters from Esoteric II Pte. Ltd. (“**Esoteric**”), an affiliate of KKR & Co. (“**KKR**”), and GIC Infra Holdings Pte. Ltd. (the “**GIC Entity**”), an affiliate of GIC Pte. Ltd. (“**GIC**”), indicating an interest in purchasing up to an aggregate of approximately ₹ 10,800 million and ₹ 9840 million, respectively, of the Units sold in this Issue at the Issue Price and on the same terms as the other subscribers in this Issue, representing approximately 42.2% and 38.4%, respectively, of the Units offered and sold in this Issue. In addition, as our Sponsor is required under the InvIT Regulations to maintain at least 15% ownership of our issue and outstanding Units, it will subscribe to up to an aggregate amount of approximately ₹ 2,370 million of the Units issued in this Issue. If each of these entities determines to subscribe to, and our Trustee and the Investment Manager determine to so allot, all of the Units indicated above, Esoteric, the GIC Entity and our Sponsor will hold, after the completion of this Issue, approximately 21.86%, 19.92% and 15.01%, respectively, of our issued and outstanding Units, and the liquidity of our Units may be adversely affected. However, the commitment letters from Esoteric and the GIC Entity, are not binding agreements or commitments to subscribe, and they could determine to subscribe to, and our Trustee and the Investment Manager could determine to allot, fewer or no Units in this Issue.

2. We have entered into definitive agreements which, if fully completed, will result in a change of control of the Investment Manager and a transfer of a significant Unitholding in IndiGrid from our Sponsor to an affiliate of KKR.

Prior to this Issue, the Trustee, our Sponsor and our Investment Manager have entered into definitive agreements with affiliates of KKR, which, if fully completed, will result in a change of control of the Investment Manager and a transfer of a significant Unitholding in IndiGrid from our Sponsor to an affiliate of KKR following receipt of approvals for its designation as a sponsor of IndiGrid (collectively, the “**KKR Transaction**”). Pursuant to these agreements, Electron IM Pte. Limited (“**Electron**”), an affiliate of KKR, has agreed to acquire up to 74% of the share capital of the Investment Manager in a series of transactions, including the acquisition of 19.99% of the share capital of the Investment Manager in a transaction that is expected to close on the Closing Date. In addition, Electron has entered into a shareholders’ agreement with the Investment Manager and its shareholder, under which Electron will have, pursuant to its initial acquisition of 19.99% of the share capital of Investment Manager as set forth above, the right to appoint a director on the board of directors of the Investment Manager and will obtain certain affirmative voting rights with respect to certain matters such as amendments to charter documents of the Investment Manager, transfer of assets and declaration of dividends, and upon such change of control, Electron will have the right to appoint three out of ten directors to the board of directors of the Investment Manager and the right to recommend candidates for the appointment of three other directors.

In addition to the commitment to subscribe to up to 42.2% of the Units sold in this Issue as described above, Esoteric, an affiliate of KKR, has also agreed to acquire up to 15% of our issued and outstanding Units owned by our Sponsor on a post-Issue basis and to be designated as a “Sponsor” of IndiGrid together with our Sponsor which is subject to unitholders approval. If these transactions are completed, KKR, through its affiliate, will hold approximately 36.87% of the issued and outstanding Units of IndiGrid.

The completion of the KKR Transaction is subject to a number of conditions precedent, including, among others, the approval by Unitholders and the receipt of approval from SEBI, in accordance with the InvIT Regulations. The Investment Manager has scheduled an extraordinary general meeting of our Unitholders to be held on May 24, 2019 to evaluate the proposed KKR Transaction. However, there is no assurance that the Unitholders of IndiGrid and SEBI will approve the proposed KKR Transaction.

If the KKR Transaction is completed as described above, by virtue of its significant Unitholding in IndiGrid, KKR, through its affiliate, will have the ability to significantly influence most matters requiring approval by our Unitholders and could significantly influence the outcome of corporate actions in a manner which may conflict with our interests and the interests of our Unitholders. In addition, as the controlling shareholder of our Investment Manager, KKR, through its affiliate, will have significant influence on the composition of the board of directors and management teams of our Investment Manager and, consequently, the investment and financial management of our power transmission assets. No assurance can be given that KKR’s objectives will not conflict with our business goals and activities.

Following the completion of the KKR Transaction, the market price of IndiGrid’s Units may decline if, among other reasons, the effect of these transactions on the financial results of IndiGrid is not consistent with our expectations or with the expectations of financial analysts or investors, or if current Unitholders sell a significant number of the Units after consummation of these transactions.

For more details on the KKR Transaction, see “*Key Developments related to IndiGrid and the Issue*” on page 224.

3. The completion of the KKR Transaction is subject to the receipt of approval from Unitholders and SEBI, which may impose conditions that could have an adverse effect on us, if not obtained, and could prevent completion of the KKR Transaction.

The completion of the KKR Transaction is subject to a number of conditions precedent, including, among others, the receipt of approval from Unitholders and SEBI. The Investment Manager has scheduled an extraordinary general meeting of our Unitholders to be held on May 24, 2019 to evaluate the proposed KKR Transaction. However, there is no assurance that the Unitholders and SEBI will approve the KKR Transaction and the requirement for such approvals make the completion and timing of the KKR Transaction uncertain. For more details on the KKR Transaction, see “*Key Developments related to IndiGrid and the Issue*” on page 224. Any failure to obtain the required approvals for the KKR Transaction could lead to the termination of the KKR Transaction, which could materially affect our ongoing business and, without realizing any of the benefits of having completed the KKR Transaction, we will be subject to a number of risks, including the following:

- the market price of the Units could decline;
- if the KKR Transaction is terminated and the board of directors of the Investment Manager seeks another comparable transaction, we cannot assure that we will be able to find a party willing to enter into a transaction on terms equivalent to or more attractive than the terms agreed to in the KKR Transaction;
- the time and resources committed by our management to matters relating to the KKR Transaction may adversely affect our business in the future on account of such time and resources not being devoted to pursuing other beneficial opportunities;
- we may experience negative reactions from the financial markets or from customers, partners or employees and may consequently encounter reputational harm;
- we may be required to pay our costs relating to the KKR Transaction, such as legal, accounting, financial advisory and printing fees, whether or not the KKR Transaction is completed; and
- delays in the completion of the KKR Transaction could, among other things, result in additional transaction costs, loss of revenue or other negative effects associated with uncertainty about completion of the KKR Transaction.

RISKS RELATED TO OUR BUSINESS

4. *We may be unable to operate and maintain our power transmission projects to achieve the prescribed availability.*

We operate our power transmission projects under an availability-based tariff regime. The Tariff Regulations provide specific guidance on the calculation of availability, and take into account the elements in the transmission system (including transmission lines and substations) as well as the reason for any outages, with force majeure outages being excluded from such calculation. If our availability falls below 95% for a particular line, we are subject to a penalty, which reduces the annual transmission charge we receive for the relevant period.

We may be unable to operate and maintain our power transmission projects to achieve prescribed availability due to a number of factors, which include:

- failure to meet licensing requirements or to obtain, maintain or renew approvals and licenses;
- operator error, improper installation or mishandling of equipment;
- breakdown or failure of power transmission systems;
- flaws in equipment design or construction of power lines or substations;
- work stoppages or labor disturbances or disputes;
- performance of equipment below expected levels of output or efficiency;
- environmental issues affecting the operations of transmission systems;
- planned or unplanned power outages;
- theft of equipment and lines;
- claims on completed projects and litigations, proceedings, judgments or awards arising therefrom; and
- force majeure and catastrophic events, including fires, explosions, landslides, storms, floods, social unrest, earthquakes and terrorist acts, to the extent such events are not excluded from the calculation of availability under the transmission services agreements (“TSAs”) and the Tariff Regulations.

Accidents or malfunctions involving transmission lines or substations including failure of transmission towers, power conductors or insulators, may disrupt transmission of electricity and result in availability being below expected levels.

In addition, power transmission projects rely on equipment that is built by third parties, and which is subject to malfunction. Although, in certain cases, manufacturers provide warranties and performance guarantees, and may be required to compensate us for certain equipment failures, engineering and design defects, such arrangements are subject to time limits, fixed liability caps and may not fully compensate us for the damage incurred or for penalty payments which may be imposed on us due to any reduced availability below required levels. Warranties under certain supplier contracts for certain of our Portfolio Assets have expired, as a result of which we may not be compensated for equipment failures, engineering and design defects from such suppliers.

The power transmission projects comprising the Portfolio Assets and Target Assets are generally in geographically remote areas with difficult terrain, which poses particular challenges for their operation and maintenance, including security and accessibility.

If any of these risks or any similar risks materialize, our ability to operate and maintain power transmission projects to achieve prescribed availability thresholds could be adversely affected. We may also face reputational risks which could affect our ability to bid for future power transmission projects and we may face potential claims for loss of business or for damages if we are unable to transmit power as agreed under our TSAs. A Portfolio Asset or Target Asset may have its license cancelled by CERC or its TSA terminated by either a long-term transmission customer (“LTTC”) or the CTU for failure to operate and maintain the power transmission projects in accordance with prescribed requirements. Any of these circumstances could materially and adversely affect our business, prospects, financial condition, results of operations and cash flows.

5. *We may lose tariff revenues and incur significant repair and replacement costs in the event our power transmission projects are rendered inoperable due to force majeure events.*

In the event that any of our power transmission projects are rendered inoperable due to force majeure events, there can be no assurance that we will be able to successfully apply to obtain a deemed availability certificate to receive tariffs under the force majeure provisions under the applicable TSA, or that our insurance will reimburse us for repair and replacement costs, either partially or fully for the period of such force majeure event, which could materially affect our business, prospects, financial condition, results of operations and cash flows.

One of the Portfolio Assets, BDTCL, had its 765 KV S/C Bhopal – Indore transmission line rendered inoperable for approximately 51 days in fiscal 2015 when gale force winds damaged a tower. BDTCL received a deemed availability certificate for the same period. Additionally, there was a delay in the construction of the OGPTL transmission lines due to heavy rainfall and flood in Jharsuguda and Sundargarh districts of Odisha, among other factors. The OGPTL project received energization approval on August 23, 2017. However, due to non-availability of bays at the PGCIL substation at Sundargarh (Jharsuguda), the said line was deemed to be commissioned with effect from August 30, 2017.

ENICL, a ROFO Asset, has had its 400 KV D/C Purulia – Bihar Sharif transmission line rendered inoperable twice. It was rendered inoperable in August 2016 until July 2017, and was rendered inoperable again in August 2018. In both instances, flooding and heavy rainfall damaged the transmission towers. While ENICL received deemed availability certificates for the period between August 2016 to July 2017, it has received deemed availability certificates only for the months between August 2018 to October 2018. While the Sponsor is in the process of submitting related insurance claims, there can be no assurance that we will be able to successfully apply for a deemed availability certificate to continue receiving tariffs under the TSA in the future or that our insurance will reimburse us for the repair and replacement costs.

6. *Substantially all our revenues are derived from tariff payments received from LTTCs and a delay in payments of point of connection (“PoC”) charges to the Central Transmission Utility (“CTU”) by users and customers may adversely affect our cash flows and results of operations.*

In accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 (“**Sharing of Charges and Losses Regulations**”) and the CERC’s PoC payment system, transmission licensees, such as our Portfolio Assets and the Target Assets, are entitled to recover their approved tariffs from Inter-State Transmission Systems (“**ISTS**”) charges collected by the CTU. The CTU collects transmission charges from customers, including our LTTCs on a regular basis and pays such transmission charges to the transmission licensees, including the Portfolio Assets. The payment mechanism is structured, in accordance with the Tariff Regulations to incentivize the end consumers to make timely payments through rebates, and a surcharge that is levied on untimely payments by LTTCs.

The LTTCs under the PoC mechanism include various state utilities, other distribution licensees and TSUs. These LTTCs have experienced periods of financial weakness in the past. A failure or delay on the part of any LTTCs to make timely payments or on the part of distribution licensees or TSUs to make the requisite payments to the CTU could affect the capability of the CTU to make the corresponding payments to transmission licensees, including our Portfolio Assets. As a result, factors beyond our control that affect the business, prospects, financial condition, results of operations or cash flows of the LTTCs could result in the delay or failure of our Portfolio Assets to receive tariff payments.

PGCIL serves as a CTU and is responsible for the planning, development and operation of inter-state transmission of electricity and the national grid. PGCIL also undertakes high capacity transmission corridor and grid strengthening projects. Its dual roles as a CTU and power transmission project developer and operator may give rise to conflicts of interest that could result in delays in tariff payments to us. As a result of these and similar

factors that may be beyond our control, our business, prospects, financial condition, results of operations and cash flows may be adversely affected.

7. ***As the terms and conditions, including the tariff structure under our TSAs are generally fixed, we may not be able to offset increases in costs, including operation and maintenance costs, solely from tariffs payable to us under the TSAs.***

The tariff structure under our TSAs is largely fixed for the entire term of the TSAs. Operation and maintenance costs of the Portfolio Assets and the Target Assets may increase due to factors beyond our control, including the following:

- Increase in the cost of labor, materials and insurance;
- Restoration costs in case of events such as, floods, natural disasters and accidents;
- Increase in raw material costs;
- Adverse weather conditions;
- Unforeseen legal, tax and accounting liabilities; and
- Other unforeseen operational and maintenance costs.

We may not be able to offset increased operation and maintenance costs as the tariff is fixed under our TSAs, and given the escalable component forms only a small portion of the tariff payable to us, it may be insufficient to offset such cost increases. Additionally as the escalable portion of our tariff is linked to inflation, there can be no assurance that adjustments of the escalable tariff will be sufficient to cover increased costs resulting from inflation. Significant increases in operation and maintenance costs may reduce our profits, could expose us to penalties under the TSAs and could adversely impact our business, prospects, financial condition, results of operations and cash flows.

Any increased volatility or rate of inflation of global commodity prices, in particular oil and steel prices, could adversely affect our customers, contractual counterparties and end users. Although the Reserve Bank of India periodically imposes certain policy measures designed to curb inflation, these policies may not be successful. Any slowdown in India's growth, inflation volatility or fluctuation or sustained periods of hyperinflation could cause our actual results of operations to deviate from our financial projections and estimates and adversely impact our business, prospects, financial condition, results of operations and cash flows.

8. ***We intend to acquire the Target Assets with the proceeds with this issue and any failure to acquire these assets could have a material adverse effect on our business, financial condition and results of operations.***

We have entered into the OGPTL Securities Purchase Agreement and the NTL Securities Purchase Agreement with our Sponsor on April 30, 2019, to acquire the Target Assets. For further details see "Related Party Transactions" on page 228.

We intend to acquire the Use of Proceeds Assets with the proceeds of this Issue. If we are unable to raise the expected proceeds from this Issue, we may not be able to acquire the Use of Proceeds Assets and as a result be in breach of our share purchase agreements with our Sponsor and may not be able to realise the anticipated benefits of the acquisition of the Use of Proceeds Assets. If we are unable to obtain Unitholders' approval at the extraordinary general meeting of Unitholders currently scheduled on May 24, 2019 or any other required approvals to complete the acquisitions of the Use of Proceeds Assets, we may not be able to complete such acquisitions. This could have a material adverse impact on our business, financial condition and results of operations and prospects.

In addition, the acquisition of the Use of Proceeds Assets, may result in material transaction expenses, increased interest and amortization expense, increased depreciation expense and increased operating expense and financing costs, any of which could have an adverse effect on our results of operations. The acquisition may entail integration and management of the Use of Proceeds Assets to realize economies of scale and control costs, as well as other risks, including diversion of management resources otherwise available for ongoing development of our business. Further, the acquisition of the Use of Proceeds Assets and any other acquisitions or alliances may expose us to the risk of unanticipated business uncertainties or legal liabilities for which the Sponsor or its alliance partners in relation to the Use of Proceeds Assets may or may not indemnify us.

9. *The ability of our Project Manager to ensure that our power transmission systems are fully operational at all times may be subject to the limitations of the power grid, existing equipment or operational risks outside of their control.*

Power grid outages at the state, regional or national level disrupt the transmission of electricity and could result in performance being below expected levels. For example, there could be failure in the transmission towers, power conductors or insulators. In addition, power transmission projects rely on sophisticated machinery that is built by third parties, which may malfunction. Injuries to people or property may also occur in the ordinary course of carrying on our business, which could subject us to significant disruptions in our business and legal and regulatory actions. For example, a fatal accident along the transmission lines set up by BDTCL at the time of construction, resulted in the death of eight laborers. The operation of power transmission projects also involves many operational risks, some of which are outside our control, including explosions, fires, damages due to earthquakes and other natural disasters, the breakdown or failure of transmission equipment or other equipment or processes, operating below expected levels, labor disputes, civil unrest, terrorism and war. For example, the construction of the OGPTL transmission lines was delayed due to, amongst other factors, unseasonal and heavy rainfall and flood in Odisha and delay in the grant of forest clearance to OGPTL in respect of the forest land acquired for the construction of the said transmission lines. Any disruption in the operations of our power transmission projects could negatively impact the reputation of IndiGrid, the Project Manager, the Investment Manager or the Sponsor among our customers, stakeholders, regulators or within our industry. The occurrence of any of the above events could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.

10. *The Portfolio Assets and Target Assets may not achieve the projected financial performance referred to in the financial projections, which could adversely affect our ability to meet our projected distributions to our Unitholders.*

The projected financial information included in the section entitled “*Projections of Revenue from Operations and Cash Flow from Operating Activities*” on page 325 is based upon the projected financial performance of each of the Portfolio Assets and Target Assets. Should any of the Portfolio Assets and Target Assets be unable to meet the expected financial projections for any reason, this would materially and adversely affect our ability to meet our financial projections.

These financial projections are only estimates of possible future operating results and not guarantees of future performance. The financial projections, while presented with numerical specificity, are necessarily based on a variety of estimates and assumptions as set out in this Preliminary Placement Document, though considered reasonable by the Investment Manager, may not be realized and are inherently subject to significant business, economic, competitive, industry, regulatory, market and financial uncertainties and contingencies, many of which are beyond the control of IndiGrid, the Investment Manager or the Sponsor. Our actual future operating results will be affected by numerous factors, including those discussed in the section entitled “*Forward-Looking Statements*” on page 20 and in this risk factor.

Actual results or developments may differ materially from the expectations expressed or implied in the Projections of Revenue from Operations and Cash Flow from Operating Activities or from any projections or estimate provided in the past. Accordingly, there is no assurance that we will be able to achieve such projections or make the distributions set out in “*Projections of Revenue from Operations and Cash Flow from Operating Activities*” on page 325. You should not rely solely on the financial projections in making an investment decision given how they are calculated and the possibility that actual results may differ materially from the underlying estimates and assumptions.

Furthermore, the outstanding indebtedness and the proposed indebtedness, including any refinancing of existing indebtedness, of the Portfolio Assets or Target Assets may be subject to certain financial covenants which may have the effect of restricting the distributions that the Portfolio Assets or Target Assets may make to us, which may in turn restrict the amount of distributions that we can make to our Unitholders.

11. *We have amended the ROFO Deed and entered into the Framework Agreement with our Sponsor, the terms of which could be materially different from the ROFO Deed.*

On April 30, 2019, we entered into the Framework Agreement with our Sponsor through which we have agreed to acquire the Framework Assets from our Sponsor, subject to definitive share purchase agreements to be entered into in future. The Framework Assets include two assets, GPTL and KTL, which were part of the ROFO Deed. To facilitate this, we amended the ROFO Deed on April 30, 2019 (the “**ROFO Deed Amendment**”), subject to Unitholder approval to be obtained at an extraordinary general meeting currently schedule for May 24, 2019, and as a result only the acquisition of ENICL by IndiGrid subject to definitive share purchase agreements to be entered into will be covered under the terms of the ROFO Deed following the effectiveness of the ROFO Deed Amendment and the Framework Agreement following such approval. The Framework Agreement is different from the ROFO Deed in several ways. For example, under the Framework Agreement, we have agreed the valuation of the Framework Assets, while we have not agreed to such valuation under the ROFO Deed. Similarly, we have agreed to acquire the Framework Assets within 13 months from the date of commissioning of the Framework Assets or by December 2020 for GPTL and KTL, and December 2021 for NER, as the case may be, while under the ROFO Deed, we can acquire the ROFO Asset by within 18 months from the date of the ROFO Deed Amendment. Further, the Framework Agreement specifies that the consideration to be paid for the Framework Agreement is to be mutually agreed at the time of execution of share purchase agreement, provided that it will be based on the enterprise value of such Framework Assets specified in the Framework Agreement, which is Rs. 10.25 billion, Rs. 13.75 billion and Rs. 4,100 billion for GPTL, KTL and NER respectively, subject to certain adjustments, including prevailing interest rates and due diligence findings. If the final consideration payable or other terms of the share purchase agreement differ or are more onerous than currently contemplated, such acquisitions may require us to incur higher acquisition and financing costs or not complete such acquisitions, and our financial condition and results of operations may be adversely affected. For more details on the Framework Agreement and the amended ROFO Deed, see “*Related Party Transactions* on page 228.

12. *The assumptions in the Projections of Revenue from Operations and Cash Flow from Operating Activities are inherently uncertain and are subject to significant business, economic, financial, regulatory and competitive risks and uncertainties that could cause actual results to differ materially from those projected.*

The Projections of Revenue from Operations and Cash Flow from Operating Activities on page 325 are forward-looking statements which are subject to a number of assumptions. These include assumptions concerning inflation, which affects the escalable component of the tariffs. Although the projections have been prepared after due and careful deliberation by the Investment Manager, the assumptions underlying the projections are inherently uncertain and are subject to significant business, economic, financial, regulatory and competitive risks, uncertainties and contingencies, many of which are outside of the Investment Manager’s control and subject to change. In addition, our revenue from operations is dependent on a number of factors, including the performance of our transmission systems, which may decrease for a number of reasons. We may be unable to operate and maintain our power transmission projects to achieve the prescribed availability.

These factors may adversely affect our ability to achieve the projected operating results and distributions as some or all of the events and circumstances assumed may not occur as expected, or events and circumstances that are not currently anticipated may arise. There is no assurance that the assumptions will be realized or that actual distributions will be as projected. If we do not achieve the projected operating results, we may not be able to make the expected distributions, in which case the market price of the Units may decline materially or we may be in default under the InvIT Regulations. The Investment Manager will not, and disclaims any obligation to, furnish updated business plans or projections to our Unitholders, or to otherwise make public such information.

13. *The independent auditors’ report on IndiGrid’s Projections of Revenue from Operations and Cash Flow from Operating Activities contains restrictions with respect to the purpose of the report and, use of the report by investors in the United States.*

The independent auditor’s report on Projections of Revenue from Operations and Cash Flow from Operating Activities, contains the following restrictions:

The report is required by the InvIT Regulations requiring the independent auditor to issue a report on the Projection Information and is issued for the sole purpose of the Issue in accordance with the Indian InvIT Regulations. The independent auditor’s work has not been carried out in accordance with auditing or other standards and practices generally accepted in jurisdictions outside India, including in the United States, and accordingly should not be relied upon as if it had been carried out in accordance with those standards and practices. U.S. securities regulations do not require profit forecasts to be reported by a third party. The report should not be

relied upon by prospective investors in the United States, including persons who are Qualified Institutional Buyers as defined under Rule 144A under the U.S. Securities Act of 1933, as amended, participating in the Issue. The independent auditors accept no responsibility and deny any liability to any person who seeks to rely on the report and who may seek to make a claim in connection with any offering of securities on the basis that they had acted in reliance of such information under the protections afforded by the laws of the United States.

14. *We may not be able to make distributions to our Unitholders comparable to our Unitholders' estimated or anticipated distributions or the level of distributions may fall.*

While we have had a stable track-record of distributions since listing, future distributions will be based on the net distributable cash flows. The InvIT Regulations provide that not less than 90% of our net distributable cash flows should be distributed to the Unitholders. Under the InvIT Regulations, distributions must be declared and made not less than once every six months in each financial year and will be made not later than fifteen days from the date of such declaration and pursuant to its distribution policy IndiGrid declares its distributions once every quarter. The amount of cash available for distribution to Unitholders principally depends upon the amount of cash that IndiGrid receives as dividends or the interest and principal payments from our Portfolio Assets and Target Assets that we acquire from the proceeds of this Issue, which in turn depends on the amount of cash that the relevant Portfolio Assets and Target Assets generate from operations and may fluctuate based on, among other things:

- insufficient cash flows received from our Portfolio Assets and Target Assets;
- debt service requirements and other liabilities of our Portfolio Assets and Target Assets;
- fluctuations in the working capital needs of our Portfolio Assets and Target Assets;
- ability of our Portfolio Assets and Use of Proceeds Asset to borrow funds and access capital markets;
- restrictions contained in any agreements entered into by our Portfolio Assets and Target Assets, including financing agreements;
- respective businesses and financial positions of our Portfolio Assets and Target Assets;
- applicable laws and regulations, which may restrict the payment of dividends by the Portfolio Assets and Target Assets;
- operating losses incurred by the Portfolio Assets or Target Assets in any financial year;
- changes in accounting standards, taxation laws and regulations, laws and regulations in respect of foreign exchange repatriation of funds, corporation laws and regulations relating thereto;
- amount and timing of capital expenditures on our Portfolio Assets and the Target Assets;
- amount of management fees we pay to the Investment Manager and the Project Manager; and
- nature of cash flows received from our Portfolio Assets and Target Assets, where payments in the form of dividends from our Portfolio Assets and the Target Assets to SGL1, SGL2 or SGL3, as the case may be, will be subject to the levy of dividend distribution tax and accordingly, the net distributable cash flows from our Portfolio Assets and Target Assets will be reduced to the extent of such levy.

Our Investment Manager will be liable to pay interest to our Unitholders if distributions are not paid within the period prescribed in InvIT Regulations.

Further, the method of calculation of the net distributable cash flows may change subsequently due to regulatory changes. Any change in applicable laws in India or elsewhere (including, for example, tax laws and foreign exchange controls) may limit our ability to pay or maintain distributions to our Unitholders. Furthermore, no assurance can be given that we will be able to pay or maintain the levels of distributions or that the level of distributions will increase over time, or that future acquisitions will increase our distributable cash flow to our Unitholders. Distributions that the Unitholders have received in the past may not be reflective of the distributions that may be paid in the future. Any reduction in, or delay/default of, payments of distributions could materially and adversely affect the market price of our Units. As a result of all these factors, we cannot guarantee that we will have sufficient cash generated from operations to achieve distributable or realized profits or surplus in any future period in order to make distributions every three months or at all.

For further details on our distributions, see “Distributions” on page 205.

15. *Any changes to current tariff policies or modifications of tariffs standards by regulatory authorities could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.*

Tariffs determined by regulatory order and charged to customers comprise virtually all of our Portfolio Assets' and the Target Assets' revenues. Such tariffs are collected by the CTU, under a payment pooling mechanism and subject to periodic reviews by the CERC. The Portfolio Assets and the Target Assets have no ability or flexibility to charge more for regulated services than is provided for under the relevant tariff. The Tariff Regulations are being currently revised for the period from 2019 to 2024.

With respect to potential impacts on statutory payment pooling bodies, in accordance with the Sharing of Charges and Losses Regulations, transmission licensees such as the Portfolio Assets and the Target Assets are entitled to recover their approved tariffs from ISTS charges collected by the CTU. The CTU collects transmission charges from distribution licensees and TSUs on a regular basis and pays such charges to transmission licensees, including us. In the event of any change in the operating statutory parameters of the CTU, or a failure or delay on the part of the CTU to make the corresponding payments to the Portfolio Assets or the Target Assets, the counterparty risk may increase significantly and our business, prospects, financial condition, results of operations and cash flows may be materially and adversely affected.

With respect to potential impacts on statutory dispatch bodies, in accordance with the Electricity Act, 2003 ("Electricity Act"), the operators of the national or state transmission grids, the NLDC, the RLDCs and the SLDCs, operate the grids as independent operators. Any negative change in the operating statutory parameters of the NLDC, the RLDCs or the SLDCs, as applicable, may negatively affect the corresponding availability of the transmission assets of the Portfolio Assets and the Target Assets and in turn materially and adversely affect the business, prospects, financial condition, and results of operations and cash flows of the Portfolio Assets and the Target Assets. Any such unfavorable changes, particularly to tariff, payment pooling and dispatch regulations, could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.

16. *Our businesses could be adversely affected if we are unable to maintain or renew our existing regulatory approvals due to changes to the regulatory environment and the laws, rules and directives of the GoI.*

The power industry in India is regulated by a wide variety of laws, rules and directives issued by government and relevant regulatory authorities.

The timing and content of any new law or regulation is not within the control of the Portfolio Assets and the Target Assets and any changes to current regulatory bodies or the existing regulatory regime could have a material adverse effect on the business, prospects, financial condition, results of operations and cash flows of the Portfolio Assets and the Target Assets.

The laws and regulations governing the power transmission industry have become increasingly complex and govern a wide variety of issues, including billing and collections, allocation of transmission charges among LTTCs, rights of way, land acquisitions, calculations of availability and forest clearances. Any change in policy for such issues may result in our inability to meet such increased or changed requirements. Future changes in laws and regulations and the failure or apparent failure to address any regulatory changes or enforcement initiatives could have an adverse impact on the business and future financial performance of our Portfolio Assets and the Target Assets, impair their ability to declare dividends to IndiGrid, harm our reputation, subject us to penalties, fines, disciplinary actions or suspensions or increase the risk of litigation and have an adverse effect on the price of the Units.

17. *Any power transmission project that we acquire, which is still under construction and development, may be subject to cost overruns or delays.*

We may acquire power transmission projects, including certain Framework Assets, which are still under construction and development, and the ROFO Asset, in accordance with the InvIT Regulations and subject to Unitholders' approval in certain cases. The development of power transmission projects is subject to substantial risks, including various planning, engineering and construction risks. Power transmission projects typically require substantial capital outlays and a long gestation period of between three to four years before the commencement of commercial operation. The owner of a power transmission project generally begins generating a return on investment after the commencement of commercial operation, which may be delayed due to various reasons.

Under the InvIT Regulations, we can only acquire a power transmission project which has received all requisite approvals and certifications for commencing operations. Several key steps must be taken before power transmission projects start to operate, recover costs and generate revenue, including:

- conducting surveys and investigations for the proposed route;
- entering into construction contracts and long-term service agreements with contractors with sufficient expertise;
- purchasing necessary transmission equipment;
- acquiring land/obtaining rights of way from land owners and local authorities;
- complying with ongoing requirements of the required approvals and licenses;
- procuring sufficient equity, debt, mezzanine and other necessary financing;
- entering into or securing transmission and tariff-related arrangements including, TSAs, RSAs and tariff orders; and
- obtaining requisite approvals to commence transmission on lines.

During the construction and development phases of a power transmission project we may also suffer from the unavailability of equipment or supply, work stoppages, labor or social unrest, adverse weather conditions, natural calamities, delays in construction, delays in clearances, unforeseen construction-related and/or operational delays and defects, delivery failures by contractors, increased cost of raw materials, unavailability of adequate funding, inability to secure rights of way for certain portions of the transmission line, failure to complete power transmission projects within budget and in accordance with the required specifications, additional interest costs incurred due to project delays, legal actions brought by third parties, changes in government, regulatory and tax policies, foreign exchange movements, adverse trends in the power transmission industry or general economic conditions in India. For example, the construction of the transmission lines of the BDTCL and JTCL was delayed by more than a year due to delays in obtaining approvals and clearances from relevant authorities. The commissioning of the Purulia & Kharagpur Transmission Company Limited (“PKTCL”) was delayed due to among other things delay in obtaining forest clearances, strikes and other *force majeure* events. Additionally, the construction of the OGPTL transmission lines was delayed due to, amongst other factors, unseasonal and heavy rainfall and flood in Odisha and delay in the grant of forest clearance to OGPTL in respect of the forest land acquired for the construction of the said transmission lines. Similarly, for some of the Framework Assets which are under construction, approvals and permits such as the transmission licenses in certain cases, are still pending and any delays in procuring these approvals and permits could impact construction timelines, which in turn could affect the Sponsor’s ability to offer them to us under the Framework Agreement.

For certain Framework Assets, the Sponsor must also obtain rights of way to expand transmission lines and find suitable available land on which to construct substations. The Sponsor has limited control over the land acquisition process, both in terms of timing and ability to obtain the land on commercially acceptable terms, since the Sponsor needs to acquire land through the state governments or from private landowners. Similarly, the Sponsor has limited control over obtaining forest clearances that block its projects. The Sponsor may not be able to acquire the land required for substations, obtain forest clearances for diversion of forest land or secure the required rights of way in a timely manner or at all. Delay in constructing infrastructure, such as bay ends at connecting substations, which are not within the scope of the project, but are critical for the operation of the project may also delay the construction of the project. Certain Portfolio Assets have also filed petitions in this regard. For details, please see the section entitled “*Litigation*” on page 239. Such delays in the development of the Sponsor’s power transmission projects could in turn delay the Trustee’s exercise of our right of first offer with respect to such projects.

The foregoing factors may also give rise to risks in the building and construction phase of power transmission projects and create delays in the completion of such projects. Construction disruptions or delays could impede our ability to exercise our right of first refusal in respect of assets owned by the Sponsor, and in turn materially and adversely affect our financial and operational estimates and projections, our business, prospects, financial condition, results of operations and cash flows.

18. *Framework Assets which are under development by the Sponsor are subject to risks associated with the engagement of third party contractors which may delay or even prevent such Framework Assets from being offered to us under the Framework Deed.*

The Sponsor’s ability to complete the construction of the Framework Assets on time is subject to its ability to award subcontracts to competent contractors in a timely manner and to ensure the timely execution of such contracts, while ensuring that the required quality is maintained by these contractors. Some of the Sponsor’s

subcontracts in relation to the power transmission projects are yet to be awarded and will be awarded by the Sponsor at an appropriate time during the course of implementation of these Framework projects.

The Sponsor undertakes construction of the relevant infrastructure and substations for its power transmission projects through third party contractors and suppliers and is accordingly, entirely dependent on the skills of these third party contractors for the construction and installation of the power transmission projects and the supply of most infrastructure and equipment. The Sponsor's selection criteria for contractors are primarily based on their execution capability and track record, and the technical experience and financial position requirements of the projects. The availability of competent construction companies may be limited due to the experience, skills and competence required for the construction of power transmission of the voltage as the Sponsor's projects and the shortage of construction companies available to undertake large and complex power transmission projects.

The Sponsor has limited control over the quality of services, equipment or supplies provided by these contractors and may be exposed to risks relating to the timely delivery and the quality of the services, equipment and supplies provided by the contractors necessitating additional investments by the Sponsor to ensure the adequate performance and delivery of contracted service. The Sponsor does not have full direct control over the day-to-day activities of its third-party contractors and is reliant on such contractors performing their tasks and services in accordance with the relevant contracts. We may not be able to claim damages for indirect losses and losses which exceed the contract price from the supplier in case of their default.

If the performance of contractors is inadequate, this could result in incremental cost and time overruns which in turn could adversely affect the Sponsor's future projects and expansion plans. If the Sponsor is not able to outsource certain project aspects to competent contractors on a timely basis, or on terms that provide for the timely and cost-effective execution of its projects, the Sponsor may be delayed in completing projects and the applicable returns on its projects may be adversely affected. The Sponsor's budgeted costs for its power transmission projects are calculated on the basis of management estimates and the occurrence of any contingencies beyond the Sponsor's control may adversely affect the returns from the affected project.

Contractors and suppliers in the transmission business are generally subject to liquidated damages payments for performance shortfalls and they may also give limited warranties in connection with design and engineering work as well as provide guarantees and additional liabilities. However, liquidated damages provisions and guarantees are available for a limited time period from the commissioning date and may not address all losses, damages or risks or cover the full loss or damage suffered due to construction delays or performance shortfalls.

Furthermore, there is no assurance that the Sponsor's contractors will not violate any applicable laws and regulations, including environmental laws and regulations, in their provision of services. If the Sponsor becomes aware that any of its contractors is involved in any material breach of applicable laws and regulations, the Sponsor may not be able to continue with the relevant contracting agreement with such contractor or be able to replace such contractors on similar terms or terms acceptable to the Sponsor or at all.

19. IndiGrid is a relatively new entity with a limited operating history, which will make it difficult for our future performance to be assessed.

IndiGrid was settled as a trust on October 21, 2016 and was registered with SEBI as an infrastructure investment trust or InvIT on November 28, 2016. IndiGrid acquired its interests in BDTCL and JTCL immediately prior to listing pursuant to the initial public offer of its Units on June 6, 2017. Furthermore, IndiGrid acquired PKTCL, RAPP Transmission Company Limited ("**RTCL**") and Maheshwaram Transmission Limited ("**MTL**") from its Sponsor in Fiscal 2018, and completed the acquisition of Patran Transmission Company Limited ("**PTCL**") in Fiscal 2018. All our Portfolio Assets have an operating history of at least one year. Accordingly, IndiGrid, as an infrastructure investment trust, has a limited operating history by which our past performance may be judged. This will make it difficult for investors to assess our future performance. There can be no assurance that we will be able to generate sufficient revenue from our operations to service our borrowings. Historical financial data has been included elsewhere in this Preliminary Placement Document, and there are estimates and judgments inherent in the preparation of such data. There can be no assurance that our future performance will be consistent with the estimates of past financial performance or projections included elsewhere in this Preliminary Placement Document. Additionally, our special purpose combined financial statements included elsewhere in this Preliminary Offering Document may differ significantly from our consolidated financial statements, if we are not able to complete the acquisition of the Use of Proceeds Assets with the proceeds of this Issue.

20. *Price increases, foreign exchange movement or shortages in the availability of equipment could adversely affect the Sponsor's ability to develop the ROFO Asset and the Framework Assets in line with its projected budget or originally envisaged timeframes.*

Price increases, foreign exchange movement or shortages in the availability of equipment could adversely affect the Sponsor's ability to develop projects in line with its projected budget or originally envisaged timeframes. While the Sponsor may enter into fixed price contracts for its power transmission projects under implementation, the cost of these contracts is ultimately affected by the availability, cost and quality of raw materials. The tower structure, conductors, insulators and transformers are major components in a power transmission project and any delay in placing orders or obtaining delivery may result in increased prices. The prices and supply of the tower structure, conductors, insulators and transformers and other equipment depend on factors not under the Sponsor's control, including general economic conditions, foreign exchange rate fluctuations, competition, production levels, transportation costs, exchange rates and import duties.

Any delay in placing the orders or procurement of equipment and services may delay the Sponsor's implementation schedule for these projects. Such delays may also lead to increases in prices of such equipment and services, further affecting the costs of the ROFO Asset and the Framework Assets and the yield generated by the ROFO Asset and the Framework Assets.

21. *The Investment Manager may not be able to execute our growth strategy successfully, including in respect of acquisitions of the Framework Assets and the ROFO Asset.*

Under the terms of the Framework Agreement and the ROFO Deed, we are not able to acquire the power transmission projects of the Sponsor until such projects meet the eligibility criteria specified in the InvIT Regulations. Our growth therefore depends, in part, on the ability of the Sponsor to manage the development and construction of new projects in a timely and cost-effective manner. If the Sponsor determines that any one or more of the Framework Assets or the ROFO Asset which have been awarded to it are based on bids that it later determines to be unviable or if the Sponsor's expenses required for the completion of such projects are not on commercial terms favorable to it, the Sponsor's ability to complete awarded projects profitably or at all may be adversely affected, which could materially and adversely affect our ability to realize the anticipated benefits from the Framework Agreement and the ROFO Deed.

In addition, the projected yields which our Sponsor anticipates at the point of bidding may not materialize and the Sponsor may have to apply to the CERC for tariff enhancements. While, tariff enhancement applications in respect of the ENICL, JTCL and BDTCL projects have been approved by CERC previously, there can be no assurances that future tariff enhancements applications for any of the Portfolio Assets, ROFO Assets, Framework Assets or the ROFO Assets will be granted.

Our growth strategy includes expanding our portfolio of project companies through acquisitions in order to maximise distributions for our Unitholders, improve portfolio diversification and enhance flexibility. The Investment Manager undertakes the management and control of our business and growth strategy. Except in respect of transactions equal to or greater than 25% of the InvIT Assets which require prior Unitholders' approval, or an issuance of Units to fund the future acquisitions, no Unitholder may have the opportunity to evaluate the Investment Manager's decisions regarding specific strategies used or the acquisitions made on our behalf, or the terms of any such acquisitions, including in respect of the Framework Assets and the ROFO Assets.

The primary component of our growth strategy is to acquire additional infrastructure projects within the power transmission sector from the Sponsor pursuant to Framework Agreement and ROFO Deed. There can be no assurance that the Investment Manager will be able to implement this strategy successfully or that it will be able to expand our portfolio at all, or at any specified rate or to any specified size. The Investment Manager may not be able to make acquisitions or investments or divestments of power transmission projects on favorable terms or within a desired time frame. Even if the Investment Manager was able to successfully make additional acquisitions or investments, there can be no assurance that such acquisitions or investments will produce incremental distributions to our Unitholders and improve our prospects or overall financial condition. We may also be exposed to liability with the acquisition of additional power transmission projects.

In addition, the Sponsor may not be able to sell the Framework Assets or the ROFO Asset to us even if we agree with the Sponsor on the price and other terms of the sale if the Sponsor remains subject to lock-in requirements under the project agreements entered into with the authorities or any requisite consents from LTTCs and/or CERC are not obtained. As power transmission projects are illiquid in nature, it also may make it difficult for us to sell

our Portfolio Assets. Further, pursuant to the InvIT Regulations, we are required to hold an infrastructure asset for a minimum period of three years from the date of purchase.

The Investment Manager expects to face competition for acquisition opportunities, and competitors for these opportunities may have greater financial resources or access to financing on more favorable terms than us. Further, it may be that the types of investments sought by the Investment Manager are small in number. This competition, and possible limits in the number of available opportunities, may limit acquisition opportunities, lead to higher acquisition prices, or both.

In general, acquisitions involve a number of risks, including the inability to secure or repay the financing required to acquire large power transmission projects, the failure to retain key personnel of the acquired business and the failure of the acquired business to achieve expected results. Our Investment Manager may fail to identify material risks or liabilities associated with the acquired business prior to its acquisition, such as repayment or default risks related to existing debt of assets that we may acquire. The execution of our acquisition growth strategy may also divert the Investment Manager's attention from the profitable management of IndiGrid.

Additionally, acquisition of power transmission assets is subject to substantial risks, including the failure to identify material problems during due diligence (for which we may not be indemnified), the risk of over-paying for assets or not making acquisitions on an accretive basis, the ability to collect revenues and, if the projects are in new markets, the risk of entering markets and technologies where the Investment Manager has limited or no experience. In addition, any control deficiencies in the accounting systems of the assets that we acquire may make it more difficult to integrate them into our existing accounting systems. While the Investment Manager will perform due diligence on our prospective acquisitions, we may not be able to discover all potential operational deficiencies in such projects. The integration and consolidation of acquisitions requires substantial human, financial and other resources and may divert the Investment Manager's attention from our existing business concerns, disrupt our ongoing business or otherwise fail to be successfully integrated. There can be no assurance that any future acquisitions will perform as expected or that the returns from such acquisitions will support the financing utilized to acquire them or maintain them. As a result, the consummation of acquisitions may have a material adverse effect on the Investment Manager's ability to execute our growth strategy, which could have a material adverse effect on our business, cash flow and ability to make distributions to our Unitholders.

22. *We may not be able to successfully fund future acquisitions of new projects due to the unavailability of debt or equity financing on acceptable terms, which could impede the implementation of our acquisition strategy and negatively impact our business.*

We will rely on debt and equity financing to expand our portfolio of projects through acquisitions in the future, including in respect of the Target Assets, Framework Assets and the ROFO Assets, which may not be available on favorable terms or at all. Target Assets.

Debt financing to fund the acquisition of a project may not be available on short notice or may not be available on acceptable terms. Since the timing and size of acquisitions cannot be readily predicted, we may need to be able to obtain funding on short notice to benefit fully from opportunities. However, under applicable law, the aggregate consolidated borrowings and deferred payments net of cash and cash equivalents of IndiGrid cannot exceed 70% of the value of our assets. If such borrowings and payments exceed 49%, we are required to obtain a credit rating of "AAA" or equivalent for the consolidated borrowing and proposed borrowing under the InvIT Regulations. In addition, such level of indebtedness of SGL1 and the InvIT Assets may impact our ability to borrow without prior approval of our Unitholders.

Restrictions imposed by the Reserve Bank of India may limit our ability to borrow overseas for projects under development and hence could constrain our ability to obtain financing on competitive terms and refinance existing indebtedness. In addition, there can be no assurance that any required regulatory approvals or borrowing in foreign currencies will be granted to us without onerous conditions, or at all.

Debt financing may increase our vulnerability to general adverse economic and industry conditions by limiting our flexibility in planning for or reacting to changes in our business and our industry. We will also be subject to the risk that certain covenants in connection with any future borrowings may limit or otherwise adversely affect our operations and our ability to acquire additional projects or undertake other capital expenditure by requiring us to dedicate a substantial portion of our cash flows from operations to payments on our debt.

We may also fund the consideration (in whole or in part) for future acquisitions through the issuance of additional Units. Such issuances may result in the dilution of the interests held by existing Unitholders. IndiGrid may not be able to complete the issuance of the required number of Units on short notice or at all due to a lack of investor demand for the Units at prices that it considers to be in the interests of then-existing Unitholders. As a result of a lack of funding, we may not be able to pursue our acquisition strategy successfully. Potential vendors may also view the prolonged time frame and lack of certainty generally associated with the raising of equity capital to fund any such purchase negatively and may prefer other potential purchasers.

23. *We operate in a highly competitive environment, and increased competitive pressure could adversely affect our business and the ability of the Investment Manager to execute our growth strategy.*

The market for investing in power transmission projects, and energy infrastructure generally, is highly competitive and fragmented, and the number and variety of investors for energy infrastructure assets has been increasing. Some of our competitors are, or may be supported by, large companies that have greater financial, managerial and other resources than us. Our competitors may also have established relationships with other stakeholders that may place them in a better position to take advantage of certain opportunities. The competitive environment may make it difficult for the Investment Manager to successfully acquire power transmission projects. Our ability to execute our growth strategy could be adversely affected by the activities of our competitors and other stakeholders. These competitive pressures could have a material adverse effect on our business, expected capital expenditures, results of operations, cash flows and financial condition and our distributions to our Unitholders.

24. *Opposition from local communities and other parties may adversely affect our financial condition, results of operations and cash flows.*

The construction and operation of our power transmission systems and substation projects may have significant consequences on grazing, logging, agricultural activities, mining and land development as well as on the ecosystem of the affected areas. The environmental impact of a particular transmission project typically depends on the location of the project and the surrounding ecosystem. Further, the construction and operation of our power transmission systems may disrupt the activities and livelihoods of local communities, especially during the project construction period. Repair work on a power transmission project may be delayed to resolve local community concerns. Any such opposition may adversely affect our financial condition, results of operations and cash flows, and harm our reputation.

Our Portfolio Assets and the Target Assets could be subject to opposition, such as through litigation or by other means, from public interest groups, local communities or non-governmental organizations, in relation to the environmental impact of their transmission projects or in relation to land acquisition, acquisition and use of rights of way and construction activities for their projects and the consequent impact on the livelihood of affected communities.

Several of the parcels of land on which the Portfolio Assets' and the Target Assets' existing substations are situated were acquired by the Government of India (the "GoI") or the relevant state governments and were thereafter awarded to us. Land so acquired may remain subject to disputes after it is transferred to our Portfolio Assets.

In addition, there are various court proceedings pending against the Portfolio Assets with respect to land on which the Portfolio Assets have right of way, for the purposes of construction of the transmission lines, most of which relate to demands for increased compensation by landowners. For example, the lands on which the transmission lines of, inter alia, MTL, BDTCL and JTCL are situated are subject to litigation in relation to right of way claims from land owners, which caused delays in the operation of the transmission lines. Similarly, the lands on which the transmission lines and substations of Framework Assets are situated are also subject to right of way claims, which are pending consideration before appropriate authorities. See "Litigation" on page 239.

25. *Our operations are subject to environmental, health and safety laws and regulations.*

Our operations are subject to environmental laws and regulations in the various locations in India where our Portfolio Assets and the Target Assets' operate. Although environmental approvals were obtained prior to completion of construction of the Portfolio Assets and the Target Assets, environmental laws and regulations in India have, and may continue to become, more stringent. Stricter laws and regulations, or stricter interpretation of

the existing laws and regulations, may impose new liabilities on the Portfolio Assets and the Target Assets, which could materially and adversely affect our business, prospects, financial condition, results of operations and cash flows.

The employees and contractors on our power transmission projects are exposed to risks. If safety procedures are not followed or if certain materials used in power substations and transmission equipment is improperly handled, it could lead to injuries to employees, contract laborers or other persons, damage our Portfolio Assets' and the Target Assets' properties and properties of others or harm the environment. Due to the nature of these materials, we may be liable for certain costs, including costs for health-related claims, or removal or treatment of hazardous substances, including claims and litigation from or relating to current or former employees for injuries arising from occupational exposure to materials or other hazards at power substations and transmission facilities. This could result in significant disruption in our businesses and legal and regulatory actions, which could materially and adversely affect our business, prospects, financial condition, results of operations and cash flows and adversely affect our reputation. For example, a fatal accident at the time of construction along the transmission line set up by BDTCL resulted in the death of eight laborers.

26. *Our success depends in large part upon our Investment Manager and our Project Manager, the management and skilled personnel that they employ and their ability to attract and retain such persons.*

Our ability to make consistent distributions to our Unitholders depends on the continued service of management teams and skilled personnel of our Investment Manager and our Project Manager. Each faces a continuous challenge to recruit and retain a sufficient number of suitably skilled personnel. Generally, there is significant competition for management and other skilled personnel in our industry in India, and it may be difficult to attract and retain the skilled personnel that our Investment Manager or our Project Manager need. In particular, even if our Investment Manager and our Project Manager were to increase their pay structures to attract and retain such personnel, they may be unable to compete with other companies for suitably skilled personnel to the extent they are able to provide more competitive compensation and benefits. Furthermore, our Investment Manager and Project Manager may not be able to adequately redeploy and retrain their employees to keep pace with continuing changes, evolving standards and changing customer preferences. The loss of key personnel may have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.

27. *Upgrading or renovation work or physical damage to our power transmission projects may disrupt their operations.*

Our power transmission projects may need to undergo upgrading, renovation or repair work from time to time to retain their optimal operating condition and may also require unforeseen ad hoc maintenance or repairs in respect of faults or problems that may develop or because of changes pertaining to operations and maintenance. Our power transmission projects may suffer some disruptions and it may not be possible to continue operations on areas affected by such upgrading or renovation work. In addition, physical damage to power transmission projects resulting from fire, severe weather or other causes may lead to a significant disruption to, or a long-term cessation of, business and operations and, together with the foregoing, may result in unforeseen costs, which may have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.

28. *Grid disturbances or failures could adversely affect our reputation and relations with regulators and stakeholders.*

Grid disturbances can arise due to the imbalance between power being delivered to and removed from the transmission system. For example, in July 2012, India experienced grid disturbances, which caused large-scale power outages in three of India's five interconnected power grids. The grid disturbances were caused by a combination of factors, including weakened inter-regional corridors due to multiple outages on other transmission lines, a delay or refusal by power generators to reduce power generation at the time of reduced demand and overdrawing of electricity by some of the provincial utilities.

Although our Portfolio Assets and the Target Assets' deploy modern methods for maintenance, load dispatch and communications systems to avoid such outcomes, the grid could again experience disturbances and such disturbances could adversely affect our reputation, business, prospects, financial condition, results of operations and cash flows.

29. *Our results of operations could be adversely affected by strikes, work stoppages or increased wage demands by employees or other disputes with employees.*

The Project Manager has full-time employees focused on day-to-day operations and maintenance and the Portfolio Assets have appointed third party contractors to operate and maintain our transmission systems. Our transmission systems may experience disruptions in their operations due to disputes or other problems with labor, and efforts by workers to modify compensation and other terms of employment may divert management's attention and increase operating expenses. The occurrence of such events could materially and adversely affect our business, prospects, financial condition, results of operations and cash flows.

The Project Manager and our Portfolio Assets enter into contracts with independent contractors to complete specified assignments in respect of our transmission systems and these contractors are required to source the labor necessary to complete such assignments. Although the Project Manager and our Portfolio Assets do not engage these laborers directly, under Indian law they may be held responsible for wage payments to laborers engaged by contractors, should the contractors default on wage payments. Any requirement to fund such payments may materially and adversely affect the business, prospects, financial condition, results of operations and cash flows. Furthermore, pursuant to the provisions of the Contract Labor (Regulation and Abolition) Act, 1970, the Project Manager and our Portfolio Assets may be required to absorb a portion of the wage payments due to such contract laborers that are engaged by independent contractors, as if they were their employees.

30. *As direct or an indirect shareholder of our Portfolio Assets, IndiGrid's rights are subordinated to the rights of creditors, debt holders and other parties specified under Indian law in the event of insolvency or liquidation of any of the Portfolio Assets.*

In the event of liquidation of any of the Portfolio Assets, secured and unsecured creditors of such Portfolio Assets will be entitled to payment from the liquidation proceeds in priority to us in our capacity as a direct or indirect equity shareholder of the Portfolio Assets. Under the Insolvency and Bankruptcy Code, 2016, in the event of winding-up of any of the Portfolio Assets, workmen's dues and debts due to secured creditors which rank *pari passu* are required to be paid in priority over all other outstanding debt, followed by wages and salaries of employees, debts due to unsecured creditors, any amounts due to the central or state government, any other debts, preference shareholders and equity shareholders. Further, amounts payable to us in respect of any unsecured debt issued by our Portfolio Assets will be subordinated in the manner set forth above.

Under the terms of the TSAs executed by the Portfolio Assets with LTTCs, the Portfolio Assets are not permitted to create or subsist any encumbrance over all or any of their rights and benefits under the TSAs. However, the Portfolio Assets are permitted to create any encumbrance over all or part of the receivables, including under the TSAs, letters of credit or the other assets of the Portfolio Assets in favour of lenders or representatives of lenders on their behalf, as security for amounts payable under the financing agreements with such lenders, subject to the conditions specified under the TSAs.

Direct and indirect tax assessments of the Portfolio Assets for only few years have been initiated by the relevant government department and authorities and there may be additional tax liabilities, including if pending tax litigation is ruled against us.

Accordingly, amounts payable to us in respect of any unsecured debt subscribed by us, will, upon enforcement of security over such receivables, letters of credit or the other assets of the Portfolio Assets, be subordinated to amounts payable in respect of statutory dues and operating and maintenance expenses (including operating expenses payable to the Portfolio Assets, if any), as well as to amounts payable to secured lenders.

31. *Our lenders have substantial rights to determine how we conduct our business which could put us at a competitive disadvantage and our borrowings are secured by all of the assets of the Portfolio Asset and their shares. To be updated closer to launch for any refinancing due to Patran.*

Loans under the loan agreements are secured by, amongst others, (i) first ranking *pari passu* charge over all present and future immovable assets pertaining to the project; (ii) first ranking *pari passu* charge on all tangible movable assets, including movable plants and machinery, machinery spares, tools and accessories and all other movable assets and current assets, both present and future; and (iii) first charge, including by way of hypothecation, over all accounts, both present and future, that may be opened in accordance with the transaction documents; (v)

assignment by way of security or charge by way of hypothecation, over all right, title, interest, claims, benefits and demands relating to, (a) the agreements in relation to the Project (the “**Project Agreements**”); (b) clearances obtained pertaining to the project; (c) any letter of credit, guarantee, including contractor guarantees, liquidated damages, consent agreements, side letters or performance bond provided by any party to the Project Agreements; and (d) insurance contracts and insurance proceeds pertaining to the Project; and (vi) pledge of 51% of the equity share capital of the project SPVs, in terms of the financing agreements.

The shares of following Portfolio Assets have been pledged as detailed in the table below:

Portfolio Asset	Loan facility and lenders	Pledge of Portfolio Asset shares
BDTCL	External commercial borrowing from India Infrastructure Finance Company (UK) Limited and non-convertible debentures issued by BDTCL	SGL1 has pledged 99*% of its equity shares of BDTCL
JTCL	Rupee term loan availed by IndiGrid from IndusInd Bank Limited and non-convertible debentures issued by IndiGrid	SGL1 has pledged 51% of its equity shares of JTCL
MTL		SGL1 has pledged 48.99% of its equity shares of MTL
RTCL		SGL1 has pledged 51% of its equity shares of RTCL
PKTCL		SGL1 has pledged 51% of its equity shares of PKTCL

*BDTCL is under discussion with the debenture trustee to create charge over balance 2% equity shares as per the loan and security agreements.

For further details, please see sections entitled “*Description of Portfolio Assets*” and “*Financial Indebtedness and Deferred Payments*” on pages 26 and 200 respectively.

In the event of a default under these loan agreements, there is a risk that the lenders could enforce the pledge by way of court procedure followed by a public auction of the pledged shares. Further, we may be required to pledge the shares of the Portfolio Assets for any refinanced or additional indebtedness. If we lose ownership or control of the Portfolio Assets, or of all or some of their assets as a result of the enforcement of security by a lender, our business, financial condition, results of operation, cash flows and ability to make distributions to our Unitholders would be adversely affected.

32. We have a substantial amount of outstanding borrowings, which requires significant cash flows to service, and limits our ability to operate freely.

As of March 31, 2019, our total borrowings (including current maturities and interest accrued) was ₹ 87,452.88 million on a combined basis. For further details of our debt, see “*Financial Indebtedness and Deferred Payments*” on page 200. We intend to finance the majority of the cost of our future acquisitions of power transmission companies through debt and therefore expect to incur substantial additional borrowings in the future. Our ability to meet our debt service obligations and repay our outstanding borrowings will depend primarily on the cash generated by our business.

We cannot assure you that we will generate sufficient cash to service existing or proposed borrowings or fund other liquidity needs, which could have an adverse effect on our business, cash flows and results of operations.

33. Our insurance policies may not provide adequate protection against various risks associated with our operations.

Our operations are subject to a number of risks generally associated with the transmission of electricity. Sterlite Power Grid Ventures Limited has obtained insurance policies covering the Portfolio Assets and Target Assets to cover risks including risks in relation to loss or damage from fire, flood, terrorism, earthquake, cyclone, storm, sabotage, machinery breakdown and any accidental physical loss and destruction or damage to the insured property due to a cause, other than as excluded in the insurance policies. These risks can cause personal injury and loss of life and damage to, or the destruction of, property and equipment (including infrastructure developed by us) and may result in the limitation or interruption of our business operations and the imposition of civil or criminal liabilities. While our insurance policies cover such risks, they are subject to exclusions based on certain circumstances including, among others, faulty or defective design materials or workmanship, wear and tear, larceny, acts of fraud or dishonesty, any willful act or willful negligence on the part of insured or any person acting on its behalf, war, invasion, damage caused by nuclear weapons material or ionising radiation or contamination by radioactivity from any nuclear fuel or nuclear waste, loss or damage caused directly or indirectly from discharge of pollutants or contaminants, and certain properties, including, among others, money, cheques, bonds, credit cards, securities of any description and explosives.

Our insurance policies may not be sufficient to cover any material losses that we may incur in the future and we may not be able to renew our insurance arrangements, which typically extend for a period of one year, on similar terms or at all. If our losses significantly exceed our insurance coverage, cannot be recovered through insurance or occur during a period during which insurance coverage had lapsed, our business, prospects, financial condition, results of operations and cash flows could be materially and adversely affected.

In addition, we may not be able to maintain insurance of the types or at levels which are necessary or adequate for our business or at rates which are reasonable, in particular, in case of significant increases in premium levels at the time of renewing insurance policies or the lack of availability of insurance companies to underwrite these risks. The costs of higher insurance premiums could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows. Furthermore, the occurrence of an event for which we are not adequately or sufficiently insured or the successful assertion of one or more large claims against us that exceed available insurance coverage, or changes in our insurance policies (including premium increases or the imposition of large deductible or co-insurance requirements), could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.

34. *We may be required to record significant charges to earnings in the future when we review our power transmission assets for potential impairment.*

Under Ind AS, we are required to review our power transmission assets for impairment whenever circumstances indicate the carrying value may not be recoverable. Various uncertainties, including deterioration in global economic conditions that result in upward changes in the cost of capital, increases in cost of completion of such power transmission assets and the occurrence of natural disasters that impact our power transmission assets, could impact expected cash flows to be generated by such assets, and may result in impairment of these power transmission assets in the future.

35. *Classification of the transmission assets in the Portfolio Assets and Target Assets as tangible assets.*

We classify the transmission assets in the Portfolio Assets and the Use of Proceeds Assets as tangible assets under Ind AS 16 – *Property, Plant and Equipment* and not as financial and/or intangible assets under Appendix C of Ind AS 115 – *Revenue from contracts with customers*. If there is a change in the classification, accounting policies or the interpretation thereof which results in the transmission licenses held by the Portfolio Assets and Target Assets being considered “service concession arrangements” under Appendix C to Ind AS 115, it would have significant implications on our financial statements resulting in a material adverse effect on our financial condition, results of operations and cash flows. In such case, a substantial part of our income would be considered financial income and a substantial part of our assets would be considered financial and/or intangible assets where none of the property, plant or equipment of the Portfolio Assets or the Use of Proceeds Assets would be reflected on their respective balance sheets and accordingly there would be no depreciation on property, plant or equipment in the statement of profit and loss.

36. *There are risks associated with the expansion of our business to new areas.*

As part of our growth strategy, we may expand our business to new areas, which may prove more difficult or costly than anticipated. For example, we intend to pursue additional sources of revenue, such as optical fiber and tower leasing, which we may be unable to monetize due to regulations issued by CERC which require the sharing of revenue from power transmission projects or if we are unable to obtain requisite approvals from CERC or LTTCs.

37. *Critical aspects of our power transmission projects have a limited duration.*

Our TSAs have a term of 35 years except the TSA in respect of ENICL which has a term of 25 years and any renewal is subject to CERC's discretion. There can be no assurance that we can replace our physical assets or renew our TSAs on acceptable terms, if at all.

While the TSAs have a duration of 35 years, the transmission licenses issued by CERC are valid for a period of 25 years from the date of issue of the transmission license. There can be no assurances that these licenses will be renewed.

38. *This Preliminary Placement Document contains information from the CRISIL Report which we have commissioned.*

The information in the section entitled "Industry Overview" on page 129 is based on the CRISIL Report and other publicly available information. We commissioned the CRISIL Report for the purposes of confirming our understanding of the industry in connection with the Issue. Neither we, nor the Trustee, the Sponsor, the Investment Manager or the Lead Managers, nor any other person connected with the Issue has verified the information in the CRISIL Report. Further, the CRISIL Report has been prepared based on information as of specific dates and may no longer be current or reflect current trends. Opinions in the CRISIL Report based on estimates, projections, forecasts and assumptions may prove to be incorrect.

CRISIL Research, a division of CRISIL Limited ("CRISIL"), has advised that while it has taken due care and caution in preparing the CRISIL Report based on the information obtained by CRISIL from sources which it considers reliable, it does not guarantee the accuracy, adequacy or completeness of the CRISIL Report or the data therein and is not responsible for any errors or omissions or for the results obtained from the use of CRISIL Report or the data therein. Further, the CRISIL Report is not a recommendation to invest / disinvest in any entity covered in the CRISIL Report. CRISIL especially states that it has no liability whatsoever to the subscribers / users / transmitters / distributors of the CRISIL Report. CRISIL Research operates independently of, and does not have access to information obtained by CRISIL's Ratings Division or CRISIL Risk and Infrastructure Solutions Limited, which may, in their regular operations, obtain information of a confidential nature. The views expressed in the CRISIL Report are that of CRISIL Research and not of CRISIL's Ratings Division or CRISIL Risk and Infrastructure Solutions Limited.

39. *The Special Purpose Combined Financial Statements presented in this Preliminary Placement Document may not be indicative of our future financial condition, results of operations and cash flows.*

The Special Purpose Combined Financial Statements included in this Preliminary Placement Document may not be comparable to our consolidated financial statements going forward. The Special Purpose Combined Financial Statements for the financial years ended March 31, 2017, 2018 and 2019, combine the financial statements of all the six Portfolio Assets that we acquired at various stages in the three financial years and the two Use of Proceeds Assets that we plan to acquire with the proceeds of this Issue, and have been shown as if they were part of a single group for all the three years presented. IndiGrid's only assets are our shareholding in the Portfolio Assets and any debt financing provided by IndiGrid to the Portfolio Assets which are not included in the Special Purpose Combined Financial Statements. The Special Purpose Combined Financial Statements have been prepared for the sole purpose of the Issue and may not necessarily represent our consolidated financial position, results of operations and cash flows, nor do they give an indication of our financial results, cash flows and financial position in the future. Our financial position after the Issue may differ in certain significant respects from our financial position as indicated in the Special Purpose Combined Financial Statements, especially if we are unable to acquire the Use of Proceeds Assets from the proceeds of the Issue.

40. *Our trademark application for “IndiGrid” and the logo, may be rejected and our ability to use the trademark and logo may be impaired.*

Our application for the trademark “IndiGrid” has been opposed to, or objected to, by third parties. Our ability to use the trademark and logo may be seriously impaired if our trademark application is rejected. We cannot assure you that the trademark will be registered in our name or at all. As a result, we will be required to cease the use of “IndiGrid” and the logo which may have a material, adverse effect on the operations of IndiGrid and require the management’s time and attention.

41. *Our contingent liability could adversely affect our financial condition, results of operations and cash flows.*

As of March 31, 2019, we had a contingent liability (as per Ind AS 37 – *Provisions, Contingent Liabilities and Contingent Assets*) for entry tax demand and building and other construction workers cess demand in the amount of Rs. 525.15 million that had not been provided for. If any of our contingent liabilities materialize, it could have an adverse effect on our financial condition, results of operations and cash flows.

42. *The ROFO Deed will terminate in certain circumstances.*

The ROFO Deed may be terminated, if any of the following events occur:

- by mutual consent of the parties to the ROFO Deed;
- the Investment Manager and/or any entity controlled or designated by the Sponsor ceases to be Investment Manager; or
- if IndiGrid ceases to be listed on the BSE, the NSE or any other recognized stock exchanges.

Termination of the ROFO Deed would adversely affect our ability to implement our acquisition growth strategy, and consequently have a negative impact on our business and overall prospects.

43. *The Framework Agreement will terminate in certain circumstances.*

The Framework Agreement may be terminated, if any of the following events occur:

- by mutual consent of the parties to the Framework Agreement; and
- the Framework Agreement can terminate automatically for that particular Framework Asset if the Framework Assets are not acquired within 13 months of the Framework Asset achieving CoD or before December 2020 for GPTL and KTL, and December 2021 for NER, unless it is mutually agreed to extend the timeline.

Termination of the Framework Agreement would adversely affect our ability to implement our acquisition growth strategy, and consequently have a negative impact on our business and overall prospects.

RISKS RELATED TO OUR ORGANIZATION AND STRUCTURE

1. *Changes in government regulation could adversely affect our profitability and ability to make distributions.*

Regulatory changes in India, particularly in respect of the InvIT Regulations, could expose us to greater tax liability than our financial projections assume. The InvIT Regulations also requires us to maintain certain investment ratios, including the requirement that 80% of the value of our assets should comprise completed and revenue-generating assets, which may prevent us from acquiring additional assets to achieve our growth strategy.

2. *We depend on the Investment Manager, the Project Manager and Trustee to manage our business and assets, and our financial condition, results of operations and cash flows and ability to make distributions may be harmed if the Investment Manager and/ or Project Manager and/or the Trustee fail to perform satisfactorily. Our rights and rights of the Unitholders to recover claims against the Project Manager, the Investment Manager or the Trustee may be limited.*

Sterlite Power Grid Ventures Limited (“SPGVL”), our Sponsor, also fulfils the role of our Project Manager under the Project Implementation and Management Agreement, with responsibility for operating and maintaining our power transmission projects and supervising their revenue streams. An affiliate of our Sponsor, Sterlite Investment

Managers Limited, fulfils the role of our Investment Manager under the Investment Management Agreement, in accordance with the InvIT Regulations. The success of our business and growth strategy and the operational success of our transmission systems will depend significantly upon the managers' satisfactory performance of these services. Our recourse against the Project Manager, the Trustee and Investment Manager is limited. The Project Manager's liability to IndiGrid for non-performance or breach of its obligations under the Project Implementation and Management Agreement is limited to the fees payable to the Project Manager under the agreement. The Trustee's liability under the Trust Deed is limited to the fees received by it, except in case of the Trustee's gross negligence or wilful misconduct or fraud. Further, the Trustee is not liable for anything done or omitted to be done or suffered by the Trustee in good faith in accordance with or pursuant of any request or advice of our Investment Manager and for any action or omission that results in a loss to our Unitholders (by reason of any depletion in the value of the Portfolio Assets or Target Assets or otherwise), except in the event where such loss is a result of the Trustee's fraud, gross negligence or wilful default or breach of the Trust Deed. The Investment Manager's liability to IndiGrid for non-performance or breach of its obligations under the Investment Management Agreement is limited to two years of the fees payable to the Investment Manager (for the immediately preceding two financial years) under the agreement. Further, the Investment Manager is not liable for any act or omission which may result in a loss to our Unitholders (by reason of any depletion in the value of the Portfolio Assets or otherwise), except in the event that such loss is a result of the Investment Manager's fraud or gross negligence or default or where the Investment Manager fails to exercise due care in relation to its obligations under the Investment Management Agreement. Accordingly, we may not be able to recover claims against the Project Manager, the Trustee or the Investment Manager.

If the Investment or Project Management Agreements were to be terminated or if their terms were to be altered, our business could be adversely affected, as the Trustee may not be able to immediately replace such services, and even if replacement services were immediately available, the terms offered or obtained with the new managers could be less favorable than the ones currently offered by the Investment Manager and the Project Manager.

3. *There may be conflicts of interest between IndiGrid, the Investment Manager, the Project Manager and the Sponsor.*

The Sponsor, its subsidiaries, related corporations and associates are engaged in, among other things, power transmission business. The Sponsor, as on March 31, 2019, holds 21.19% of our Units.

SPGVL acts as our Project Manager, and with respect to the ROFO Asset and Framework Assets, acts as the engineering, procurement and construction contractor. Further, each of the Portfolio Assets utilises the services of certain employees of the Project Manager. Such services of the employees of the Project Manager are provided to each of the Portfolio Assets on a deputation basis. There can be no assurance that such arrangement will not result in a conflict of interest between IndiGrid and the Project Manager. Furthermore, there can be no assurance that any such deputation in the future will not be in breach of the provisions of the Companies Act, 2013. The Sponsor may also exercise influence over our activities through the Investment Manager, its affiliate. There can be no assurance that our interests will not conflict with those of the Sponsor, its subsidiaries, related corporations and associates, in relation to matters including but not limited to future acquisitions of power transmission businesses. In particular, our rights under the ROFO Deed and Framework Agreement are limited to the ROFO Assets and Framework Assets, respectively, and we do not have any rights to participate in investments originated or identified by the Sponsor or in any future projects developed or acquired by the Sponsor.

4. *The Investment Manager's fee is not linked to our net profitability and is not capped at a maximum amount.*

The Investment Manager's fee is not linked to our net profitability and is not capped at a maximum amount. Under the Investment Management Agreement, the Investment Manager's fee is based on operating profit of each Portfolio Asset i.e. 1.75% of EBITDA of each Portfolio Asset (without considering the Investment Manager's fee in calculating EBITDA). Accordingly, the quantum of such fee is directly linked to operational profitability of the Portfolio Assets (and any assets acquired or established by us in the future). As a result, the Investment Manager may be entitled to its fee even if IndiGrid incurs a net loss on a consolidated basis. The Investment Manager's fee is not capped at a maximum amount and may increase with the acquisition of new projects and assets by us.

5. *We have entered into material related party transactions and may continue to do so in the future, which may potentially involve conflict of interests with the Unitholders.*

The transactions resulting from the Project Implementation and Management Agreement, the Investment Management Agreement, the OGPTL Securities Purchase Agreement, the NTL Securities Purchase Agreement, and the transactions contemplated under the Framework Agreement and the ROFO Deed, are or shall be, as applicable, related party transactions and their terms may not be deemed as favorable to us as if they had been negotiated solely between unaffiliated third parties. In addition, the Portfolio Assets have entered into transactions with SPGVL and other subsidiaries, associates or affiliates of Sterlite Power Transmission Limited (“**Sterlite Group Companies**”) in the ordinary course of their business. While we believe that all such transactions (which have included (unsecured) inter-corporate deposits and guarantees given on behalf of subsidiaries and joint ventures of Sterlite Group Companies) have been conducted on an arm’s length basis, it may be deemed that the Portfolio Assets might have achieved more favorable terms had such transactions not been entered into with related parties. Furthermore, it is likely that we will enter into additional related party transactions in the ordinary course of our business. Such transactions, individually or in the aggregate, could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.

6. *Our Project Manager may compete with other power transmission projects and our Project Manager and Investment Manager may also provide services to other power transmission projects.*

The Project Manager has granted us a right of first offer on the ROFO Assets. However, the Project Manager is free to pursue the development, construction and operation of other power transmission projects and may compete directly with us for the acquisition of other similar assets and businesses.

The Project Manager and Investment Manager will also not be prohibited from providing management services to investment trusts or power transmission projects of its own or owned by third parties. If either manager engages in such activity in the future, it could give rise to conflicts of interest or adversely affect the ability of the managers to provide the levels of service that we require. Conflicts of interest of our Investment Manager or Project Manager may have an adverse effect on our business.

7. *Sterlite Power Grid Ventures Limited owns a significant percentage of our outstanding Units, and also serves as our Project Manager, allowing it to exercise significant influence over us.*

SPGVL, our Sponsor owns 21.19% of our outstanding Units as on March 31, 2019 and is also our Project Manager. Hence, SPGVL exercises significant influence over our operations and policies, our acquisition of transmission assets and our incurrence of additional borrowings and capital expenditures, among other matters. The interests of SPGVL may not necessarily be aligned with our interests or the interests of our Unitholders.

8. *Our Portfolio Assets, the Sponsor and their Associates and the Trustee are involved in certain legal proceedings and any adverse outcome in these or other proceedings may have a material adverse effect on our reputation, business, financial condition, results of operations and cash flows.*

From time to time our Portfolio Assets, the Investment Manager, the Project Manager, their respective Associates and the Trustee are involved in litigation, claims and other proceedings relating to the conduct of their business, including compensation claims, civil matters, criminal matters and tax disputes. Any claims could result in litigation against us, the Investment Manager, the Project Manager, the Sponsor and their respective Associates and the Trustee, and could also result in regulatory proceedings being brought against us by various government and state agencies that regulate our businesses. Often, these cases raise complex factual and legal issues, which are subject to risks and uncertainties and which could require significant time from the operation and management of our Portfolio Assets. Litigation and other claims and regulatory proceedings against the Portfolio Assets or their management could result in unexpected expenses and liabilities and could also materially and adversely affect our business, prospects, financial condition, results of operations and cash flows.

Currently, there are outstanding legal proceedings against our Portfolio Assets that are incidental to their business and operations, including certain criminal proceedings against certain of their directors and management. These proceedings are pending at different levels of adjudication before various courts, tribunals, enquiry officers and appellate tribunals. Such proceedings could divert management time and attention, and consume financial resources in their defense. Further, an adverse judgment in some of these proceedings could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows. In addition, the Sponsor (also acting as the Project Manager), its associates, and the Trustee are involved in litigation, claims and other proceedings relating to the conduct of their businesses, including compensation claims, civil matters, criminal matters and tax disputes. Any such litigation and/or regulatory proceedings could harm our reputation

and materially and adversely affect our business, prospects, financial condition, results of operations and cash flows. For details, please see the section entitled “*Litigation*” on page 239.

9. *We are required to maintain the eligibility conditions specified under Regulation 4 of the InvIT Regulations on an ongoing basis. We may not be able to ensure such ongoing compliance by the Investment Manager, our Sponsor, the Project Manager and the Trustee, which could result in the cancellation of the registration of IndiGrid.*

We are required to maintain the eligibility conditions specified under Regulation 4 of the InvIT Regulations on an ongoing basis. These eligibility conditions include, among other things, that (a) the Sponsor, the Investment Manager and the Trustee are separate entities, (b) the Sponsor has a net worth of not less than Rs. 1,000 million and has a sound track record in the development of infrastructure or fund management in the infrastructure sector, (c) the Investment Manager has a net worth of not less than Rs. 100 million and has not less than five years’ experience in fund management or advisory services or development in the infrastructure sector, (d) the Trustee is registered with the SEBI under Securities and Exchange Board of India (Debenture Trustees) Regulations, 1993 and is not an associate of the Sponsor or Investment Manager and (e) IndiGrid and Parties to IndiGrid are “fit and proper persons” as defined under Schedule II of the Intermediaries Regulations on an ongoing basis. We may not be able to ensure such ongoing compliance by InvIT and Parties of the InvIT, which could result in the cancellation of the registration of IndiGrid as an infrastructure investment trust.

10. *We are governed by the InvIT Regulations, the implementation and interpretation of which, is largely uncertain.*

IndiGrid has been constituted under the InvIT Regulations which were issued in 2014, as amended and supplemented with additional guidelines and circulars.

The InvIT Regulations and other corresponding changes to applicable law, are largely untested in their implementation. Uncertainty in applicability, interpretation or implementation of any amendment to, or change in, law, regulation or policy, including due to an absence, or a limited body, of administrative or judicial precedent may be time consuming and costly for us to resolve and may impact the viability of our current business or restrict our ability to grow our business in the future and consequently, our ability to make distributions to the Unitholders. Changes to our organizational structure, changes to our agreements, cost increases, fines, legal fees or business interruptions may result from changes to regulations, from new regulations, from new interpretations by courts or regulators of existing regulations or from stricter enforcement practices by regulatory authorities of existing regulations. In addition, new costs may arise from audit, certification and/or self-assessment standards required to maintain compliance with new and existing InvIT Regulations, which may render it economically unviable to continue conducting business as an infrastructure investment trust or otherwise have a material, adverse effect on our business, financial condition, results of operations and cash flows.

Further, SEBI has the right to, with or without prior notice, order inspection of the books of accounts, records and other documents pertaining to our operations, either on its own or, upon receipt of complaint. Upon review of the inspection report, SEBI is entitled to, if it so deems appropriate (in the interest of the securities markets or our Unitholders) (a) to delist our Units from the stock exchanges and require us to surrender our certificate of registration; (b) to wind-up our operations; (c) to sell our assets; (d) or direct us not to operate or access the capital markets for a specified period; or (e) direct us to not do such things as SEBI may deem appropriate in the interest of our Unitholders. Any such occurrence may have a material adverse effect on our business, result of operations, financial conditions and cash flows.

Further, units of a trust may not be classified as “securities” under the Securities Contract Regulation Act, 1956, as amended, and infrastructure investment trusts are not “companies” or “bodies corporate” within the meaning of various SEBI regulations and the Companies Act, 2013, as amended. Accordingly, the applicability of several regulations (including regulations relating to intermediaries, underwriters, merchant bankers, takeover, insider trading and fraudulent and unfair trade practices) to us is presently unclear.

There can be no assurance that the legal framework for infrastructure trusts will not impose additional regulations and policies which could impact our operations and it is difficult to forecast how any new laws, regulations or standards or future amendments to the InvIT Regulations will affect infrastructure trusts and the infrastructure sector in India. Such changes may adversely affect our business, results of operations and prospects, to the extent that we are unable to suitably respond to and comply with any such changes in applicable law and policy. We may

incur increased costs and other burdens relating to compliance with such new regulations, which may also require significant time and other resources, and any failure to comply with these changes may adversely affect our business, results of operations and prospects.

11. *We must maintain certain investment ratios, which may present additional risks to us.*

Pursuant to the InvIT Regulations, we are required to invest not less than 80% of the value of our assets in completed and revenue-generating infrastructure projects, such as the Portfolio Assets, and are limited to our consolidated borrowings and deferred payments net of cash and cash equivalents not exceeding 70% of the value of our assets. If such borrowings and payments exceed 49%, we are required to obtain a credit rating of “AAA” or equivalent for the consolidated borrowing and proposed borrowing under the InvIT Regulations. In addition, we must not invest more than 10% of the value of our assets in under-construction infrastructure projects. If these conditions are breached on account of market movements of the price of the underlying assets or securities, the Investment Manager must inform the Trustee and ensure that these conditions are satisfied within six months of such breach (or within one year with Unitholder approval). Failure to comply with these conditions may present additional risks to us, including divestment of certain assets, delisting and other penalties, which could have a material, adverse effect on our business, financial condition, results of operations and cash flows.

12. *The Investment Manager is required to comply with certain ongoing reporting and management obligations in relation to the Trust. There can be no assurance that the Investment Manager will be able to comply with such requirements.*

The Investment Manager is required to comply with certain ongoing reporting and management obligations in relation to the Trust in accordance with the InvIT Regulations. These requirements include, among other things, (a) making investment decisions with respect to the underlying assets or projects of IndiGrid, (b) overseeing the activities of the Project Manager, (c) investing and declaring distributions in accordance with the InvIT Regulations, (d) submitting reports to the Trustee and (e) ensuring the audit of our accounts. There can be no assurance that the Investment Manager will be able to comply with such requirements in a timely manner or at all, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

13. *Compliance with the European Union Directive on Alternative Investment Fund Managers may increase administrative and regulatory burdens on the Investment Manager and IndiGrid.*

The AIFMD came into force in July 2011. The AIFMD regulates the activities of certain private fund managers undertaking fund management activities or marketing fund interests to investors within the European Economic Area (the “EEA”) (the EEA comprises the member states of the European Unions and Norway, Iceland and Lichtenstein). In that regard, the AIFMD is intended to apply additional regulation and operating requirements to:

- alternative investment fund managers (“AIFM”) with their registered offices in the EEA; and
- non-EEA AIFMs that manage EEA alternative investment funds (“AIFs”) or actively market AIFs to investors resident, domiciled or with a registered office in the EEA.

As used herein, the “AIFMD” refers to Directive 2011/61/EU of the European Parliament and of the Council of June 8 2011 on Alternative Investment Fund Managers, together with EU Commission delegated Regulation (EU) No. 231/2013 of December 19, 2012, supplementary Directive 2011/61/EU of the European Parliament and of the Council, and the national laws transposing Directive 2011/61/EU in any EEA Member State in which IndiGrid is marketed.

Among other things, the AIFMD regulates and imposes regulatory obligations in respect of the active marketing in the EEA by AIFMs (irrespective of whether they have their registered office in an EEA Member State or elsewhere) of AIFs (whether established in an EEA Member State or elsewhere). Many of the provisions of the AIFMD require the adoption of delegated acts and regulatory technical standards, as well as the establishment of guidelines. The deadline for the transposition of the AIFMD into the laws of each of the member states of the EEA was July 22, 2013, although many EEA member states took longer to adopt national legislation or otherwise implement the AIFMD in their jurisdiction. Most, but not all, EEA member states have published the relevant acts, standards and guidelines. Where these acts, standards and guidelines have been implemented, their practical application is still subject to clarification or completion. Regulatory changes arising from the transposition of the AIFMD into national law that impair the ability of the Investment Manager to manage the investments of IndiGrid,

or limit the Investment Manager's ability to market Units in the future, may require increased compliance efforts and associated expenses, or otherwise may materially and adversely affect IndiGrid's ability to carry out its investment strategy and achieve its investment objectives.

The Investment Manager is a Non-EEA AIFM for the purposes of the AIFMD. Non-EEA AIFMs are currently not able to become authorised under the AIFMD. In order to market to investors resident, domiciled or with a registered office in the EEA, non-EEA AIFMs must market AIFs in accordance with the applicable national private placement regimes of the EEA member states in which they wish to market and comply with a sub-set of requirements under the AIFMD (which are much more limited in scope than those applicable to AIFMs that are established in the EEA). Such limited requirements are: (i) "point-of-sale" disclosures (as to which, please see Annexure C), (ii) ongoing investor disclosures required pursuant to Articles 23(4) and (5) of the AIFMD (as to which, please see below), (iv) provision of information relating to IndiGrid's investments and its assets under management to the regulators of any EEA Member State into which Units in IndiGrid are actively marketed, and (v) the "asset-stripping" rules (in the event that IndiGrid acquires control of an EEA based portfolio company).

In connection with IndiGrid's initial public offering in 2017, IndiGrid registered with the UK Financial Conduct Authority ("FCA") as an AIF whose units were to be marketed in the UK. However, as of the date of this Preliminary Placement Document, the Investment Manager, in its capacity as a Non-EEA AIFM, has not complied with certain ongoing reporting obligations to the FCA. Any failure to make these past filings, or continued non-compliance, could expose IndiGrid and the Investment Manager to penalties. If the non-compliance continues, their registration as an AIF and AIFM, respectively could be cancelled.

The information in respect of IndiGrid required to be disclosed pursuant to Articles 23(4) and (5) of the AIFMD will be made available to each Unitholder, as follows: (a) the percentage of IndiGrid's assets which are subject to special arrangements arising from their illiquid nature will be notified to the Unitholders; (b) any new arrangements for managing the liquidity of IndiGrid will be provided without undue delay in a disclosure notice delivered to each Unitholder; (c) the current risk profile of IndiGrid and the risk management systems employed by the Investment Manager to manage those risks may be provided in each annual report of IndiGrid; (d) any changes to the maximum level of leverage which the Investment Manager may employ on behalf of IndiGrid, as well as any right of the reuse of collateral or any guarantee granted under the leveraging arrangement, will be provided without undue delay in a disclosure notice delivered to each Unitholder; and (e) the total amount of leverage employed by IndiGrid may be provided in each annual report of IndiGrid. The Investment Manager in its capacity as an AIFM to IndiGrid has not complied with its ongoing reporting requirements under the Alternative Investment Fund Managers Directive to the Financial Conduct Authority in the United Kingdom. While the Investment Manager is in the process of com

In addition, it is possible that some EEA member states will elect in the future to restrict or prohibit the marketing of non-EEA AIFs to investors based in those jurisdictions. Any such restrictions or prohibitions may make it more difficult for IndiGrid to raise its targeted amount of commitments.

In light of the foregoing, the AIFMD could have an adverse effect on the Investment Manager or IndiGrid by, among other things, increasing the regulatory burden and costs of doing business in the EEA members states, imposing extensive disclosure obligations on companies located in EEA member states, if any, in which IndiGrid invests, and potentially disadvantaging IndiGrid as an investor in portfolio companies located in EEA member states as compared to competitors (e.g., those not in the alternative investment space) that may not be in scope of the AIFMD.

14. The Alternative Investment Fund Managers Directive may impose requirements on or restrict the use of leverage by IndiGrid and the Investment Manager.

Although the Investment Manager will seek to use leverage in relation to IndiGrid in a manner it believes is prudent, the use of leverage will generally magnify both the opportunities for gain and risk of loss from any given asset. The cost and availability of leverage is highly variable and at times it may be difficult to obtain or maintain the desired degree of leverage. The use of leverage will also result in interest expense and other costs that may not be covered by distributions made to IndiGrid or appreciation of its investments. An increase in interest rates may decrease the profitability of IndiGrid or its portfolio companies. The use of leverage also may impose restrictive financial and operating covenants on a portfolio company, in addition to the burden of debt service, and may impair its ability to carry out business operations or to finance future operations and capital needs. A leveraged capital structure will increase a portfolio company's exposure to any deterioration in market conditions,

competitive pressures, an adverse economic environment or rising interest rates, which could accelerate and magnify declines in the value of IndiGrid's investments. If a portfolio company is not able to generate adequate cash flow to meet debt service, IndiGrid may suffer a partial or total loss of capital invested in such portfolio company.

To the extent required by applicable law and regulation, the Investment Manager will disclose any change to its leverage policy (such information being contained in IndiGrid's Financial Policy and its Trust Deed) in the first annual reports of IndiGrid (or by other means) to be delivered after such change and, accordingly, will disclose in such reports (or by such other means) the maximum level of leverage permitted. Thereafter and to the extent required by applicable law and regulation, the Investment Manager will disclose to Unitholders on an annual basis any change to the maximum level of leverage permitted as well as any re-hypothecation rights or any guarantee granted under the leveraging arrangement and the total amount of leverage employed by IndiGrid. The Investment Manager will also disclose to Unitholders on an annual basis (whether in the annual reports of IndiGrid or otherwise) the percentage of IndiGrid's assets which are subject to special arrangements arising from their illiquid nature, any new liquidity management arrangements, the current risk profile of IndiGrid and the risk management systems employed to manage those risks.

15. *There is a significant risk that IndiGrid will be a passive foreign investment company for U.S. federal income tax purposes, which could result in materially adverse tax consequences to holders of the Units which are subject to U.S. federal income tax.*

Based on the nature of our revenue and the way our business is operated, there is a significant risk that IndiGrid will be a passive foreign investment company ("PFIC") for U.S. federal income tax purposes. A non-U.S. entity treated as a corporation for U.S. federal income tax purposes will be a PFIC for any taxable year if (applying certain look-through rules) either (i) at least 75% of its gross income for such year is passive income or (ii) at least 50% of the value of its assets (based on an average of the quarterly values of the assets) during such year is attributable to assets that produce passive income or are held for the production of passive income. A separate determination has to be made after the close of each taxable year as to whether we were a PFIC for that year. There are significant ambiguities in applying the PFIC test to us. If we are considered a PFIC, material adverse tax consequences could apply to holders of Units who are subject to U.S. federal income tax with respect to any "excess distribution" received from us and any gain from a sale or other disposition of the Units. Prospective investors are urged to consult their advisors regarding IndiGrid's PFIC status and the U.S. federal income tax consequences of an investment in the Units.

16. *It may be difficult for the Unitholders to remove the Trustee or the Investment Manager.*

Under the InvIT Regulations, the Trustee or the Investment Manager cannot be removed without the approval of Unitholders where the votes cast in favour of the resolution shall not be less than one and a half times the votes cast against such resolution.

17. *The registered office of the Investment Manager is not owned by the Investment Manager.*

The registered office of the Investment Manager is located on premises which are not owned by Investment Manager. In the event the use of such premises by the Investment Manager is conducted in a manner that amounts to a breach of the lease arrangements with the owners of such property, the Investment Manager could be subject to adverse consequences. Any such action may adversely affect Investment Manager's business operations, financial condition and results of operations.

RISKS RELATED TO INDIA

1. *We are exposed to risks associated with the power industry in India.*

We derive, and expect to continue to derive in the foreseeable future, most of our revenues and operating profits from India. Changes in macroeconomic conditions generally impact the power industry and could negatively impact our business. Accordingly, our business is highly dependent on the state of development of the Indian economy and the macroeconomic environment prevailing in India. Changes in government policies that favor the development of power generation, including large-scale power projects that generally require increased transmission facilities for evacuating the electricity they generate, may have an adverse impact on demand for transmission facilities. Since the use of our transmission systems, our expansion plans and future power transmission projects depend or will depend on the operation of power generation projects, the financial health of

distribution companies (“DISCOMs”), macroeconomic factors that may negatively impact demand for electricity or more generally the development of power generation projects in India or the timely commencement of their operations (such as fuel price fluctuations, volatility and other market conditions that may adversely impact power generation projects) could in turn have a material adverse effect on our growth prospects, business and cash flows. In addition, access to financing may be more expensive or not available on commercially acceptable terms during economic downturns. Any of these factors and other factors beyond our control could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.

2. *Our performance and growth are dependent on the factors affecting the Indian economy.*

Our performance and the growth are dependent on the performance of the Indian economy, which, in turn, depends on various factors. The Indian economy has been affected by global economic uncertainties, volatility in interest rates, currency exchange rates, commodity and electricity prices, adverse conditions affecting agriculture and various other macroeconomic factors as well as regulatory changes. For instance, the GoI issued a notification pursuant to which certain Indian currency notes of high denomination stopped being legal tender in November 2016. Also, with effect from July 1, 2017, the GoI imposed a national goods and service tax to replace taxes and levies previously issued by central and state governments in India. Such changes have had and could continue to impact the Indian economy.

Conditions outside India, such as a slowdown or recession in the economic growth of other major countries and regions, especially in Europe and China, also have an impact on the growth of the Indian economy, and GoI policy may change in response to such conditions. While recent Indian governments have been focused on encouraging private participation in the industrial sector, any adverse change in policy could result in a further slowdown of the Indian economy. GoI corruption, scandals and protests against certain economic reforms have occurred in the past, and could in the future slow the pace of liberalization and deregulation. The rate of economic liberalization could decrease, and specific laws and policies affecting foreign investment, currency exchange rates and other matters affecting investment in India could change as well. In the power transmission industry, there can be no assurance that the GoI’s engagement with and outreach to private sector operators, including us, will continue in the future. A significant change in India’s economic liberalization and deregulation policies, in particular, those relating to the power transmission industry, could disrupt business and economic conditions in India generally and our business in particular.

Additionally, an increase in trade deficit or a decline in India’s foreign exchange reserves could negatively impact interest rates and liquidity, which could adversely impact the Indian economy and our business. Any downturn in the macroeconomic environment in India could materially and adversely affect the business, prospects, financial condition, results of operations and cash flows.

3. *We may be exposed to variations in foreign exchange rates.*

While our revenues are in Indian rupees, we may also borrow funds from outside India in foreign currencies to finance capital expenditure and working capital requirements. As of March 31, 2019, IndiGrid on a combined basis had an aggregate of Rs. 2,453.19 million equivalent of foreign currency loan from financial institution, which represented 2.81% of our total borrowings (including current maturities and interest accrued). We may also purchase equipment from suppliers located outside India, and payment for such equipment is typically denominated in U.S. dollars. The Indian rupee has depreciated in recent years, and in the future may continue to depreciate, against the U.S. dollar, leading to increases in the Indian rupee cost for us to service and repay foreign currency borrowings. In addition, in the event of disputes under any of our foreign currency borrowings, we may be required by the terms of those borrowings to defend ourselves in foreign courts or arbitration proceedings, which could result in additional costs. A depreciation of the Indian rupee would also increase the costs of imports and may have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows. In addition, our hedging policy and arrangements with respect to our foreign currency exposure may not, when implemented, fully protect us from foreign exchange rate fluctuations and there can be no assurance that we will be able to renew our current hedging arrangements, which have a five-year term, on satisfactory terms or at all upon expiry.

4. *A decline in India’s foreign exchange reserves may reduce liquidity and increase interest rates in India, which could have an adverse impact on us.*

Flows to foreign exchange reserves can be volatile, and past declines have adversely affected the valuation of the Indian rupee. During the first half of 2014, emerging markets including India, witnessed significant capital outflows due to concerns regarding the withdrawal of quantitative easing in the U.S. and other structural factors in India such as high current account deficits and lower growth outlook. As a result, the Indian rupee depreciated significantly. To manage the volatility in the exchange rate, the RBI took several measures including increasing the marginal standing facility rate by 200 basis points and reducing domestic liquidity. The RBI also subsequently announced measures to attract capital flows, particularly targeting the non-resident Indian community. The RBI intervened again in February 2016 as a result of increased volatility of the exchange rate. Any increased intervention in the foreign exchange market or other measures by the RBI to control the volatility of the exchange rate may result in a decline in India's foreign exchange reserves, reduced liquidity and higher interest rates in the Indian economy, which could adversely affect our ability to obtain financing on adequate terms or at all, which in turn could affect our business and future financial performance.

5. *Social, economic and political conditions and natural disasters could have a negative effect on our business.*

Each of the Portfolio Assets is incorporated in India and they derive all of their revenue from India. In addition, all of our assets are located in India. Consequently, our business may be adversely affected by social, economic and political conditions in India and its neighboring countries. Specific risks, such as the following could adversely influence the Indian economy, thereby having a material adverse effect on our business, financial condition, results of operations and cash flows:

- political instability, riots or other forms of civil disturbance or violence;
- war, terrorism, invasion, rebellion or revolution;
- government interventions, including expropriation or nationalization of assets, increased protectionism and the introduction of tariffs or subsidies;
- changing regulatory regimes;
- underdeveloped industrial and economic infrastructure;
- changes in exchange rates and controls, interest rates, government policies, taxation and economic and political developments;
- changes in policies such as, fiscal and economic policy, industrial policy, direct and indirect taxes and the export-import policy; and
- changes in state-specific regulation and conditions.

Natural disasters such as floods, earthquakes or famines have in the past had a negative impact on the Indian economy. Potential effects may include damage to infrastructure and the loss of business continuity and business information. If our facilities are affected by any of these events, our operations may be significantly interrupted, which could materially adversely affect our business, prospects, financial condition, results of operations and cash flows.

6. *Any downgrading of India's debt rating by rating agencies could have a negative impact on our business.*

Any adverse revisions to India's credit ratings by rating agencies may adversely affect our ability to raise additional financing and the interest rates and other terms at which such additional financing is available. This could materially and adversely affect our ability to obtain financing for capital expenditure, which could in turn materially and adversely affect our business, prospects, financial condition, results of operations and cash flows. India's sovereign debt rating could be downgraded due to various factors, including changes in tax or fiscal policy or a decline in India's foreign exchange resources, which are outside our control.

7. *Financial instability in other countries may cause increased volatility in Indian financial markets.*

The Indian market and the Indian economy are influenced by economic and market conditions in other countries, including conditions in the United States, Europe and certain emerging economies in Asia. Financial turmoil in Asia, Russia and elsewhere in the world in the past has adversely affected the Indian economy. Any worldwide financial instability may cause increased volatility in the Indian financial markets and, directly or indirectly, adversely affect the Indian economy and financial sector as well as us.

Although economic conditions vary across markets, loss of investor confidence in one emerging economy may cause increased volatility across other economies, including India. Financial instability in other parts of the world

could have a global influence and thereby negatively impact the Indian economy. Financial disruptions could materially and adversely affect our business, prospects, financial condition, results of operations and cash flows.

The global credit and equity markets have experienced substantial dislocations, liquidity disruptions and market corrections. The dislocation of the sub-prime mortgage loan market in the United States since September 2008, and the more recent European sovereign debt crisis, has led to increased liquidity and credit concerns and volatility in the global credit and financial markets. In Europe, Brexit, and any prolonged period of uncertainty which results, could have a significant negative impact on international markets. These could include further falls in stock exchange indices and/or greater volatility of markets in general due to the increased uncertainty. These and other related events could have a significant impact on the global credit and financial markets as a whole, and could result in reduced liquidity, greater volatility, widening of credit spreads and a lack of price transparency in the global credit and financial markets.

In response to such developments, legislators and financial regulators in the United States and other jurisdictions, including India, implemented a number of policy measures designed to add stability to the financial markets. However, the overall long-term impact of these and other legislative and regulatory efforts on the global financial markets is uncertain, and they may not have the intended stabilizing effects. Any significant financial disruption could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.

8. *If inflation rises in India, increased costs may result in a decline in profits.*

Inflation rates in India have been volatile in recent years, and such volatility may continue. Increasing inflation in India could cause a rise in the price of transportation, wages, raw materials and other expenses. While the escalable component of the tariff is linked to the wholesale price index and consumer price index, there can be no assurance that an increased escalable tariff will sufficiently offset our increased costs due to inflation which could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.

9. *Significant differences exist between Ind AS and other accounting principles, such as IFRS and U.S. GAAP, which may be material to investors' assessments of our financial condition, result of operations and cash flows.*

The Special Purpose Combined Financial Statements included in this Preliminary Placement Document are prepared and presented in conformity with Ind AS and the Guidance Note on Combined and Carve-out financial statements issued by ICAI. Ind AS differs from accounting principles with which prospective investors may be familiar in other countries, such as IFRS, Indian GAAP and U.S. GAAP. Accordingly, the degree to which the Special Purpose Combined Financial Statements included in this Preliminary Placement Document will provide meaningful information is entirely dependent on the reader's level of familiarity with Indian accounting practices. Persons not familiar with Indian accounting practices should limit their reliance on the financial disclosures presented in this Preliminary Placement Document.

10. *Changing laws, rules and regulations and legal uncertainties including adverse application of tax laws and regulations such as application of Goods and Service Tax, may adversely affect our business results of operations, cash flows and financial performance.*

Our business and financial performance could be adversely affected by changes in law or interpretations of existing, or the promulgation of new, laws, rules and regulations in India applicable to us and our business. There can be no assurance that the central or the state governments may not implement new regulations or policies which will require us to obtain approvals and licenses from the governments and other regulatory bodies or impose onerous requirements and conditions on our operations. Any new regulations and policies and the related uncertainties with respect to the implementation of new regulations may have a material adverse effect on our business, financial condition and results of operations. In addition, we may have to incur capital expenditures to comply with the requirements of any new regulations, which may also materially affect our results of operations.

The GoI has enacted the Central Goods and Services Tax Act, 2017 which lays down a comprehensive national GST regime which has combined taxes and levies collected by the central and state governments into a unified rate structure. This legislation was notified and made effective from July 1, 2017. Given GST is a new legislation, there may be certain impact on IndiGrid under GST which may not be correctly estimated. The implementation of this new structure may be affected by any disagreement between certain state governments, which could create uncertainty. We may also incur increased costs and other burdens relating to compliance with the new

requirements under the GST regime, which may also require significant management time and other resources, and any failure to comply may adversely affect our business. Further, any future increases or amendments to the GST may affect our overall tax efficiency and we may be liable to pay additional taxes.

The Government has also proposed major reforms in Indian tax laws with respect to the provisions relating to the general anti-avoidance rule (“**GAAR**”). As regards GAAR, the provisions have been introduced in the Finance Act, 2012 and have come into effect from April 1, 2017. The GAAR provisions intend to catch arrangements declared as “impermissible avoidance arrangements”, which is any arrangement, the main purpose or one of the main purposes of which is to obtain a tax benefit and which satisfy at least one of the following tests (i) creates rights, or obligations, which are not ordinarily created between persons dealing at arm’s length; (ii) results, directly or indirectly, in misuse, or abuse, of the provisions of the Income Tax Act; (iii) lacks commercial substance or is deemed to lack commercial substance, in whole or in part; or (iv) is entered into, or carried out, by means, or in a manner, which are not ordinarily employed for bona fide purposes. If GAAR provisions are invoked, then the Indian tax authorities have wide powers, including denial of tax benefit or a benefit under a tax treaty. As the taxation system is intended to undergo significant overhaul, its consequent effects on us cannot be determined at present and there can be no assurance that such effects would not adversely affect our business and future financial performance.

Taxes in India are revised every year and Indian courts may interpret such changes with a retroactive effect. The government may also change tax laws with a retrospective effect. The uncertainty surrounding the Indian tax system, combined with significant penalties for default could expose us to tax risks which may be higher than expected.

11. Tax laws are subject to changes and differing interpretations, which may materially and adversely affect our operations and growth prospects.

The current tax laws and regulations in India provide certain exemptions to interest income earned by business trusts from a special purpose vehicle as a result of which IndiGrid is subject to relatively lower tax liabilities. These exemptions could be modified or removed at any time or clarified in a manner adverse to IndiGrid, which could adversely affect our profitability and financial condition.

Tax laws and regulations are subject to differing interpretations by tax authorities. Differing interpretations of tax and other fiscal laws and regulations may exist within governmental ministries, including tax administrations and appellate authorities, thus creating uncertainty and potential unexpected results. The degree of uncertainty in tax laws and regulations, combined with significant penalties for default and a risk of aggressive action, including by retrospective legislation, by the governmental or tax authorities, may result in tax risks in the jurisdictions in which we operate being significantly higher than expected. For instance, while the Investment Manager intends to take measures to ensure that it is in compliance with all relevant tax laws, there is no assurance that the tax authorities will not take a position that differs from the position taken by us with regard to our tax treatment of various items. Any of the above events may result in a material, adverse effect on our business, financial condition, results of operations and/or prospects. Tax authorities in India may also introduce additional or new regulations applicable to our business which could adversely affect our business and profitability.

12. We may be affected by competition law in India and any adverse application or interpretation of the Competition Act could adversely affect our business.

The Competition Act, 2002 (the “**Competition Act**”), regulates practices having an appreciable adverse effect on competition in the relevant market in India. Under the Competition Act, any formal or informal arrangement, understanding or action in concert, which causes or is likely to cause an appreciable adverse effect on competition in India, is considered void and results in the imposition of substantial monetary penalties. Further, any agreement among competitors which, directly or indirectly, involves the determination of purchase or sale prices, limits or controls production, supply, markets, technical development, investment or provision of services, shares the market or source of production or provision of services by way of allocation of geographical area, type of goods or services or number of customers in the relevant market or, directly or indirectly, results in bid-rigging or collusive bidding, is presumed to have an appreciable adverse effect on competition. The Competition Act also prohibits abuse of a dominant position by any enterprise. The Competition Commission of India (“**CCI**”) has extra-territorial powers and can investigate any agreements, abusive conduct or combinations occurring outside India if such agreements, conduct or combinations have an appreciable adverse effect on competition in India. However, there can be no assurance as to the impact of the provisions of the Competition Act on the agreements that the Portfolio Assets have entered into. We are not currently party to any outstanding proceedings, nor have

we received notice in relation to non-compliance with the Competition Act or the agreements they have entered into. However, if we are affected, directly or indirectly, by the application or interpretation of any provision of the Competition Act, or any enforcement proceedings initiated by the CCI, or any adverse publicity that may be generated due to scrutiny or prosecution by the CCI or if any prohibition or substantial penalties are levied under the Competition Act, it could materially and adversely affect our business, prospects, financial condition, results of operations and cash flows.

RISKS RELATED TO THE ISSUE AND THE UNITS

1. Investors in the Units may not be able to enforce a judgment of a foreign court against IndiGrid.

IndiGrid is an investment trust organized under the laws of India. Other than Tarun Kataria, all of the directors of IndiGrid and key managerial personnel named in this Preliminary Placement Document are residents of India. Further, all the assets of IndiGrid are located in India. As a result, it may be difficult for investors to effect service of process upon IndiGrid or to enforce judgments obtained against IndiGrid. India has reciprocal recognition and enforcement of judgments in civil and commercial matters with only a limited number of jurisdictions, such as the United Kingdom, Singapore and Hong Kong and no reciprocity with the United States of America. In order to be enforceable, a judgment from a jurisdiction with reciprocity must meet certain requirements of the Indian Code of Civil Procedure, 1908 (the “**Civil Procedure Code**”). The Civil Code only permits the enforcement and execution of monetary decrees in the reciprocating jurisdiction, not being in the nature of any amounts payable in respect of taxes, other charges, fines or penalties. Judgments or decrees from jurisdictions which do not have reciprocal recognition with India cannot be enforced by proceedings in execution in India. Therefore, a final judgment for the payment of money rendered by any court in a non-reciprocating territory for civil liability, whether or not predicated solely upon the general laws of the non-reciprocating territory, would not be enforceable in India. Even if an investor obtained a judgment in such a jurisdiction against us, our officers or directors, it may be required to institute a new proceeding in India and obtain a decree from an Indian court. However, the party in whose favor such final judgment is rendered may bring a fresh suit in a competent court in India based on a final judgment that has been obtained in a non-reciprocating territory within three years of obtaining such final judgment. Generally, there are considerable delays in the disposal of suits by Indian courts.

It is unlikely that a court in India would award damages on the same basis as a foreign court if an action were to be brought in India. Furthermore, it is unlikely that an Indian court would enforce foreign judgments if that court was of the view that the amount of damages awarded was excessive or inconsistent with Indian practice. A party seeking to enforce a foreign judgment in India is required to obtain prior approval from the RBI under the FEMA to repatriate any amount recovered. For further details, see “*Enforcement of Civil Liabilities*” on page 22.

1. The reporting requirements and other obligations of infrastructure investment trusts are still evolving. Accordingly, the level of ongoing disclosures made to and the protection granted to our Unitholders may be more limited than those made to or available to shareholders of a company that has listed its equity shares upon a recognized stock exchange in India.

The InvIT Regulations, along with the guidelines and circulars issued by the SEBI from time to time, govern the infrastructure investment trusts in India. However, as compared with the statutory and regulatory framework governing companies that have listed their equity shares on a recognized stock exchanges in India, the regulatory framework applicable to infrastructure investment trusts is relatively nascent and thus, still evolving. While the InvIT Regulations were notified with effect from September 26, 2014, the norms in relation to continuous disclosures and compliances were notified by SEBI on November 29, 2016 and the guidelines in relation to a preferential issue of units by an infrastructure investment trust were only notified by the SEBI recently (by way of a circular dated June 5, 2018).

Accordingly, the ongoing disclosures made to our Unitholders under the InvIT Regulations may differ from those made to shareholders of a company that has listed its equity shares on a recognized stock exchange in India in accordance with the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015. Further, the rights of our Unitholders may not be as extensive as the rights of shareholders of a company that has listed its equity shares on a recognized stock exchange in India, and accordingly, the protection available to our Unitholders may be more limited than those available to such shareholders.

2. Your ability to acquire and sell Units offered in the Issue is restricted by the distribution, solicitation and transfer restrictions set forth in this Preliminary Placement Document.

No actions have been taken to permit a public offering of our Units offered in the Issue in any jurisdiction. As such, your ability to acquire Units offered in the Issue is restricted by the distribution and solicitation restrictions set forth in this Preliminary Placement Document. For further information, see “*Selling Restrictions*” on page 262. Furthermore, our Units offered in the Issue are subject to restrictions on transferability and resale. Units allotted to you pursuant to this Issue cannot be sold by you for one year from the date of allotment, except on a recognized stock exchange. You are required to inform yourself about and observe these restrictions. Our representatives, our agents and us will not be obligated to recognize any acquisition, transfer or resale of our Units offered in the Issue made other than in compliance with applicable law.

3. *IndiGrid may be dissolved, and the proceeds from the dissolution thereof may be less than the amount invested by the Unitholders.*

IndiGrid is an irrevocable trust registered under the Registration Act and it may only be extinguished (i) if it is impossible to continue with IndiGrid or if the Trustee, on the advice of the Investment Manager, deems it impracticable to continue with us; (ii) on the written recommendation of the Investment Manager and upon obtaining the prior written consent of such number of the Unitholders as is required under the InvIT Regulations; (iii) if our Units are delisted from the Stock Exchanges; (iv) if the SEBI passes a direction for winding up IndiGrid or the delisting of the Units; or (v) in the event we become illegal. Under the Trust Deed, in the event of dissolution, our net assets, remaining after settlement of all liabilities, and the retention of any reserves which the Trustee deems to be necessary to discharge contingent or unforeseen liabilities, shall be paid to our Unitholders. Should IndiGrid be dissolved, depending on the circumstances and the terms upon which our assets are disposed of, there is no assurance that our Unitholders will recover all or any part of their investment. There may also be uncertainty around the interpretation and implementation of certain provisions in relation to insolvency of a trust under the Insolvency and Bankruptcy Code, 2016 which came into force in 2016.

4. *The sale or possible sale of a substantial number of Units by the Sponsor in the public market following the lapse of its lock-up requirement could adversely affect the price of the Units.*

The Sponsor is required to hold a minimum of 15% of our Units, for a minimum period of three years from the date of listing of the units i.e June 6, 2017 and the balance of its Unitholding was required to be locked in for a period of one year.

Our Units are listed on the NSE and the BSE. If the Sponsor, upon the expiry of its lock-up period directly or indirectly sells or is perceived as intending to sell a substantial number of its Units, or if an additional secondary offering of the Units is undertaken, the market price for the Units could be adversely affected.

5. *Under Indian law, foreign investors are subject to restrictions that limit their ability to transfer or redeem Units, which may adversely impact the trading price of the Units.*

Under foreign exchange regulations currently in force in India, transfers of Units between non-residents and residents are permitted, subject to certain limited exceptions, if they comply with the pricing and reporting requirements specified by RBI. If a transfer of Units is not compliant with such pricing or reporting requirements and does not fall under any of the exceptions specified by RBI, then RBI’s prior approval is required.

Additionally, Unitholders who seek to convert Indian rupee proceeds from a sale of Units in India into foreign currency and repatriate that foreign currency from India require a no-objection or a tax clearance certificate from the Indian income tax authorities.

We cannot assure you that any required approval from RBI or any other Governmental agency can be obtained on any particular terms or in a timely manner, or at all.

Our Unitholders will not have the right to redeem or request the redemption of our Units while our Units are listed on the Stock Exchanges. In terms of the InvIT Regulations, an infrastructure investment trust may redeem Units only by way of a buyback or at the time of delisting of Units and may be subject to additional conditions and restrictions under Indian regulations.

6. *There is no assurance that our Units will remain listed on the Stock Exchanges.*

Although it is currently intended that the Units will remain listed on the NSE and the BSE, there is no guarantee of the continued listing of the Units. Among other factors, we may not continue to satisfy the listing requirements

of the Stock Exchanges. Accordingly, Unitholders will not be able to sell their Units through trading on the Stock Exchanges if the Units are no longer listed on the Stock Exchanges. While the InvIT Regulations state that we must provide investors with an exit prior to delisting, the specific mechanism of such delisting and related exit offer has not yet been finalized by the SEBI. Further, under the InvIT Regulations, we are required to maintain a minimum of 20 Unitholders at all times after the listing of the Units and certain minimum public holding. Failure to maintain such minimum number of Unitholders or public holding may result in action being taken against us by the SEBI and the Stock Exchanges, including the compulsory delisting of our Units.

7. *The price of the Units may decline after the Issue.*

The Issue Price of the Units will be in accordance with the guidelines for Preferential Issue of Units by Infrastructure Investment Trusts issued by the SEBI on June 5, 2018 and may not necessarily be indicative of the market price of the Units after the completion of the Issue. The Units may trade at prices significantly below the Issue Price after the Issue. The trading price of the Units will depend on many factors, including:

- the perceived prospects of our business and the power transmission industry;
- differences between our actual financial and operating results and those expected by investors and analysts;
- changes in analysts' recommendations or projections;
- changes in general economic or market conditions;
- the market value of our assets;
- the perceived attractiveness of the Units against those of other equity or debt securities, including those not in the infrastructure industry;
- the balance of buyers and sellers of the Units;
- the future size and liquidity of the Indian infrastructure investment trust market;
- any future changes to the regulatory system, including the tax system, both generally and specifically in relation to Indian infrastructure investment trusts;
- the ability on our part to implement successfully its investment and growth strategies;
- foreign exchange rates; and
- broad market fluctuations, including weakness of the equity markets and increases in interest rates.

For these reasons, among others, the price of Units may fluctuate. To the extent that we retain operating cash flow for investment purposes, working capital reserves or other purposes, these retained funds, while increasing the value of its underlying assets, may not correspondingly increase the market price of the Units. Any failure on our part to meet market expectations with regard to future earnings and cash distributions may adversely affect the market price for the Units.

In addition, the Units are not capital-protected products and there is no guarantee that Unitholders can regain the amount invested. If IndiGrid is terminated or liquidated, it is possible that investors may lose all or a part of their investment in the Units.

8. *Rights of Unitholders under Indian law may be more limited than under the laws of other jurisdictions.*

Indian legal principles related to corporate procedures, directors' fiduciary duties and liabilities, and Unitholders' rights may differ from those that would apply to a company or a trust in another jurisdiction. Unitholders' rights under Indian law may not be as extensive as unitholders' rights under the laws of other countries or jurisdictions. Investors may have more difficulty in asserting their rights as Unitholder in an Indian trust or as a shareholder of a company in another jurisdiction.

9. *No investors are permitted to withdraw their Bids at any stage after closure of the Issue.*

Pursuant to the SEBI Preferential Issue Guidelines, investors are not permitted to withdraw their Bids at any stage after closure of the Issue, notwithstanding adverse developments in international or national monetary policy, financial, political or economic conditions, our business, results of operations, or otherwise, at any stage after closure of the Issue.

10. *Unitholders may be subject to Indian taxes arising out of capital gains on the sale of the Units.*

Under current Indian tax laws, capital gains arising from the sale of units of a business trust within 36 months is taxable in India at applicable rates. However, any gain realized on the sale of listed units on a stock exchange held

for more than 36 months will not be subject to capital gains tax in India if Securities Transaction Tax (“**STT**”), is paid on the transaction. STT is levied on and collected by a domestic stock exchange on which units are sold. Any gain realized on the sale of units held for more than 36 months, which are sold other than on a recognized stock exchange on which no STT has been paid, is subject to long term capital gains tax in India at applicable rates, subject to taxation treaty benefits in the case of a non-resident holder.

GENERAL INFORMATION

IndiGrid

IndiGrid was settled on October 21, 2016, in New Delhi, pursuant to the Trust Deed, as an irrevocable trust in accordance with the Indian Trusts Act, 1882. IndiGrid was registered with SEBI on November 28, 2016 under Regulation 3(1) of the InvIT Regulations and has obtained a certificate of registration from SEBI bearing number IN/InvIT/16-17/0005. The principal place of business of IndiGrid is situated at F-1, The Mira Corporate Suites, 1 & 2, Ishwar Nagar, Mathura Road, New Delhi 110 065.

IndiGrid is an investment infrastructure trust established to hold assets in completed and revenue generating projects and under-construction projects in terms of Regulation 18(5) of the InvIT Regulations. For information on the background of IndiGrid and the description of the Portfolio Assets, please see the sections entitled “*Overview of IndiGrid*”, “*Description of Portfolio Assets*” and “*Our Business*” on pages 24, 26 and 161, respectively.

Compliance Officer of IndiGrid

The compliance officer of IndiGrid is Swapnil Patil. His contact details are as follows:

Swapnil Patil

F-1, The Mira Corporate Suites
1 & 2, Ishwar Nagar, Mathura Road
New Delhi 110 065
Tel: +91 11 4996 2200
Fax: +91 11 4996 2288
E-mail: complianceofficer@indigrid.co.in

Bidders can contact the Compliance Officer in case of any pre-Issue or post-Issue related problems such as non-receipt of Allotment Advice/letter of Allotment, non-credit of Allotted Units in the respective beneficiary account, non-receipt of refund orders and non-receipt of funds by electronic mode.

The Sponsor - Sterlite Power Grid Ventures Limited

Registered office:

4th Floor, Godrej Millennium
9 Koregaon Road
Pune, Maharashtra 411 001

Correspondence address:

F-1, The Mira Corporate Suites
1 & 2, Ishwar Nagar, Mathura Road
New Delhi 110 065

Contact Person of the Sponsor

Saurabh Mathur is the contact person of the Sponsor. His contact details are as follows:

Saurabh Mathur

F-1, The Mira Corporate Suites
1 & 2, Ishwar Nagar, Mathura Road
New Delhi 110 065
Tel: +91 11 4996 2200
Fax: +91 11 4996 2288
E-mail: saurabh.mathur@sterlite.com
Website: www.sterlitepower.com

The Investment Manager - Sterlite Investment Managers Limited

Registered office:

Maker Maxity, 5 North Avenue
Level 5, Bandra Kurla Complex
Bandra East
Mumbai 400 051

Correspondence Address:

F-1, The Mira Corporate Suites
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New Delhi 110 065
Tel: +91 11 6539 9990
Fax: +91 11 4996 2288
E-mail: swapnil.patil@indigrid.co.in
Contact Person: Swapnil Patil
Website: www.indigrid.co.in

The Project Manager – Sterlite Power Grid Ventures Limited

Registered office:

4th Floor, Godrej Millennium
9 Koregaon Road
Pune, Maharashtra 411 001

Correspondence address:

F-1, The Mira Corporate Suites
1 & 2, Ishwar Nagar, Mathura Road
New Delhi 110 065
Tel: +91 11 4996 2200
Fax: +91 11 4996 2288
E-mail: saurabh.mathur@sterlite.com
Contact Person: Saurabh Mathur
Website: www.sterlitepower.com

The Trustee – Axis Trustee Services Limited

Registered Office

Axis Trustee Services Limited
Axis House Bombay Dyeing Mills Compound
Pandurang Budhkar Marg
Worli
Mumbai 400 025

Correspondence Address

Axis Trustee Services Limited
2nd Floor, The Ruby, 29
Senapati Bapat Marg
Dadar West
Mumbai 400 028
Tel : 022 6230 0451
Fax : 022 6230 0700
Email : debenturetrustee@axistrustee.com/compliances@axistrustee.com
Contact Person: Ms. Krishna Kumari
Website: www.axistrustee.com

Other Parties involved in IndiGrid

Auditor

S R B C & Co. LLP, Chartered Accountants

C-401, 4th Floor
Panchshil Tech Park
Yerwada
Pune 411 006
Tel: + 91 20 6603 6000
Fax: + 91 20 6603 5900
E-mail: srbco@srb.in
Firm Registration No: 324982E/E300003

Valuer

Haribhakti & Co. LLP

5B, "A" Block
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T. Nagar, Chennai 600 017
Tel: +91 44 2815 4192
Fax: +91 44 4213 2024
E-mail: sundararaman.s@haribhakti.co.in
ICAI Firm Registration No.: 103523W
Contact Person: S. Sundararaman

Technical Consultant

Tractebel Engineering Pvt. Ltd.

Intec House
37, Institutional Area, Sector 44
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Tel: +91 124 469 85 00
Fax: +91 124 469 85 85
E-mail: sadasib.mohapatra@tractebel.engie.com
Contact Person: Sadasib Mohapatra

Global Co-ordinators and Book Running Lead Managers

Edelweiss Financial Services Limited

14th Floor, Edelweiss House
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Kalina,
Mumbai 400 098
Tel: +91 22 4009 4400
Fax: +91 22 4086 3610
E-mail: indigrid.qip@edelweissfin.com
Website: www.edelweissfin.com
Investor Grievance E-mail:
customerservice.mb@edelweissfin.com
Contact Person: Shubham Mehta/ Nishita John
SEBI Registration No.: INM0000010650

Axis Capital Limited

1st Floor, Axis House
C 2 Wadia International Centre
Pandurang Budhkar Marg, Worli
Mumbai - 400 025
Telephone: +91 22 4325 2183
Fax: +91 22 4325 3000
E-mail: indigrid.qip@axiscap.in
Website: www.axiscapital.co.in
Contact Person: Mayuri Arya
SEBI Registration No.: INM000012029

Citigroup Global Markets India Private Limited

1202, 12th Floor
First International Financial Center
G-Block, Bandra Kurla Complex

Bandra East
Mumbai 400 098
Tel: +91 22 6175 9999
Fax: +91 22 6175 9898
Website:
www.online.citibank.co.in/rhtm/citigroupglobalscreen1.htm
Investor Grievance E-mail:
investors.cgmb@citi.com
Contact Person: Ashish Guneta
SEBI Registration No.: INM000010718

Book Running Lead Manager

IndusInd Bank Limited

11th Floor
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Elphinstone Road, Mumbai 400 013
Tel: +91 22 7143 2206
Fax: +91 22 7143 2270
E-mail: priyankar.shetty@indusind.com
Website: www.indusind.com
Contact Person: Priyankar Shetty
SEBI Registration No.: INM000005031

Escrow Collection Banks

HDFC Bank Limited

Lodha - I Think Techno Campus, O-3 Level
Next to Kanjurmarg Railway Station
Kanjurmarg (East), Mumbai 400 042
Tel: +91 22 3075 2914, +91 22 3075 2928
Website: www.hdfcbank.com
Contact Persons: Vincent Dsouza, Siddharth Jadhav,
Prasanna Uchil, Neerav Desai
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siddharth.jadhav@hdfcbank.com
prasanna.uchil@hdfcbank.com
neerav.desai@hdfcbank.com

IndusInd Bank Limited

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Website: www.indusind.com
E-mail:
shinde.rupesh@indusind.com;
anand.ganu@indusind.com
Contact person: Rupesh Shinde/ Anand Ganu

Legal Counsel to IndiGrid and the Sponsor as to Indian law

Cyril Amarchand Mangaldas

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PARTIES TO INDIGRID

A. The Sponsor - Sterlite Power Grid Ventures Limited

History and Certain Corporate Matters

Sterlite Power Grid Ventures Limited (“SPGVL”) is the Sponsor of IndiGrid. The Sponsor was incorporated in India under the Companies Act, 2013 with corporate identity number U33120PN2014PLC172393. The Sponsor was originally incorporated on June 3, 2014 at Ahmedabad. The Sponsor’s registered office is situated at 4th Floor, Godrej Millennium, 9 Koregaon Road, Pune, Maharashtra 411 001, and its corporate office is situated at F-1, The Mira Corporate Suites 1 & 2, Ishwar Nagar, Mathura Road, New Delhi 110 065. For further details, please see the section entitled “*General Information*” on page 92.

STL, the erstwhile promoter of SPGVL, incorporated in the year 2000, entered into the business of power transmission by bidding for its first project, ENICL, and ENICL was awarded by Power Finance Corporation Limited in 2010. STL was operating with the objective to plan, promote and develop an integrated and efficient power transmission system network in all aspects including planning, investigation, research, designing, engineering, construction, operation and maintenance of transmission lines and sub-stations in accordance with the policies and guidelines laid down by the Central Government from time to time. After the accumulation of number of projects in the group and in order to restructure the transmission business of STL, the Sponsor was incorporated in June, 2014. All the entities won through the bidding process were transferred to the relevant subsidiaries of the Sponsor with an objective to set up and develop separate, systematic, efficient, economical, and organised lines of business of STL to solely operate in development of power transmission network in the different parts of India.

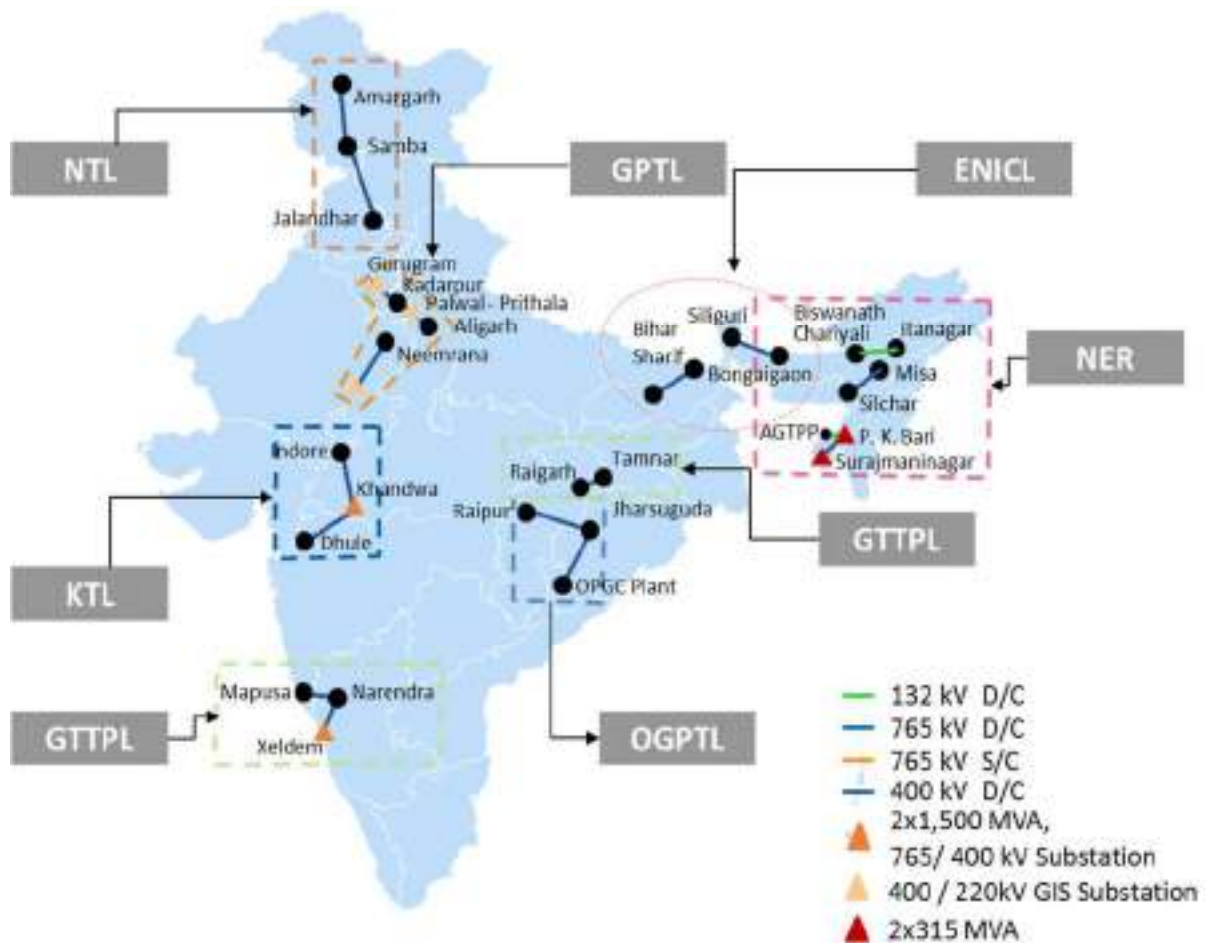
On May 18, 2015, the board of directors of STL and SPTL approved a scheme of arrangement between STL, SPTL and their respective shareholders and creditors (“**Scheme**”), which was approved by the High Court of Bombay through its order dated April 22, 2016. In accordance with the Scheme, the power products and transmission grid businesses of STL were demerged into SPTL, with effect from May 23, 2016. Accordingly, SPTL holds approximately 99.99% of the issued and paid-up equity share capital of SPGVL on a fully diluted basis.

On May 30, 2018, the board of directors of SPGVL and SPTL approved a scheme of amalgamation between SPGVL, SPTL and their respective shareholders (the “**Proposed Scheme**”), which has been filed before the Mumbai bench of the National Company Law Tribunal on July 17, 2018 and admitted by the NCLT on September 12, 2018. Pursuant to the Proposed Scheme, SPGVL and SPTL would be amalgamated into a single entity. This scheme of arrangement is currently pending.

Background of the Sponsor

Our Sponsor is one of the leading independent power transmission companies operating in the private sector. Our Sponsor has developed 12 inter-state power transmission projects with a total network of 38 power transmission lines. Some of these projects have been fully commissioned, including certain projects transferred to us, while others are at different stages of development. Our Sponsor generated consolidated total income of ₹ 8,864.67 million in Fiscal 2018 and had total consolidated assets of ₹ 69,749.54 million as at March 31, 2018.

The following diagrams illustrate the Sponsor’s operational and under-construction projects and their locations within India:



- *Operational: ENICL, NTL, OGPTL*
- *Under construction: KTL, GPTL, NER, GTTPL*

The Sponsor also deploys thermo-vision scanning, puncture insulator detector and corona measurement devices for preventive maintenance and follows prudent maintenance practices, which ensures improved business performance, reduced costs and also increases revenues generated by the InvIT Assets by maintaining high transmission availability. Maintenance of high availability rates entitles projects to receive an incentive payment under the applicable TSA and tariff regulations.

In accordance with the eligibility criteria specified under the InvIT Regulations, the consolidated net worth (i.e. the total of share capital and consolidated reserves and surplus) of the Sponsor as on March 31, 2018 was ₹ 7.85 billion. The Sponsor has experience of at least five years through ENICL, an Associate of the Sponsor, and the Sponsor has been a developer of power transmission assets with at least two projects of the Sponsor having been completed.

Further, neither the Sponsor nor any of the promoters or directors of the Sponsor: (i) are debarred from accessing the securities market by SEBI; (ii) are promoters, directors or persons in control of any other company or a sponsor, investment manager or trustee of any other infrastructure investment trust or an infrastructure investment trust which is debarred from accessing the capital market under any order or direction made by SEBI; or (iii) are in the list of wilful defaulters published by the RBI.

Board of Directors of the Sponsor

The board of directors of the Sponsor is entrusted with the overall management of the Sponsor. Please see below the details in relation to the board of directors of the Sponsor:

Sr. No.	Name	DIN
1.	Pravin Agarwal	00022096
2.	Pratik Agarwal	03040062
3.	A R Narayanswamy	00818169
4.	Avaantika Kakkar	06966972
5.	Ved Mani Tiwari	06652919

Brief Biography of the Directors of the Sponsor

Please see below a brief biography of the directors of the Sponsor:

1. Pravin Agarwal

Pravin Agarwal is a Non-Executive Director of the Sponsor. He has been associated with the Sterlite group since its inception and has over 31 years of experience in general management and commercial affairs in the infrastructure industry. He is also a director in Twin Star Technologies Limited and Twin Star Display Technologies Limited.

2. Pratik Agarwal

Pratik Agarwal is a Non-Executive Director of the Sponsor. He holds a master's degree in business administration from London Business School and a bachelor's degree from Wharton Business School, University of Pennsylvania. He has also been the managing director and chief executive officer of SPTL since June 2016. He is also the vice-chairman of SPGVL. Pratik Agarwal has over 11 years of experience in building core infrastructure businesses in ports, power transmission and broadband sector in India. He has been instrumental in transforming the way infrastructure projects – especially power transmission are built by deploying global technologies like LiDAR survey, heli-stringing and helicrane construction. Pratik Agarwal was also the Chairman of the Transmission Task Force constituted by FICCI in 2016.

3. A. R. Narayanaswamy

A. R. Narayanaswamy is an Independent Director of the Sponsor. He is a chartered accountant and management consultant. He serves as a director on the board of various companies forming a part of the Sterlite group. He is also a director in Hindustan Zinc Limited, Bharat Aluminium Co Limited, Vizag General Cargo Berth Limited and IBIS Systems and Solution Private Limited.

4. Avaantika Kakkar

Avaantika Kakkar is an Independent Director of the Sterlite Power Grid Ventures Limited. She has obtained her bachelor's degree in law from Indian Law Society's Law College. Avaantika has worked across sectors including infrastructure, pharma, auto & auto-parts, financial services, chemicals, media, technology, distribution, agriculture – commodities, telecommunication, petroleum & natural gas. She is a regular speaker at domestic and international seminars, training institutes, and law schools. Avaantika is a ranked lawyer in Chambers & Partners, was recognized as GCR's Top 100 women in Antitrust, 2016 and is a Leading Lawyer (Asia Law). She was recognized by the Economic Times as a future business leader for its "40 under Forty" feature, 2018. Avaantika is also a published novelist. At present, she is a partner (Head - Competition) at Cyril Amarchand Mangaldas.

5. Ved Mani Tiwari

Ved Mani Tiwari is a Non- Executive Director on the Board of our Sponsor. He holds a master's degree in management for senior executives from Indian School of Business, Hyderabad and a bachelor's degree in electrical engineering from Madan Mohan Malaviya Engineering College, Gorakhpur, University of Gorakhpur. He has also completed executive programs from The Kellogg School of Management and Wharton Business School, University of Pennsylvania. He has 30 years of experience working with the Central Public Sector Enterprises (CPSEs), Government of India as well as the private sector in general management, policy making,

program management and large scale project execution. He has also served as a director in the Ministry of Railways, where he was responsible for financing, designing, engineering and procurement of infrastructure projects. He has previously held key positions such as managing director of SunEdison India and director on the boards of Kochi Metro Rail Limited, Chennai Metro Rail Limited and Maharashtra Metro Rail Corporation Limited.

Unitholding of the Sponsor

For details of the Unitholding of the Sponsor, please see the sections entitled “*Information concerning the Units– Unit holding of IndiGrid as at March 31, 2019*” and “*Information concerning the Units – Unitholders holding more than 5% of the Units of IndiGrid as at March 31, 2019*” on pages 195 and 196, respectively.

B. The Trustee – Axis Trustee Services Limited

History and Certain Corporate Matters

Axis Trustee Services Limited is the Trustee in respect of IndiGrid. The Trustee is a registered intermediary with SEBI under the Securities and Exchange Board of India (Debtenture Trustees) Regulations, 1993, as a debtenture trustee having registration number IND000000494 and is valid until suspended. The Trustee’s registered office and principal place of business is situated at Axis House, Bombay Dyeing Mills Compound, Pandurang Budhkar Marg, Worli, Mumbai 400 025. The Trustee is a wholly-owned subsidiary of Axis Bank Limited.

Background of the Trustee

The Trustee’s services are aimed at catering to the individual needs of the client and enhancing client satisfaction. As Trustee, it ensures compliance with all statutory requirements and believes in the highest ethical standards and best practices in corporate governance. It aims to provide the best services in the industry with its well trained and professionally qualified staff with a sound legal acumen. The Trustee is involved in varied facets of debtenture and bond trusteeships, including, advisory functions and management functions. The Trustee also acts as a security trustee and is involved in providing services in relation to security creation, compliance and holding security on behalf of lenders.

The Trustee is also involved in providing services as (i) a facility agent for complex structured transactions with advice on suitability of the transaction on operational aspects; (ii) an escrow agent; (iii) a trustee to alternative investment funds; (iv) custodian of documents as a safekeeper; (v) monitoring agency; and (vi) a family office.

The Trustee confirms that it has and undertakes to ensure that it will at all times, maintain adequate infrastructure personnel and resources to perform its functions, duties and responsibilities with respect to IndiGrid, in accordance with the InvIT Regulations, the Trust Deed and other applicable law.

The Trustee is not an Associate of the Sponsor or the Investment Manager. Further, neither the Trustee nor any of the promoters or directors of the Trustee (i) are debarred from accessing the securities market by SEBI; (ii) is a promoters, directors or persons in control of any other company or a sponsor, investment manager or trustee of any other infrastructure investment trust or an infrastructure investment trust which is debarred from accessing the capital market under any order or direction made by SEBI; or (iii) are in the list of wilful defaulters published by the RBI.

Board of Directors of the Trustee

The Board of Directors of the Trustee is entrusted with the responsibility for the overall management of the Trustee. Please see below the details in relation of the board of directors of the Trustee:

Sr. No.	Name	DIN
1.	Ram Bharoseylal Vaish	00150310
2.	Rajesh Kumar Dahiya	07508488
3.	Sanjay Sinha	08253225
4.	Ganesh Sankaran	07580955

Key Terms of the Trust Deed

The Trustee has entered into the Trust Deed which provides for the powers, duties, rights, liabilities of the Trustee, which are in accordance with the Indian Trusts Act, 1882 and the InvIT Regulations. Further, the Trust deed also includes certain provisions in relation to the Unitholders, which, among others, include the rights and liabilities of Unitholders. The key terms of the Trust Deed are provided below:

- *Powers of the Trustee*

The Trustee has been provided with various powers under the Trust Deed in accordance with the Indian Trusts Act, 1882 and the InvIT Regulations, including but not limited to:

- (i) The Trustee shall, in relation to IndiGrid, have all powers of a person competent to contract, acting as a legal and beneficial owner of such property.
- (ii) The Trustee shall have the power to determine, in accordance with the Investment Management Agreement and the investment objectives, distributions to Unitholders and other rights attached to the Units in compliance with the InvIT Regulations.
- (iii) The Trustee shall oversee voting of Unitholders.
- (iv) The Trustee shall have the power to do the following, which may be delegated to the Investment Manager: (a) cause the offering of Units through the offer documents; (b) issue and allot Units; (c) cause the offer documents to be provided to Bidders; (d) summon and conduct meetings of the Unitholders; and (e) approve transfer of Units.
- (v) The Trustee shall have the power to make such reserves out of the income or capital as the Trustee may deem proper.
- (vi) The Trustee shall invest and hold Portfolio Assets and shall be empowered to make investment decisions.
- (vii) The Trustee shall have the power to employ and pay at the expense of IndiGrid, any agent in any jurisdiction whether attorneys, solicitors, brokers, banks, trust companies or other agents.
- (viii) The Trustee shall, on behalf of IndiGrid, appoint an investment manager to manage IndiGrid and shall oversee the activities of the investment manager so appointed.
- (ix) The Trustee shall, on behalf of IndiGrid, appoint a project manager for the operation and management of IndiGrid and shall oversee the activities of the project manager so appointed.
- (x) The Trustee may appoint a custodian in order to provide custodian services.
- (xi) The Trustee shall have the power and duty to pay all such duties, fee or taxes (and any interest or penalty chargeable thereon) as well as to create any reserves for future potential tax liability out of IndiGrid or the income thereof, or to the extent of the amount invested in the Units by the Unitholders, as may be permitted under applicable law.
- (xii) The Trustee shall, subject to the advice of the Investment Manager, have the power to pay expenses of IndiGrid out of the funds held by IndiGrid.
- (xiii) The Trustee shall, in discharge of its duties, have the power to take the opinion of legal/tax counsel in any jurisdiction.
- (xiv) The Trustee may sell, rent or buy any property, or borrow property from or carry out any other transaction with the trustees of any other trust or the executors or administrators of any estate.
- (xv) The Trustee shall have the power to effect compromises, including by accepting property before the time at which it is transferable or payable or compromising, compounding, abandoning or otherwise settling any claim or thing whatsoever relating to IndiGrid or the Trust Deed.

- (xvi) The Trustee shall, subject to the advice of the Investment Manager, have the power to borrow funds including any subordinated equity or other fund from any person or authority (whether Government or otherwise, whether Indian or overseas).
- (xvii) Subject to the conditions laid down in any offer document or placement memorandum, and InvIT Regulations, the Trustee may, subject to any advice of the Investment Manager, retain any proceeds received by IndiGrid from any Portfolio Asset.
- (xviii) The Trustee shall cause the Depository to maintain the Depository Register.
- (xix) The Trustee shall advise the Investment Manager in relation to the appointment of Valuer, Auditors, registrar and transfer agent, merchant bankers, custodian, Credit Rating Agency and any other intermediary or service provide or agent.
- (xx) The Trustee may, make rules to give effect to, and carry out the investment objectives, which may be delegated to the Investment Manager, including, the (a) manner of maintaining of the records and particulars of the Unitholders; (b) norms of investment by IndiGrid in accordance with the Investment Objectives of IndiGrid and in accordance with the powers and authorities of the Trustee; (c) matters relating to entrustment / deposit or handing over of any securities or special purpose vehicles of IndiGrid to any one or more custodians and the procedure relating to the holding thereof by the custodian; (d) such other administrative, procedural or other matters relating to the administration or management of the affairs of IndiGrid and which matters are not by the very nature required to be included or provided for in the Trust Deed or by the management thereof and which matters are not inconsistent with the provisions thereof; (e) procedure for seeking the vote of the Unitholders either by calling a meeting or through postal ballot or otherwise; and (f) procedure for summoning and conducting meetings of Unitholders.
- (xxi) The Trustee shall review the reports required in terms of InvIT Regulations and applicable law and make relevant intimations to SEBI in this regard.
- (xxii) The Trustee shall have the power to open one or more bank accounts for the purposes of IndiGrid.
- (xxiii) The Trustee shall have the power to take up with SEBI or with the stock exchange(s) as applicable, any matter which has been approved in any meeting of Unitholders, if the matter requires such action.
- (xxiv) The Trustee shall also have the following powers and authorities:
 - (a) to institute, conduct, compromise, compound, or abandon any legal proceedings for or on behalf of or in the name of IndiGrid or the Trustee, and to defend, compound or otherwise deal with any such proceedings against IndiGrid or Trustee or its officers or concerning the affairs of IndiGrid, and also to compound and allow time for payment or satisfaction of any equity due and of any claims or demands by or against IndiGrid and observe and perform in relation to any decisions thereof;
 - (b) to make and give receipts, releases and other discharges for moneys payable to IndiGrid and for the claims and demands of IndiGrid;
 - (c) to enter into all such negotiations and contracts, and, execute and do all such acts, deeds and things for or on behalf of or in the name of IndiGrid as the Trustee may consider expedient for or in relation to any of the matters or otherwise for the purposes of IndiGrid;
 - (d) to sign, seal, execute, deliver and register according to law all deeds, documents, agreements, and assurances in respect of IndiGrid;
 - (e) to negotiate, sign, seal, execute and deliver documents in relation to IndiGrid, including but not limited to, any issue agreement, share purchase agreement, services agreement, deed of right of first offer, debenture subscription agreement, escrow agreement, underwriting agreement, loan documentation, draft offer document, offer document, final offer document or any other deed, agreement or document in connection with IndiGrid or the Units, including any amendments, supplements or modifications thereto; and

- (f) take into their custody and/or control all the capital, assets, property of IndiGrid and hold the same in trust for the Unitholders in accordance with the Trust Deed and InvIT Regulations.
- (xxv) Subject to Applicable law, the Trustee may at any time, buyback the Units from the Unitholders.
- (xxvi) The Trustee may, delegate to any committee or any other person, any powers set out above and the duties set out below, or as available to it under InvIT Regulations and applicable laws. Any action taken by such committee or persons in respect of IndiGrid shall be construed as an act done by the Trustee except in case of gross negligence or wilful misconduct or fraud on part of such person, in which case of gross negligence or wilful misconduct or fraud on part of such person, such persons shall indemnify IndiGrid and the Unitholders
- (xxvii) The Trustee has all such powers as it may be required to exercise under InvIT Regulations for the time being in force and do all such matters and things as may promote IndiGrid or as may be incidental to or consequential upon the discharge of its functions and the exercise and enforcement of all or any of the powers and rights under the Trust Deed.

- *Duties of the Trustee*

The Trustee shall perform its duties as required under the Trust Deed in accordance with the Indian Trusts Act, 1882 and the InvIT Regulations, including but not limited to:

- (i) The Trustee shall use best endeavours to carry on and conduct its business in a proper and efficient manner in the best interest of the Unitholders.
- (ii) The Trustee shall, on behalf of IndiGrid, enter into various agreements, including the Investment Management Agreement, Project Implementation and Management Agreement and other documents.
- (iii) The Trustee shall appoint an investment manager and project manager in terms of the InvIT Regulations and may delegate its responsibilities to the investment manager and project manager in writing.
- (iv) The Trustee shall ensure the investment manager performs its obligations in accordance with the InvIT Regulations, including compliance with the reporting and disclosure requirements, reviewing transactions and valuation reports, monitoring the functioning of IndiGrid, administrative responsibilities under the InvIT Regulations and other compliances prescribed under the InvIT Regulations and other applicable laws.
- (v) The Trustee shall oversee activities of the project manager in terms of InvIT Regulations and receive relevant records and information from the project manager.
- (vi) The Trustee shall provide SEBI and the stock exchange(s), where applicable, such information as may be sought by SEBI or by the stock exchange(s) pertaining to the activity of IndiGrid and comply with the intimation requirements under the InvIT Regulations.
- (vii) The Trustee shall at all times exercise due diligence in carrying out its duties and protecting the interests of the Unitholders.
- (viii) The Trustee shall ensure that subscription amount is kept in a separate bank account in name of IndiGrid and is only utilised for adjustment against allotment of Units or refund of money to the applicant till the time such Units are listed and the same will be utilised for objectives of the offering as will be mentioned in the offer document.
- (ix) The Trustee shall cause the books of accounts of IndiGrid to be in accordance with the Trust Deed and the InvIT Regulations.
- (x) The Trustee shall ensure that all acts, deeds and things are done for the attainment of the investment objective of IndiGrid and in compliance with InvIT Regulations and to secure the best interests of the Unitholders.

- (xi) The Trustee shall file such reports as may be required by SEBI or any other regulatory authority or as required under InvIT Regulations with regard to the activities carried on by IndiGrid.
- (xii) The Trustee shall periodically review the status of the Unitholders' complaints and their redressal undertaken by the Investment Manager.
- (xiii) The Trustee and its directors, officers, employees and agents shall at all times maintain the greatest amount of confidentiality as regards the activities and assets of IndiGrid and such other matter connected with them.
- (xiv) The assets and liabilities of IndiGrid shall at all times be segregated from the assets and liabilities of the Trustee and the assets and liabilities of other trusts managed by the Trustee.
- (xv) The Trustee shall ensure that the remuneration of the Valuer is not linked to or based on the value of the asset being valued.
- (xvi) The Trustee shall not invest in Units of IndiGrid.
- (xvii) The Trustee shall ensure that the activity of IndiGrid is being operated in accordance with the provisions of the Trust Deed, InvIT Regulations, other Applicable law and documents in relation to IndiGrid and in case of any discrepancy, it shall inform SEBI immediately in writing.
- (xviii) The Trustee shall maintain records in accordance with InvIT Regulations.

- *Rights of the Trustee*

The Trustee shall have the following rights:

- (i) The Trustee may, in the discharge of its duties, act upon any advice obtained in writing from any bankers, accountants, brokers, lawyers, professionals, consultants, or other experts acting as advisers to the Trustee.
- (ii) Subject to applicable law, no Unitholder shall be entitled to inspect or examine IndiGrid's premises or properties without the permission of the Trustee, who shall give such permission, if necessary, in consultation with the Investment Manager. Further, no Unitholder shall be entitled to require discovery of any information respecting any detail of IndiGrid's activities or any matter which may relate to the conduct of the business of IndiGrid and which information may, in the opinion of the Trustee and the Investment Manager adversely affect the interest of the Unitholder.
- (iii) The Trustee shall be entitled to reimburse itself and shall be entitled to charge IndiGrid, and shall be entitled to be indemnified and be kept indemnified from IndiGrid and from any distributions made by IndiGrid to the Unitholders, with the expenses, outgoings, taxes, levies, and liabilities (including indemnity obligations of IndiGrid, if any) as set out in the Trust Deed.

- *Liabilities of the Trustee*

The liabilities of the Trustee in terms of the Trust Deed are as follows:

- (i) The Trustee shall only be chargeable for such monies, stocks, funds and securities as the Trustee shall have actually received and shall not be liable or responsible for any banker, broker, custodian or other person in whose hands the same may be deposited or placed, nor for the deficiency or insufficiency in the value of any investments of IndiGrid nor otherwise for any involuntary loss.
- (ii) The Trustee shall not be under any liability on account of anything done or omitted to be done or suffered by the Trustee in good faith in accordance with, or in pursuance of any request or advice of the Investment Manager.
- (iii) The Trustee may accept as sufficient evidence for the value of any investment or for the cost price or sale price thereof or for any other fact within its competence, a certificate by a Valuer or a stockbroker or any other professional person appointed by the Investment Manager for the purpose.

- (iv) The Trustee shall not be under any obligation to institute, acknowledge the service of, appear in, prosecute or defend any action, suit, proceedings or claim in respect of the provisions hereof or in respect of the InvIT Assets or any part thereof or any corporate action which in its opinion would or might involve it in expense or liability unless the Investment Manager shall so request in writing and the Trustee is satisfied that the value of the investment is sufficient to provide adequate indemnity against costs, claims, damages, expenses or demands to which it may be put as Trustee as a result thereof.
 - (v) The Trustee shall not be liable in respect of any action taken or damage suffered by it on reliance upon any notice, resolution, direction, consent, certificate, affidavit, statement, certificate of stock, plan of reorganization or (without being limited in any way by the foregoing) other paper or document believed to be genuine and to have been passed, sealed or signed by appropriate authorities or entities.
 - (vi) The Trustee shall not be liable to the Unitholders for doing or failing to do any act or thing which by reason of any provision of any present or future law or regulation made pursuant thereto, or of any decree, order or judgment of any court, or by reason of any request announcement or similar action (whether of binding legal effect or not) which may be taken or made by any person or body acting with or purporting to exercise the authority of any government (which legally or otherwise) it shall be directed or requested to do or perform or to forbear from doing or performing.
 - (vii) The Trustee shall not be responsible to any Unitholder for the authenticity of any signature affixed to any document or be in any way liable for any forged or unauthorized signature on or for acting upon or giving effect to any such forged or unauthorized signature.
 - (viii) The Trustee shall not be prevented from acting as trustee of other trusts or alternate investment funds or venture capital funds or private equity funds or real estate investments trusts or InvITs or private trusts or customised fiduciary trusts separate and distinct from IndiGrid, and retaining for its own use and benefit all remuneration, profits and advantages which it may derive therefrom, as permitted under Applicable law.
 - (ix) The Trustee shall not be liable to the Unitholders or to any other party as a result of such compliance or in connection with such compliance in respect of providing any information regarding IndiGrid and/or the Sponsor and/or Unitholders, IndiGrid investments and income therefrom and provisions of these presents and complies with such request in good faith.
 - (x) The Trustee shall not incur any liability for any act or omission or (as the case may be) failing to do any act or thing which may result in a loss to a Unitholder (by reason of any depletion in the value of the InvIT Assets or otherwise), except in the event that such loss is a direct result of fraud, gross negligence or wilful default on the part of the Trustee or results from a breach by the Trustee of the Trust Deed, as determined by a court of competent jurisdiction.
 - (xi) If the Trustee engages any external advisors or experts (in accordance with the Trust Deed), to discharge its obligations under the Trust Deed, or undertakes any work which is not covered within the scope of work of the Trustee under the Trust Deed and such additional work is beyond the obligations of the Trustee under Applicable law, the Trustee shall be entitled to recover such costs, charges and expenses which the Trustee may incur in this regard, from the funds of IndiGrid.
 - (xii) It is hereby clarified that the liability of the Trustee shall be limited to the extent of the fee received by it, in all circumstances whatsoever except in case of any gross negligence or wilful misconduct or fraud on the part of the Trustee as settled by a court of competent jurisdiction.
- *Provisions relating to Unitholders*
 - (i) The aggregate liability of each Unitholder in IndiGrid shall be limited to making the capital contribution payable by it in respect of the Units subscribed by it.
 - (ii) Each Unit allotted to the Unitholders shall have one vote for any decisions requiring a vote of Unitholders.
 - (iii) In no event shall the Trustee or the Investment Manager be bound to make payment to any Unitholder, except out of the funds held by it for that purpose under the provisions of the Trust Deed.

- (iv) A Unitholder whose name and account details are entered in the depository register shall be the only person entitled to be recognised by the Trustee as having a right, title, interest in or to the Units registered in his name and the Trustee shall recognise such holder as an absolute owner and shall not be bound by any notice to the contrary and shall also not be bound to take notice of or to see to the execution of any trust, express or implied, save as expressly provided or as required by any court of competent jurisdiction to recognise any trust or equity or interest affecting the title of the Units.
- (v) The Unitholders shall not give any directions to the Trustee or the Investment Manager (whether in a meeting of Unitholders or otherwise) if it would require the Trustee or the Investment Manager to do or omit doing anything which may result in: (a) IndiGrid or the Trustee, in its capacity as the trustee of IndiGrid or the Investment Manager, in its capacity as the investment manager of IndiGrid ceasing to comply with applicable law; (b) interference with the exercise of any discretion expressly conferred on the Trustee by the Trust Deed or the Investment Manager by the Investment Management Agreement, or the determination of any matter which requires the agreement of the Trustee or the Investment Manager, provided that this shall not limit the right of the Unitholder to require the due administration of IndiGrid in accordance with the Trust Deed.
- (vi) The depository register shall (save in case of manifest error) be conclusive evidence of the number of Units held by each depositor and in the event of any discrepancy between the entries of the depository register and any statement issued by the depository, the entries in the depository register shall prevail unless the depositor proves to the satisfaction of the Trustee and the depository that the depository register is incorrect.
- (vii) The Unitholders shall have the right to call for certain matters to be subject to their consent, in accordance with the InvIT Regulations and applicable law.
- (viii) The Unitholders may, in accordance with the provisions of the documents of IndiGrid and applicable law, transfer any of the Units to an investor where such investor accepts all the rights and obligations of the transferor and the Trustee or the Investment Manager shall give effect to such transfer in accordance with applicable law.
- (ix) The Trustee shall and shall ensure that the Investment Manager obtains the consent of the Unitholders for the matters prescribed under the InvIT Regulations in accordance with the provisions of the InvIT Regulations.

Further, in accordance with the Trust Deed, in addition to the fee, distributions and expense reimbursements described in the Trust Deed, the InvIT Assets shall be utilized to indemnify and hold harmless the Trustee, the Sponsor and any of their respective officers, directors, shareholders, sponsors, partners, members, employees, advisors and agents (“**Indemnified Parties**”) from and against any claims, losses, costs, damages, liabilities and expenses, including legal fee (“**Losses**”) suffered or incurred by them by reason of their activities on behalf of IndiGrid or suffered or incurred by the Trustee in relation to any proceedings, unless such Losses resulted from fraud, gross negligence or willful misconduct of the Indemnified Parties as determined by a court of competent jurisdiction.

IndiGrid is subject to dissolution and termination in accordance with and subject to the InvIT Regulations and applicable law, in accordance with the conditions set forth in the Trust Deed.

C. The Investment Manager – Sterlite Investment Managers Limited

History and Certain Corporate Matters

Sterlite Investment Managers Limited is the Investment Manager for IndiGrid. The Investment Manager is a public company incorporated in India under the Companies Act, 1956, with corporate identity number U28113MH2010PLC308857. The Investment Manager was originally incorporated as MALCO Industries Limited on April 22, 2010 at Chennai. Subsequently, the name of the Investment Manager was changed to Sterlite Infraventures Limited and a new certificate of incorporation was issued on January 23, 2012. Further, the name of the Investment Manager was changed to Sterlite Investment Managers Limited and a new certificate of incorporation was issued by the Registrar of Companies, Chennai, on March 25, 2017. Subsequently, the Investment Manager’s registered office was changed from the State of Tamil Nadu to the State of Maharashtra, and a certificate of registration was issued by the Registrar of Companies, Maharashtra at Mumbai on May 3, 2018. The Investment Manager’s registered office is situated at Maker Maxity, 5 North Avenue, Level 5, Bandra

Kurla Complex, Bandra East, Mumbai 400 051 and its correspondence address is F-1, The Mira Corporate Suites 1 & 2, Ishwar Nagar, Mathura Road, New Delhi 110 065. The Investment Manager has experience in providing advisory services for bids.

Background of the Investment Manager

SIML has previously been involved in providing advisory services within the Sterlite group for bids, including in relation to power transmission projects across India, mega power plant projects and certain renewable energy projects. SIML has also been acting as the investment manager for IndiGrid since IndiGrid’s inception in accordance with the InvIT Regulations.

Additionally, SIML has made representations to various government agencies in relation to the bidding procedure. Such representations were in the form of general advisory and recommendations in relation to improving the existing bidding process implemented by governmental agencies in relation to infrastructure projects and the existing regulatory framework relating to certain infrastructure sectors, specifically aimed at improvement of private participation and investment in such infrastructure sectors.

The Investment Manager has not less than two employees, who have at least five years of experience each, in the field of fund management or advisory services or development in the infrastructure sector, and not less than one employee who has at least five years of experience in the relevant sub-sector in which IndiGrid proposes to invest, namely power transmission projects in India. Further, not less than half the directors of the Investment Manager are independent, and are not directors or members of the governing board of another infrastructure investment trust. The Investment Manager conducts operations pertaining to IndiGrid from F-1, The Mira Corporate Suites 1 & 2, Ishwar Nagar, Mathura Road, New Delhi 110 065. The net worth of the Investment Manager as on March 31, 2018 was ₹ 101.19 million.

The Investment Manager confirms that it has, and undertakes to ensure that it will at all times maintain, adequate infrastructure, personnel and resources to perform its functions, duties and responsibilities with respect to the management of IndiGrid, in accordance with the InvIT Regulations, the Investment Management Agreement and applicable law.

Neither the Investment Manager nor any of the promoters or directors of the Investment Manager (i) are debarred from accessing the securities market by SEBI; (ii) are promoters, directors or persons in control of any other company or a sponsor, investment manager or trustee of any other infrastructure investment trust or an infrastructure investment trust which is debarred from accessing the capital market under any order or direction made by SEBI; or (iii) are in the list of wilful defaulters published by the RBI.

Board of Directors of the Investment Manager

The board of directors of the Investment Manager is entrusted with the responsibility for the overall management of the Investment Manager. Please see below the details in relation of the board of directors of the Investment Manager:

Sr. No.	Name	DIN
1.	Shashikant H. Bhojani	00196767
2.	Rahul D. Asthana	00234247
3.	Tarun Kataria	00710096
4.	Kuldip Kaura	00006293
5.	Pratik Agarwal	03040062
6.	Harsh Shah	02496122

Brief Biography of the Directors of the Investment Manager

Please see below a brief biography of the directors of the Investment Manager:

1. ***Shashikant H. Bhojani***

Shashikant H. Bhojani was appointed as an Additional Independent Director on the board of the Investment Manager on April 27, 2017 and as an Independent Director on September 22, 2017. He was a former partner at Cyril Amarchand Mangaldas (including, erstwhile Amarchand & Mangaldas & Suresh A. Shroff & Co.) since 2001. He has previously worked with ICICI Limited (now, ICICI Bank Limited) for almost 28 years starting as a law officer and reaching the board of directors of ICICI Limited, as deputy managing director and legal adviser. He has been ranked as senior statesman and as notable practitioner in banking and finance sphere by Chambers Asia Pacific (2017), rated as a 'leading lawyer' for banking by IFLR1000 (2016), and senior statesman and eminent practitioner in banking and finance by Chambers Asia Pacific (2016). He has been a director on the boards of various companies. He has also been a member of various committees and working groups established by the Government of India and SEBI.

2. ***Rahul D Asthana***

Rahul D. Asthana, IAS (Retd.), was appointed as an Additional Independent Director on the board of the Investment Manager on December 26, 2017 and as an Independent Director on September 28, 2018. He holds a master's degree in business administration in international business from ICPE University of Ljubljana, Slovenia and a bachelor's degree in technology (aeronautical) from Indian Institute of Technology, Kanpur. Currently, he serves as a non-executive director at Mahindra Vehicles Manufacturing Limited, Aegis Logistics Limited, Vadivarhe Speciality Chemicals Limited and NBS International Limited. Previously, he served as the Metropolitan Commissioner of Mumbai, Metropolitan Region Development Authority between 2011 and 2013, where his primary role was planning for the Mumbai Metropolitan region and implementation of large infrastructure projects. He served as the chairman of Mumbai Port Trust from 2008 to 2011 where he was heading operations and management of Mumbai Port. He was responsible for the formulation and approvals for new projects of capacity addition and implementation of large projects on a public private partnership basis. He has also served as the Principal Secretary, Energy Department of Government of Maharashtra and was responsible for formulating the renewable energy policy for the State of Maharashtra. He has also served as the chief executive officer and general manager of Brihanmumbai Electric Supply and Transport dealing with distribution of power in South Mumbai and bus transport in Greater Mumbai.

3. ***Tarun Kataria***

Tarun Kataria was appointed as an Additional Independent Director on the board of the Investment Manager on October 29, 2016 and as an Independent Director on September 22, 2017. He holds a master's degree in business administration (finance) from the Wharton School of the University of Pennsylvania and is a chartered accountant. He is also an independent non-executive director (and member of the nomination and remuneration committee) of Mapletree Logistics Trust Ltd., an entity listed on the Singapore Stock Exchange. He is also an independent director (and chairman of the audit committee) of HSBC Bank (Singapore) Ltd., and an independent director in Global Moats Fund, Mauritius. In India, he is an independent non-executive director (and chair of the risk management committee) of Westlife Development Limited and Poddar Housing and Development Limited and a whole-time director of BD Kataria and Co (Maritime) Private Limited. He is also an independent director in Eagle Hospitality Trust Management Limited and Jubilant Pharma Limited. He has almost 31 years of investment banking and capital markets experience in New York, Hong Kong, Singapore and Mumbai. He was previously the chief executive officer (India) of Religare Capital Markets Limited. Prior to this he was the managing director and head of global banking and markets at HSBC India, vice chairman of HSBC Securities and Capital Markets Private Limited and non-executive director of HSBC InvestDirect Limited. Before moving to India, Tarun Kataria was based in Hong Kong as the managing director and head of institutional sales, Asia Pacific for HSBC Global Markets, where he was responsible for all client-facing activity in foreign exchange, derivatives, equities and fixed income.

4. ***Kuldip K. Kaura***

Kuldip K. Kaura was appointed as an Additional Non-Executive Director on the board of the Investment Manager on October 28, 2016 and as an Independent Director on September 22, 2017. He holds a bachelor's degree in mechanical engineering from Birla Institute of Technology & Science, Pilani. He is a business leader with rich experience in cement, natural resources and power generation and transmission sectors. Kuldip served as the chief executive officer and managing director of ACC Limited from August 13, 2010 to August 13, 2014. He has served as the director and chief executive officer of Vedanta from March 2005 to September 2008 and as the chief operating officer of Vedanta Resources plc and managing director of Sterlite Industries India Limited. He has also

served as the managing director of Hindustan Zinc Limited from April 2002 to March 2004. Before joining the Vedanta group, he was the managing director and country manager of ABB India Limited. He has served as a member of the National Council of Confederation of Indian Industries and is an office bearer of other such professional bodies. He is currently a director of Modern Food Enterprises Private Limited and a partner in Thinkpost Advisory LLP.

5. ***Pratik Agarwal***

Pratik Agarwal was appointed as an Executive Director of the Investment Manager on July 19, 2011 and was re-designated as a Non-Executive Director on July 31, 2018. For further details of Pratik Agarwal's qualifications and experience, please see the section entitled "*Parties to IndiGrid – The Sponsor – Sterlite Power Grid Ventures Limited*" on page 97.

6. ***Harsh Shah***

Harsh Shah was appointed as an Additional Executive Director on the Board of the Investment Manager on January 15, 2018. His appointment was regularized and he was appointed as the Chief Executive Officer and Whole-time Director with effect from August 1, 2018. He holds a master's degree in business administration from National University of Singapore and a bachelor's degree in electrical engineering from Nirma Institute of Technology, Gujarat University. He has extensive experience in infrastructure sector across bidding, financing, operations, mergers and acquisitions and regulatory policy. He was instrumental in setting up IndiGrid, India's first infrastructure investment trust in the power transmission sector. He is also a member of the SEBI Advisory Committee for InvITs and REITs. Previously, he served as the Chief Financial Officer of SPTL. Prior to joining Sterlite, he has worked with Larsen & Toubro Limited, L&T Infrastructure Finance Company Limited and Procter & Gamble International Operations Pte. Limited.

Brief profiles of the Key Personnel of the Investment Manager

In addition to Harsh Shah, please see below the details of the other key personnel of the Investment Manager.

1. ***Divya Bedi Verma***

Divya Bedi Verma was appointed as the Head of Finance and Compliance of the Investment Manager on April 1, 2018. She holds a bachelor's degree in commerce from Delhi University and is a qualified chartered accountant. She has completed the R12.x Oracle General Ledger Management Fundamentals Ed 1 LVC, R12.x Oracle Order Management Fundamentals Ed 1 LVC, R12.x Oracle E-Business Suite Essentials for Implementers Ed 1 LVC, 11i Oracle Order Management Fundamentals Ed 2 and 11i Oracle Receivables Fundamentals Ed 3 courses from Oracle University. She has over 18 years of experience in the field of managing finance operations, reporting, planning and compliances system change. She has worked in a global environment across the manufacturing, publishing and infrastructure industries. She has previously worked with Imaje India Private Limited, Elsevier and ATS Infrastructure Limited. She has received the CFO Next 100 award for exceptional contribution to the world of finance in December 2017.

2. ***Meghana Pandit***

Meghana Pandit was appointed as Head - Capital Raising of the Investment Manager on October 30, 2018. She holds a bachelor's degree in commerce and a master's degree in management studies from the University of Mumbai and a post graduate diploma in financial analysis from the Institute of Chartered Financial Analysts of India. She has over 12 years of experience in investment banking, covering the infrastructure sector across private equity transactions, mergers and acquisitions, initial public offerings, qualified institutional placements and infrastructure investment trusts, in sub-sectors such as roads, airports, renewable power, thermal power, ports and real estate. She has previously worked in Essar Steel Limited, Deloitte Financial Advisory Services India Private Limited and IDFC Bank.

3. ***Ashish Gupta***

Ashish Gupta is the Head – Equity Capital Markets of the Investment Manager. He has been associated with Sterlite Group since May 27, 2015. He holds a bachelor's degree in manufacturing processes and automation

engineering from the Netaji Subhas Institute of Technology, University of Delhi and has completed his post graduate diploma in management from Indian Institute of Management, Calcutta. He has cleared all three levels of CFA from CFA Institute, USA. He has eight years of experience in private equity, mergers and acquisitions, corporate strategy, business planning and investment research. He has previously worked with Welspun Energy Limited, Gaja Advisors Private Limited and Evalueserve.com.

4. *Swapnil Patil*

Swapnil Patil was appointed the company secretary of the Investment Manager on April 23, 2017. He has been associated with Sterlite Group since January 2010. He holds a bachelor's degree in commerce and master's degree in law from University of Pune. He is also an associate member of the Institute of Company Secretaries of India. He has previously worked with Tata Motors Limited. He has eight years of experience in corporate secretarial function. His focus area of operations has been statutory compliances, mergers and acquisitions, corporate restructuring, governance, corporate codes and policies, compliance management, fund raising, regulatory liaising, investor relations, litigation and all aspects of secretarial function.

5. *Ayush Goyal*

Ayush Goyal was appointed as the Manager - Finance of the Investment Manager on August 1, 2017. He has over eight years of experience in mergers and acquisitions, fund raising, transaction advisory and information technology across infrastructure, real estate and telecom sectors. He holds a bachelor's degree in Computer Science & Engineering from Maulana Azad National Institute of Technology, Bhopal and masters' degree in Business Administration (International Business) from Indian Institute of Foreign Trade, Delhi. He has previously worked with Ernst & Young LLP, HSBC Electronic Data Processing India Private Limited, Tata Consultancy Services Limited and Computer Science Corporation India Private Limited.

6. *Satish Talmale*

Satish Talmale was appointed as Chief Asset Officer of the Investment Manager on January 1, 2019. He has over 20 years of experience in general profit and loss management, business transformation, portfolio risk management, services operations, project management, sales and commercial operations and hands-on operation & maintenance services. He holds a bachelor's degree in mechanical engineering from University of Amravati and has completed the executive program in business management from Indian Institute of Management, Calcutta. He has previously worked with Ingersoll- Rand (India) Limited, GE India Industrial Private Limited, and Larsen & Toubro Limited.

Key Terms of the Investment Management Agreement

The Investment Manager has entered into the Investment Management Agreement, in terms of the InvIT Regulations. The Investment Management Agreement provides for powers, duties, rights and liabilities of the Investment Manager, in accordance with the InvIT Regulations, the key terms of which, are set out below:

A. *Powers of the Investment Manager*

The Investment Manager has been provided with various powers under the Investment Management Agreement in accordance with the InvIT Regulations, including but not limited to:

- (i) The Investment Manager shall take all decisions in relation to the management and administration of IndiGrid's assets and the investments of IndiGrid as may be incidental or necessary for the advancement or fulfilment of the Investment Objectives of IndiGrid in accordance with the InvIT Regulations, including in relation to further investments or divestments, and in this regard is empowered to:
 - (a) acquire, hold, manage, trade and dispose of shares, stocks, convertibles, debentures, bonds and other equity or equity-related securities and other debt or mezzanine securities of all kinds issued by any special purpose vehicles, infrastructure projects in India, whether in physical or dematerialised form, including power to hypothecate, pledge or create encumbrances of any kind on such securities held by IndiGrid in such special purpose vehicles, or infrastructure projects to be used as collateral security for any borrowings by IndiGrid;
 - (b) keep the capital and monies of IndiGrid in deposit with banks or other institutions whatsoever;

- (c) accept contributions;
 - (d) collect and receive the profit, interest, repayment of principal of debt or debt like or equity or equity like mezzanine securities, dividend, return of capital of any type by the special purpose vehicles, or infrastructure projects and income of IndiGrid as and when the same may become due and receivable;
 - (e) invest in securities or in units of mutual funds in accordance with the InvIT Regulations;
 - (f) invest in money market instruments including government securities, treasury bills, certificates of deposit and commercial paper in accordance with Applicable Law;
 - (g) to give, provide and agree to provide to any Portfolio Asset's financial assistance in the form of investment in share capital of any class including ordinary, preference, participating, non-participating, voting, non-voting or other class, and in the form of investment in securities convertible into share capital; and
 - (h) to invest, acquire, purchase, hold, divest, sale, hypothecate, pledge or otherwise transfer land and building and immovable property of any kind including any rights and interest therein.
- (ii) The Investment Manager along with the Trustee shall, within a reasonable time from the date of execution hereof, appoint a project manager for IndiGrid, by execution of the Project Implementation and Management Agreement.
 - (iii) The Investment Manager shall oversee activities of the Project Manager in terms of the InvIT Regulations and Applicable Law.
 - (iv) The Trustee hereby authorizes the Investment Manager to do all such other acts, deeds and things as may be incidental or necessary for the advancement or fulfillment of the Investment Objectives of IndiGrid, as set out in the offer documents.
 - (v) The Investment Manager shall have the power to issue and allot Units. The Investment Manager shall have the power to accept subscriptions to Units of IndiGrid and issue transfer and allot Units to Unitholders or such other persons and undertake all related activities.
 - (vi) The Investment Manager shall cause the depository to maintain a register of Unitholders if required.
 - (vii) The Investment Manager shall make such reserves out of the income or capital as it may deem proper and any directions of the Trustee in this behalf whether made in writing or implied from their acts shall, so far as the law may permit, be conclusive and binding. Any distribution made from such reserves shall be in accordance with the InvIT Regulations.
 - (viii) The Investment Manager may cause IndiGrid to borrow, for the purpose of IndiGrid and IndiGrid's assets and subject to approval of the Unitholders in accordance with the InvIT Regulations.
 - (ix) The Investment Manager shall have the power to exercise all rights of IndiGrid in IndiGrid's Assets, including voting rights, right to appoint directors, whether pursuant to securities held by it, or otherwise, in such manner as it deems to be in the best interest of IndiGrid, and in accordance with the InvIT Regulations and Applicable Law.
 - (x) The Investment Manager may use the services of external advisors and rely on the information provided in the due diligence process of assessing investment proposals as it deems necessary in its sole discretion.
 - (xi) The Investment Manager shall have the power to employ and pay at the expense of IndiGrid, any agent in any jurisdiction whether attorneys, solicitors, brokers, banks, trust companies or other agents, without being responsible for the default of any agent if employed in good faith to transact any business.
 - (xii) The Investment Manager may appoint any custodian in order to provide custodian services, and may permit any property comprised in IndiGrid to be and remain deposited with a custodian or with any person or persons in India or in any other jurisdiction.

- (xiii) The Investment Manager, in consultation with the trustee, shall appoint valuers, auditor, registrar and transfer agent, merchant banker, custodian, credit rating agency or any other intermediary or service provide or agent as may be applicable with respect to the activities pertaining to IndiGrid as per the provisions of the InvIT Regulations and Applicable Law.
- (xiv) In the event of any capital gains tax, income tax, stamp duty or other duties, fee or taxes (and any interest or penalty chargeable thereon) whatsoever becoming payable in any jurisdiction in respect of IndiGrid or any part thereof or in respect of documents issued or executed in pursuance of the Deed in any circumstances whatsoever, the Investment Manager shall have the power and duty to pay all such duties, fee or taxes (and any interest or penalty chargeable thereon) as well as to create any reserves for future potential tax liability (and any such interest or penalty) out of IndiGrid's income (and any such interest or penalty).
- (xv) The Investment Manager shall have the power to pay InvIT Expenses out of the funds of IndiGrid, or from any or all of the Portfolio Assets, in such proportion, as may be determined from time to time.
- (xvi) The Investment Manager shall have the power to take the opinion of legal / tax counsel in any jurisdiction concerning any difference arising under the Investment Management Agreement or any matter in any way relating to the Investment Management Agreement or to its duties in connection with the Investment Management Agreement.
- (xvii) The Investment Manager shall have the power to: (a) accept any property before the time at which it is transferable or payable; (b) pay or allow any equity or claim on any evidence that it thinks sufficient; (c) accept any composition or any security movable or immovable for any equity or other property; (d) allow any time of payment of any equity; and (e) compromise, compound, abandon, submit to arbitration or otherwise settle any equity account, claim or thing whatsoever relating to IndiGrid or the Investment Management Agreement.
- (xviii) The Investment Manager may retain the invested capital portion of any proceeds received by IndiGrid from any special purpose vehicles.
- (xix) The Investment Manager may, make rules to give effect to, and carry out the Investment Objectives, subject to Applicable Law. In particular, and without prejudice to the generality of such power, the Investment Manager may provide for all or any of the following matters, namely: (a) manner of maintaining of the records and particulars of Unitholders; (b) norms of investment by IndiGrid in accordance with the investment objectives of IndiGrid and in accordance with the powers and authorities of the Trustee as set out in the Deed; (c) matters relating to entrustment / deposit or handing over of any securities or special purpose vehicles of IndiGrid to any one or more custodians and the procedure relating to the holding thereof by the custodian; (d) such other administrative, procedural or other matters relating to the administration or management of the affairs of IndiGrid thereof and which matters are not by the very nature required to be included or provided for in the Deed or by the management thereof and which matters are not in consistent with the provisions thereof; (e) procedure for seeking the vote of the Unitholders either by calling a meeting or through postal ballot or otherwise; and (f) procedure for summoning and conducting of meetings of Unitholders.
- (xx) Subject to applicable law, no Unitholder shall be entitled to inspect or examine IndiGrid's premises or properties without the prior permission of the Investment Manager. Further, no Unitholder shall be entitled to require discovery of any information with respect to any detail of IndiGrid's activities or any matter which may be related to the conduct of the business of IndiGrid and which information may, in the opinion of the Investment Manager adversely affect the interest of other Unitholders.
- (xxi) The Investment Manager may buyback the Units from the Unitholders at the end of the Term of IndiGrid or in any other manner in accordance with applicable law, if so directed by the Trustee.
- (xxii) The Investment Manager shall also have the following powers and authorities:
 - (a) to institute, conduct, compromise, compound, or abandon any legal proceedings for or on behalf of or in the name of IndiGrid, and to defend, compound or otherwise deal with any such proceedings against IndiGrid or the Investment Manager or its officers or concerning the affairs of IndiGrid, and

also to compound and allow time for payment or satisfaction of any equity due and of any claims or demands by or against IndiGrid and to refer any differences to arbitration and observe and perform any awards thereof;

- (b) to make and give receipts, releases and other discharges for moneys payable to IndiGrid and for the claims and demands of IndiGrid;
- (c) to enter into all such negotiations and contracts, and, execute and do all such acts, deeds and things for or on behalf of or in the name of IndiGrid as the Investment Manager may consider expedient for or in relation to any of the matters or otherwise for the purposes of IndiGrid;
- (d) to ascertain, appropriate, declare and distribute or reinvest the surplus generally or under IndiGrid, to determine and allocate income, profits and gains and expenses in respect of IndiGrid to and amongst of the Unitholders, to carry forward, reinvest or otherwise deal with any surplus and to transfer such sums as the Investment Manager may, deem fit to one or more reserve funds which may be established by the Investment Manager;
- (e) to open one or more bank accounts for the purposes of IndiGrid, to deposit and withdraw money and fully operate the same;
- (f) to sign, seal, execute, deliver and register according to law all deeds, documents, and assurances in respect of IndiGrid;
- (g) pay out of the income of IndiGrid after deducting all expenses, the income and other distributions in accordance with the InvIT Regulations;
- (h) take into their custody and/or control all the capital, assets, property of IndiGrid and hold the same in trust for the Unitholders in accordance with the Deed and the InvIT Regulations;
- (i) generally to exercise all such powers as it may be required to exercise under the InvIT Regulations for the time being in force and do all such matters and things as may promote the investment objectives of IndiGrid or as may be incidental to or consequential upon the discharge of its functions and the exercise and enforcement of all or any of the powers and rights under the Investment Management Agreement and the InvIT Regulations.

B. *Duties of the Investment Manager*

The Investment Manager shall perform its duties as required under the Investment Management Agreement in accordance with the InvIT Regulations, including but not limited to:

- (i) The Investment Manager shall coordinate with the Trustee, as may be necessary, with respect to the operations of IndiGrid.
- (ii) The Investment Manager shall ensure that the valuation of IndiGrid's assets is done by the valuer(s) in accordance with Regulation 21 of the InvIT Regulations.
- (iii) The Investment Manager shall arrange for adequate insurance coverage for IndiGrid's Assets in accordance with Regulation 10(7) of the InvIT Regulations.
- (iv) The Investment Manager shall maintain proper books of accounts, documents and records with respect to IndiGrid, in the manner set out in the Deed, to give a true, fair and accurate account of the investments, expenses, earnings, profits etc. of IndiGrid. The Investment Manager shall ensure that audit of the accounts of IndiGrid by the auditors is undertaken in accordance with the InvIT Regulations and such report is submitted to the designated stock exchange within the time stipulated by the designated stock exchange, if any, and in accordance with the InvIT Regulations.
- (v) The Investment Manager shall declare distributions to Unitholders in accordance with Regulation 18 of the InvIT Regulations.

- (vi) The Investment Manager shall convene meetings of the Unitholders in accordance with Regulation 22 of the InvIT Regulations and maintain records pertaining to the meetings in accordance with Regulation 26 of the InvIT Regulations.
- (vii) The Investment Manager shall intimate the Trustee prior to any Change in Control of the Investment Manager to enable the Trustee to seek prior approval from the Unitholders and SEBI in this regard and perform all other actions as prescribed under the Investment Management Agreement and the InvIT Regulations and other applicable laws.
- (viii) The Investment Manager will monitor IndiGrid, including monitoring current and projected financial position of IndiGrid and IndiGrid's Assets including the special purpose vehicles. The Investment Manager shall place before its board of directors, a report on the activity and performance of IndiGrid in accordance with the InvIT Regulations. The Investment Manager shall designate an employee from the team or director as the compliance officer for monitoring of compliance with the InvIT Regulations and any circulars or guidelines issued thereunder and intimating SEBI in case of non-compliance.
- (ix) The Investment Manager shall maintain records pertaining to the activity of IndiGrid in terms of Regulation 26 of the InvIT Regulations.
- (x) The Investment Manager shall manage IndiGrid in accordance with the InvIT Regulations and the investment objectives of IndiGrid, and shall ensure that the investments made by IndiGrid are in accordance with the investment conditions enumerated in Regulation 18 of the InvIT Regulations and in accordance with the investment objectives.
- (xi) The Investment Manager shall review the transactions carried out between the Project Manager and its Associates and where the Project Manager has advised that there may be a conflict of interest, shall obtain confirmation from a practising chartered accountant that such transaction is on an arm's length basis.
- (xii) The Investment Manager shall ensure adequate and timely redressal of all Unitholders' grievances pertaining to the activities of IndiGrid.
- (xiii) The Investment Manager shall submit to the Trustee: (a) quarterly reports on the activities of IndiGrid including receipts for all funds received by it and for all payments made, status of compliance with the InvIT Regulations, specifically Regulations 18, 19 and 20 of the InvIT Regulations, performance report, status of development of under-construction projects, within the time period specified under the InvIT Regulations; (b) valuation reports as required under the InvIT Regulations within the time period specified under the InvIT Regulations; (c) proposal to acquire or sell or develop or bid for any asset or project or expand existing completed assets or projects along with rationale for the same; (d) details of any action which requires approval from the Unitholders as may be stipulated under the InvIT Regulations; (e) details of transactions it enters into with its Associates; (f) details of any other material fact including change in its directors, change in its shareholding, change in control of the Investment Manager, any legal proceedings that may have a significant bearing on the activity of IndiGrid, within seven working days of such action; and (g) such information, document and records as pertaining to the activities of IndiGrid as may be reasonably necessary for the Trustee with respect to its responsibilities under the Deed or the InvIT Regulations. In the event of failure of the Investment Manager to submit information or reports as specified above in a timely manner and in terms of the InvIT Regulations, the Trustee shall intimate SEBI.
- (xiv) The Investment Manager shall be responsible for all activities pertaining to the issue and listing of the Units of IndiGrid in accordance with Applicable Law including: (a) filing of offer document with SEBI; (b) filing the draft and final offer document with SEBI and the stock exchanges within the prescribed time period; (c) dealing with all matters up to allotment of Units to the Unitholders; (d) obtaining in-principle approval from the designated stock exchange; and (e) dealing with all matters relating to the issue and listing of the Units of IndiGrid as specified under Chapter IV of the InvIT Regulations and any guidelines as may be issued by SEBI in this regard.
- (xv) The Investment Manager is also responsible to ensure that the disclosures made in any offer document or placement memorandum contain material, true, correct and adequate disclosures and are in accordance with the InvIT Regulations and Applicable Law.

- (xvi) In case of occurrence of any event specified in Regulations 17(1)(a) to 17(1)(g) of the InvIT Regulations, the Investment Manager shall apply for delisting of units of IndiGrid to SEBI and the designated stock exchange in accordance with the InvIT Regulations and applicable law.
- (xvii) The Investment Manager shall within the time period prescribed under the InvIT Regulations, submit an annual report to all the Unitholders electronically or provide physical copies and to the designated stock exchanges.
- (xviii) The Investment Manager shall, in accordance with the requirements of the InvIT Regulations and other Applicable Laws, including any requirements prescribed by SEBI or the stock exchanges from time to time and provide any information having bearing on the operation or performance of IndiGrid as well as price sensitive information and other information that is required in terms of the InvIT Regulations and applicable law.
- (xix) The Investment Manager shall provide to the Trustee such assistance as may be required by the Trustee in fulfilling its obligation towards IndiGrid under applicable law or as may be required by any regulatory authority with respect to IndiGrid.
- (xx) Without prejudice to any other provision of the Investment Management Agreement, the Investment Manager will also have the following duties and obligations:
 - (a) ensure that computation and declaration of net asset value of IndiGrid is based on the valuation done by the valuer in accordance with the InvIT Regulations;
 - (b) maintain regular interaction with the Trustee on performance of IndiGrid and providing the Trustee with any information in relation to the operations of IndiGrid as maybe required;
 - (c) conducting its affairs and the affairs of IndiGrid in such a manner that no Unitholder will have any personal liability (except to the extent of their Unitholding, where such Unit is partly paid) with respect to any liability or obligation of IndiGrid;
 - (d) maintaining relationships with the Unitholders of IndiGrid and keep them updated on investment activities of IndiGrid in accordance with the terms of the IndiGrid documents;
 - (e) collecting all dividends, fee, property and other payments due and receivable by IndiGrid declaring distribution to the Unitholders in the manner set out in the Trust Deed and in terms of the InvIT Regulations;
 - (f) to ensure that no commission or rebate or any other remuneration, arising out of transaction pertaining to IndiGrid is collected by the Investment Manager or its Associates, other than as specified in the offer document or any other document as may be specified by SEBI for the purpose of the issue of the units of IndiGrid;
 - (g) to ensure that IndiGrid's assets including the special purpose vehicles, have proper legal titles, to the extent applicable and that all the material contracts entered into on behalf of IndiGrid or IndiGrid's assets are legal, valid, binding and enforceable by and on behalf of IndiGrid;
 - (h) to ensure that the activities of the intermediaries or agents or service providers appointed by it are in accordance with the InvIT Regulations or any guidelines or circulars issued thereunder;
 - (i) to ensure that any possible conflict of interest involving its role as Investment Manager is reported to the Trustee;
 - (j) to ensure that disclosures or reporting to Unitholders, SEBI, the Trustee and the designated stock exchange(s) are in accordance with the InvIT Regulations and any other applicable law;
 - (k) provide SEBI, the designated stock exchanges and Trustee, where applicable, such information as may be sought by SEBI or by the designated stock exchanges or Trustee pertaining to the activity of IndiGrid;

- (l) to inform the Trustee in writing about any change in the representations and warranties provided by it under the Investment Management Agreement during the term of the Investment Management Agreement; and
- (m) taking any other actions reasonably incidental to any of the foregoing or necessary or convenient in order to fully effect or evidence any action or transaction contemplated under the Investment Management Agreement.

C. *Liabilities of the Investment Manager*

The liabilities of the Investment Manager in terms of the Investment Management Agreement are as follows:

- (i) The Investment Manager shall not be liable in respect of any action taken or damage suffered by it on reliance upon any notice, resolution, direction, consent, certificate, affidavit, statement, certificate of stock, plan of reorganization or (without being limited in any way by the foregoing) other paper or document believed to be genuine and to have been passed, sealed or signed by appropriate authorities or entities.
- (ii) The Investment Manager shall not be liable to the Unitholders for doing or failing to do any act or thing which by reason of any provision of any present or future law or regulation made pursuant thereto, or of any decree, order or judgment of any court, or by reason of any request announcement or similar action (whether of binding legal effect or not) which may be taken or made by any person or body acting with or purporting to exercise the authority of any government (which legally or otherwise) it shall be directed or requested to do or perform or to forbear from doing or performing. If for any reason it becomes impossible or impracticable to carry out any of the provisions of these presents, the Investment Manager shall not be under any liability therefore or thereby. However, it shall duly inform the Trustee and the Unitholders of the same.
- (iii) If the Investment Manager is required by the InvIT Regulations or any applicable law to provide information regarding IndiGrid and/or the Unitholders, IndiGrid investments and income therefrom and provisions of these presents and complies with such request in good faith, whether or not it was in fact enforceable, the Investment Manager shall not be liable to the Unitholder or any of them or to any other party as a result of such compliance or in connection with such compliance.
- (iv) The Investment Manager shall not incur any liability for any act or omission which may result in a loss to a Unitholder (by reason of any depletion in the value of IndiGrid's assets or otherwise), except in the event that such loss is a result of fraud or negligence or default on the part of the Investment Manager, or where the Investment Manager fails to exercise due care in relation to its obligations under the Investment Management Agreement.
- (v) If the distributions are not made within the period prescribed in the InvIT Regulations, the Investment Manger shall be liable to pay interest to the Unitholders at the rate as may be prescribed in the InvIT Regulations until the distribution is made and such interest shall not be recovered in the forms of fee or any other form payable to the Investment Manager by IndiGrid.
- (vi) The Investment Manager shall be liable to any Unitholder for the authenticity of any signature or of any seal affixed to any endorsement or other document affecting the title to or the transmission of Units or interests in IndiGrid or of any investments of IndiGrid or be in any way liable for any forged or unauthorized signature or seal affixed to such endorsement, transfer or other document or for acting upon or giving effect to any such forged or unauthorized signature or seal. The Investment Manager shall be bound to require that the signature of any Unitholder to any document required to be signed by such Unitholder, under or in connection with these presents shall be verified to its reasonable satisfaction.

Further, in terms of the Investment Management Agreement, in addition to the fees, distributions and expense reimbursements herein described, the Trustee shall, from IndiGrid's assets, indemnify and hold harmless the Investment Manager and its respective officers, directors, shareholders, partners, members, employees, advisors and agents ("**Indemnified Parties**") from and against any claims, losses, costs, damages, liabilities, suits, proceedings and expenses, including legal fees ("**Losses**") suffered or incurred by them by reason of their activities on behalf of IndiGrid, unless such Losses have resulted from fraud, negligence, dishonest acts of commissions or omissions, reckless disregard of duty or breach of duties under the Investment Management Agreement and applicable law and wilful misconduct of the Indemnified Parties.

The Trustee, its directors, employees, officers (“**Trustee Party**”) shall be indemnified by the Investment Manager against any and all direct and actual losses, actions, claims, suits, proceedings, damages, liabilities, costs and expenses including legal fees, incurred or suffered by the Trustee Party in connection with the breach of any of the terms of the Investment Management Agreement by the Investment Manager, or failure in furnishing information required by SEBI or any regulatory authority with respect to IndiGrid, or furnishing wrong information by the Investment Manager under the InvIT Regulations or related to IndiGrid including in any offer documents, or arising out of gross negligence, wilful default or misconduct or fraud on part of the Investment Manager, in carrying out its obligations under the Investment Management Agreement, the Trust Deed, other IndiGrid documents, any information memorandum / offer documents and Applicable Law. The Trustee acknowledges and agrees that the aggregate maximum liability of the Investment Manager in each financial year, shall be limited to the aggregate fees payable to the Investment Manager for the immediately preceding two financial years, in accordance with the terms of the Investment Management Agreement, provided that such aggregate maximum liability shall not be applicable in the event such liability of the Investment Manager to indemnify the Trustee Party arises in connection with any gross negligence, wilful default or misconduct or fraud of the Investment Manager.

The Investment Management Agreement is effective from the date of execution of the Investment Management Agreement, and shall terminate in accordance with the terms of the Investment Management Agreement. The appointment of the Investment Manager may be terminated by the Trustee or the Unitholders, in accordance with the procedure specified under the InvIT Regulations.

Unitholding of the Investment Manager

For details of the Units held by the Investment Manager, please see the sections entitled “*Information Regarding the Units – Unitholding of the Sponsor, Investment Manager, Project Manager and Trustee*” on page 196.

D. The Project Manager – Sterlite Power Grid Ventures Limited

History and Certain Corporate Matters

Sterlite Power Grid Ventures Limited is the Project Manager in respect of IndiGrid. For details, please see the section entitled “*Parties to IndiGrid – The Sponsor – Sterlite Power Grid Ventures Limited*” on page 97.

Background of the Project Manager

Our Project Manager, is one of the leading power transmission companies in the private sector. For details, please see the section entitled “*Parties to IndiGrid – The Sponsor – Sterlite Power Grid Ventures Limited*” on page 97.

Neither the Project Manager nor any of the promoters or directors of the Project Manager (i) is debarred from accessing the securities market by SEBI; (ii) is a promoter, director or person in control of any other company or a sponsor, investment manager or trustee of any other infrastructure investment trust or an infrastructure investment trust which is debarred from accessing the capital market under any order or direction made by SEBI; or (iii) is in the list of wilful defaulters published by the RBI.

Key terms of the Project Implementation and Management Agreement

The Project Manager has entered into the Project Implementation and Management Agreement, in terms of the InvIT Regulations, which provides the scope of services, functions, duties and responsibilities of the Project Manager.

The functions, duties and responsibilities of the Project Manager in terms of the Project Implementation and Management Agreement and the InvIT Regulations are as follows:

- (i) The Project Manager shall undertake implementation, development, maintenance, operation and management of IndiGrid's assets including making arrangements for the appropriate maintenance, either directly or through the appointment and supervision of agents, if any, as may be necessary for discharge of its duties under the terms of the Project Implementation and Management Agreement, the O&M agreements (including the Transmission Services Agreements) and under the InvIT Regulations.
- (ii) The Project Manager shall, either directly or through appropriate agents, oversee the progress of development, approval status and other aspects of IndiGrid's assets that may be under development or, of any new projects, until its completion in accordance with any agreement that may be entered into in this regard, including the supervision of agents appointed for such purpose.
- (iii) The Project Manager shall discharge all obligations in respect of achieving timely completion of the infrastructure projects, wherever applicable, implementation, development, maintenance, operation and management of the infrastructure projects in terms of the O&M agreements (including the TSAs), the Project Implementation and Management Agreement and the InvIT Regulations.
- (iv) The Project Manager shall provide compliance certificate(s), as may be specified, to the Investment Manager and the Trustee in accordance with the InvIT Regulations, in the form prescribed by SEBI, if any.
- (v) The Project Manager provide the Investment Manager details of transactions carried out between itself and its associates and disclose any conflict of interest in such cases to the Investment Manager, in accordance with the InvIT Regulations.
- (vi) The Project Manager shall intimate the Trustee prior to any change in control of the Project Manager to enable the Trustee to seek approval from the relevant authority in accordance with the TSAs or other project documents pertaining to IndiGrid's assets, if applicable.
- (vii) The Project Manager shall provide to the Trustee and Investment Manager or to such other person as the Trustee and/or the Investment Manager may direct, all information that may be necessary for each of them to maintain the records of IndiGrid and as may be required for making submissions to SEBI or other Governmental authority, including with respect to relevant approvals, consents and other documents required in relation to the project and the reporting requirements under the InvIT Regulations, in a proper and timely manner, and in the format prescribed (if any), as required by the Trustee and /or Investment Manager.
- (viii) The Project Manager shall appoint one of its qualified employees reasonably acceptable to the Investment Manager and the each of the Portfolio Assets with adequate and appropriate experience as a principal contact for the board of directors of each Portfolio Asset, the Trustee and the Investment Manager in relation to the project and the services. The Project Manager shall have full authority, to receive directions and instructions from each Portfolio Asset and to take action in relation to and ensure compliance with such directions and instructions and report back to each Portfolio Asset, Trustee and the Investment Manager.
- (ix) The Project Manager shall at all time ensure that the transactions or arrangement entered into by the Project Manager with a related party is on an arm's-length basis.
- (x) The Project Manager shall promptly inform the parties to the Project Implementation and Management Agreement in writing of any act, occurrence or event, which the Project Manager believes is reasonably likely to increase the cost of or the time for implementation taken in relation to a project, or materially to change the financial viability, quality or function of the project.
- (xi) If any defects are found in the maintenance, materials and workmanship of the services provided under the Project Implementation and Management Agreement by the Project Manager and/or by the agents, the Project Manager shall promptly, in consultation and agreement with the other parties to the Project Implementation and Management Agreement regarding appropriate remedying of the defects, and at its own cost, repair, replace or otherwise make good (as any Portfolio Asset shall, at its discretion, determine) such defects as well as any damage caused by such defect.
- (xii) The Project Manager shall be liable to the other parties to the Project Implementation and Management Agreement for any direct loss or damage attributable to the non-performance or breach of the obligations

of the Project Manager including those of the agents, under the Project Implementation and Management Agreement. The Trustee and the Investment Manager acknowledge and agree that the aggregate maximum liability of the Project Manager shall be limited to the fee payable to the Project Manager in accordance with the terms of the Project Implementation and Management Agreement.

- (xiii) The duties of Project Manager shall also include the following:
- (a) supervision of revenue streams from IndiGrid's assets and providing the necessary certification as may be required under applicable laws and the InvIT Regulations;
 - (b) execution and completion of activities in relation to IndiGrid's assets under development in accordance with and in the manner contemplated in any agreement entered into by IndiGrid's assets;
 - (c) exercise diligence and vigilance in carrying out its duties and protecting IndiGrid's assets;
 - (d) keeping the Investment Manager informed on all matters which have a material bearing on the operations of IndiGrid's assets;
 - (e) liaising with governmental authorities in respect of its obligations under the Project Implementation and Management Agreement and the O&M Agreements;
 - (f) take appropriate measures to mitigate the risks which may be encountered by the InvIT in respect of IndiGrid's assets;
 - (g) keep proper records for actions taken in respect of IndiGrid's assets; and
 - (h) complying with the instructions of the Investment Manager and the Trustee and the provisions of the InvIT Regulations.
- (xiv) The parties to the Project Implementation and Management Agreement may, from time to time, agree to provisions for additional services to be rendered by the Project Manager. If, in the assessment of the Project Manager, additional services are required for the purposes of carrying out its duties and obligations under the Project Implementation and Management Agreement, the O&M agreements (including the TSAs) and applicable law, the Project Manager shall notify the parties to the Project Implementation and Management Agreement in writing of such requirement and obtain prior written approval of the Parties in this regard.
- (xv) In case of any inconsistency or discrepancy between the Project Implementation and Management Agreement and the O&M agreements (including the Transmission Services Agreement), the Project Manager shall bring the same into the notice of the Trustee. The Trustee, in consultation with the Investment Manager, shall issue instructions for resolving the inconsistency. The Project Manager shall be bound to comply with the instructions of the Trustee.
- (xvi) Notwithstanding anything to the contrary contained in the Project Implementation and Management Agreement, nothing contained in the Project Implementation and Management Agreement shall be construed to limit or restrict the performance of any duties or obligations of the Project Manager, Investment Manager or the Trustee contained in the InvIT Regulations and other applicable law.

Further, in terms of the Project Implementation and Management Agreement, Trustee, the Investment Manager and their respective directors, employees, officers and the InvIT ("**Indemnified Parties**") shall be indemnified by the Project Manager against any claims, losses, costs, damages, liabilities and expenses, including legal fees from and incurred or suffered by the Indemnified Parties in connection with the breach of any of the terms of the Project Implementation and Management Agreement by the Project Manager, or failure in furnishing information required by SEBI or any regulatory authority with respect to IndiGrid, or furnishing wrong information by the Project Manager under the InvIT Regulations or related to IndiGrid including in any offer documents, or arising out of gross negligence, willful default or fraud on part of the Project Manager, in carrying out its obligations under the Project Implementation and Management Agreement, the other documents in relation to IndiGrid as specified under the Project Implementation and Management Agreement, information memorandum / offer documents and applicable law. The Trustee and the Investment Manager acknowledge and agree that the aggregate maximum liability of the Project Manager in each financial year shall be limited to the fees payable to the Project Manager in such financial year in accordance with the terms of the Project Implementation and Management Agreement.

The Project Implementation and Management Agreement shall remain effective, unless terminated by the parties in accordance with the provisions of the Project Implementation and Management Agreement.

OTHER PARTIES INVOLVED IN INDIGRID

The Auditor

Background and terms of appointment

The Investment Manager, in consultation with the Trustee, has appointed S R B C & Co. LLP, Chartered Accountants (Firm Registration No. 324982E/E300003) with effect from November 7, 2016, as the auditors of IndiGrid for a period of five years, subject to approval of the Unitholders each year. The Auditors have audited the Special Purpose Combined Financial Statements and have examined the Projections of Revenue from Operations and Cash Flow from Operating Activities, and their reports in relation to such Special Purpose Combined Financial Statements and Projections of Revenue from Operations and Cash Flow from Operating Activities, each dated April 30, 2019, have been included in this Preliminary Placement Document.

For further details regarding the policy adopted by the Investment Manager on appointment of the auditors, please see the section entitled “*Corporate Governance - Policies of the Board of Directors of the Investment Manager in relation to IndiGrid*” on page 128.

Functions, Duties and Responsibilities of the Auditor

The functions, duties and responsibilities of the Auditor will be in accordance with the InvIT Regulations. Presently, in terms of the InvIT Regulations, the Auditor is required to comply with the following conditions at all times:

1. the Auditor shall conduct audit of the accounts of IndiGrid and draft the audit report based on the accounts examined by him and after taking into account the relevant accounting and auditing standards, as may be specified by SEBI;
2. the Auditor shall, to the best of his information and knowledge, ensure that the accounts and financial statements give a true and fair view of the state of the affairs of IndiGrid, including profit or loss and cash flow for the period and such other matters as may be specified;
3. the Auditor shall have a right of access at all times to the books of accounts and vouchers pertaining to activities of IndiGrid;
4. the Auditor shall have a right to require such information and explanation pertaining to activities of IndiGrid as he may consider necessary for the performance of his duties as auditor from the employees of IndiGrid or parties to IndiGrid or the holdco or the special purpose vehicles or any other person in possession of such information.

The Valuer

Background and terms of appointment

The Investment Manager, in consultation with the Trustee, has appointed Haribhakti & Co. LLP (Firm Registration No. 103523W/W100048) with effect from April 1, 2018, as the valuer of IndiGrid, for a period of one year. In accordance with the InvIT Regulations, the Valuer has undertaken a full valuation of the Portfolio Assets, and their report in relation to such valuation as on March 31, 2019 is available at https://www.indigrid.co.in/pdf/investors/results-reports/2018-19/financial-results/Valuation_reports_March_2019.pdf. Further, in accordance with the InvIT Regulations, the Valuers have undertaken a full valuation of SGL2, NTL, SGL3 and OGPTL, which are proposed to be acquired by IndiGrid, and their report in relation to such valuation as on March 31, 2019 has been included in this Preliminary Placement Document.

For further details regarding the policy adopted by the Investment Manager on appointment of the valuer, please see the section entitled “*Corporate Governance - Policies of the Board of Directors of the Investment Manager in relation to IndiGrid*” on page 128.

Functions, Duties and Responsibilities of the Valuer

The functions, duties and responsibilities of the Valuer will be in accordance with the InvIT Regulations. Presently, in terms of the InvIT Regulations, the Valuer is required to comply with the following conditions at all times:

1. the Valuer shall ensure that the valuation of IndiGrid assets is impartial, true and fair and is in accordance with Regulation 21 of the InvIT Regulations;
2. the Valuer shall ensure that adequate and robust internal controls to ensure the integrity of its valuation reports;
3. the Valuer shall ensure that it has sufficient key personnel with adequate experience and qualification to perform valuations;
4. the Valuer shall ensure that it has sufficient financial resources to enable it to conduct its business effectively and meet its liabilities;
5. the Valuer and any of its employees involved in valuing of the assets of IndiGrid, shall not, (i) invest in units of IndiGrid or in the assets being valued; and (ii) sell the assets or units of IndiGrid held prior to being appointed as the Valuer, until the time such person is designated as Valuer of IndiGrid and not less than six months after ceasing to be Valuer of IndiGrid;
6. the Valuer shall conduct valuation of IndiGrid's assets with transparency and fairness and shall render, at all times, high standards of service, exercise due diligence, ensure proper care and exercise independent professional judgment;
7. the Valuer shall act with independence, objectivity and impartiality in performing the valuation;
8. the Valuer shall discharge its duties towards IndiGrid in an efficient and competent manner, utilizing its knowledge, skills and experience in best possible way to complete a given assignment;
9. the Valuer shall not accept remuneration, in any form, for performing a valuation of IndiGrid's assets from any person other than IndiGrid or its authorised representative;
10. the Valuer shall before accepting any assignment from any related party of IndiGrid, disclose to IndiGrid any direct or indirect consideration which the Valuer may have in respect of such assignment;
11. the Valuer shall disclose to IndiGrid any pending business transactions, contracts under negotiation and other arrangements with the investment manager or any other party whom IndiGrid is contracting with and any other factors that may interfere with the Valuer's ability to give an independent and professional valuation of the assets;
12. the Valuer shall not make false, misleading or exaggerated claims in order to secure assignments;
13. the Valuer shall not provide misleading valuation, either by providing incorrect information or by withholding relevant information;
14. the Valuer shall not accept an assignment which interferes with its ability to do fair valuation;
15. the Valuer shall, prior to performing a valuation, acquaint itself with all laws or regulations relevant to such valuation.

CORPORATE GOVERNANCE

The section below is a summary of the corporate governance framework in relation to IndiGrid, implemented by the Investment Manager and each of the Portfolio Assets.

1. Investment Manager

Board of Directors

Composition of the Board of Directors of the Investment Manager

In addition to the applicable provisions of the Companies Act, the board of directors of the Investment Manager shall adhere to the following:

- (a) Not less than 50% of the board of directors of the Investment Manager shall comprise of independent directors and not directors or members of the governing board of an investment manager of another infrastructure investment trust registered under the InvIT Regulations. The independence of directors shall be determined in accordance with the Companies Act and would be determined vis-a-vis each of the Investment Manager and the Sponsor;
- (b) The chairperson of the board of directors of the Investment Manager shall be a non-executive independent director;
- (c) Collective experience of directors of the Investment Manager shall cover a broad range of commercial experience, particularly experience in infrastructure sector (including the applicable sub-sector), investment management or advisory and financial matters.

The board of directors shall not include any nominees of the Sponsor.

For details of the current composition of the board of directors of the Investment Manager, please see the section entitled “*Parties to IndiGrid – Investment Manager – Board of Directors*” on page 107.

Quorum

The quorum of the board of directors of the Investment Manager shall be in accordance with the Companies Act. At least 50% of the directors present shall be independent directors.

Frequency of meetings

The board of directors of the Investment Manager shall meet at least four times every year, with a maximum gap of 120 days between any two successive meetings. Additionally, the board of directors of the Investment Manager, prior to any meeting of the Unitholders, shall approve the agenda for Unitholders’ meetings.

Remuneration of Directors

Sitting fee: The directors of the Investment Manager will receive sitting fee for attending board meetings and meetings of the committees, in accordance with the Companies Act.

Other remuneration payable to independent directors: Of the fees payable to the Investment Manager (being 1.75% of the difference between revenue from operations and operating expenses (other than the fee of the Investment Manager) of each Portfolio Asset, per annum), an amount not exceeding 0.4% shall be payable to the independent directors of the Investment Manager (“**Overall Limit**”), as approved by the Unitholders of IndiGrid on July 26, 2018.

The board of directors of the Investment Manager shall confirm to the Trustee that the independent directors being considered for performance remuneration have complied with the following:

- (i) The attendance of a particular independent director is not less than 75% or as otherwise specified in the relevant independent director’s appointment letter. If an independent director has not achieved the specified attendance, he/ she shall not be entitled to any performance remuneration for the relevant period.

- (ii) The independent director(s) have complied with the code of conduct for independent directors as provided under Schedule IV of the Companies Act, 2013 (“**Code of Conduct**”), to the extent the provisions thereof can be applied to IndiGrid. Any independent director considered by the board of directors of the Investment Manager to be in breach of the Code of Conduct shall not be entitled to any performance remuneration.

Upon completion of the evaluation exercise, the board of directors (excluding independent directors) shall approve the performance remuneration payable to each independent director through a unanimous resolution and make a recommendation to the Trustee for the payment of performance remuneration, including the amount payable to each independent director within the Overall Limit approved by the Unitholders of IndiGrid.

The remuneration payable to the independent directors will be within the overall limit of the fee payable to the Investment Manager.

Committees of the board of directors

Name of committee	Composition	Present Members	Quorum	Frequency of meetings
Investment Committee	The Investment Committee shall comprise of directors constituting at least 50% of the board of directors of the Investment Manager. All members, including the chairperson of the Investment Committee shall be independent directors. The company secretary of the Investment Manager shall act as the secretary to the Investment Committee.	Shashikant H. Bhojani (Chairperson); Tarun Kataria; and Rahul Asthana.	The quorum shall be at least 50% of the number of members of the Investment Committee and subject to a minimum of two members.	The Investment Committee shall meet at least four times every year, with a maximum gap of 120 days between any two successive meetings. Additionally, the Investment Committee shall meet prior to any investments or divestments of assets for such number of times as required considering the scope and terms of reference of the Committee.
Audit Committee	The Audit Committee shall comprise of directors constituting at least 50% of the board of directors of the Investment Manager, with at least 50% of the Audit Committee comprising independent directors. The chairperson of the Audit Committee shall be an independent director. All members of the Audit Committee shall be financially literate and at least one member shall have accounting or related financial management expertise. The company secretary of the Investment Manager shall act as the secretary to the Audit Committee.	Tarun Kataria (Chairperson); Shashikant H. Bhojani; Kuldip K. Kaura; and Rahul Asthana.	The quorum shall be at least 50% of the directors, of which at least 50% of the directors present, shall be independent directors and subject to a minimum of two members being present in person.	The Audit committee shall meet at least once in every calendar quarter, with a maximum interval of 120 days between any two consecutive meetings of the Committee, such that at least four meetings are held in each calendar year and further such number of times as required considering the scope and terms of reference of the Committee.
Stakeholders' Relationship Committee	The Stakeholders' Relationship Committee shall comprise of directors constituting at least one third of the board of directors of the Investment Manager, with at least one independent director also being a member of the Stakeholders' Relationship Committee. The chairperson of the	Shashikant H. Bhojani (Chairperson); Kuldip K. Kaura; Pratik Agarwal; and Rahul Asthana.	The quorum shall be at least 50% of the number of members of the Stakeholders' Relationship Committee and subject to a minimum of two members.	The Stakeholders' Relationship Committee shall meet at least four times every year, or as frequently as determined by the board of directors of the Investment Manager or as directed by the Trustee.

Name of committee	Composition	Present Members	Quorum	Frequency of meetings
	Stakeholders' Relationship Committee shall be a non-executive director.			
Nomination and Remuneration Committee	The Nomination and Remuneration Committee shall comprise of at least three non-executive directors of the board of directors of the Investment Manager, with at least 50% of the members of the Nomination and Remuneration Committee being independent directors. The chairperson of the Nomination and Remuneration Committee shall be an independent director.	Shashikant H. Bhojani (Chairperson); Tarun Kataria; Kuldip K. Kaura; Rahul Asthana; and Harsh Shah.	The quorum shall be at least 50% of the members of the Nomination and Remuneration Committee and subject to a minimum of two members.	The Nomination and Remuneration Committee shall meet at least four times every year, or as frequently as determined by the board of directors of the Investment Manager or as directed by the Trustee.
Allotment Committee	Not applicable	Harsh Shah (Chairperson); Shashikant H. Bhojani; and Pratik Agarwal	Two members	Not applicable

For details of the scope of each committee, please see below.

Investment Committee

Terms of reference of the Investment Committee

The terms of reference of the Investment Committee include the following:

- (i) Reviewing investment decisions with respect to the underlying assets or projects of IndiGrid from the Sponsor including any further investments or divestments to ensure protection of the interest of unitholders including, investment decisions which are related party transactions;
- (ii) Approving any proposal in relation to acquisition of assets, further issue of units including in relation to acquisition or assets; and
- (iii) Formulating any policy for the Investment Manager as necessary, in relation to its functions, as specified above.

Audit Committee

Terms of reference of the Audit Committee

The terms of reference of the Audit Committee include the following:

- (i) Provide recommendations to the board of directors regarding any proposed distributions;
- (ii) Overseeing IndiGrid's financial reporting process and disclosure of its financial information to ensure that its financial statements are correct, sufficient and credible;
- (iii) Giving recommendations to the board of directors regarding appointment, re-appointment and replacement, remuneration and terms of appointment of the statutory auditor of IndiGrid and the audit fee, subject to the approval of the unitholders;
- (iv) Reviewing and monitoring the independence and performance of the statutory auditor of IndiGrid, and effectiveness of audit process;

- (v) Approving payments to statutory auditors of IndiGrid for any other services rendered by such statutory auditors;
- (vi) Reviewing the annual financial statements and auditor's report thereon of IndiGrid, before submission to the board of directors for approval, with particular reference to:
 - changes, if any, in accounting policies and practices and reasons for such change;
 - major accounting entries involving estimates based on the exercise of judgment by management;
 - significant adjustments made in the financial statements arising out of audit findings;
 - compliance with listing and other legal requirements relating to financial statements;
 - disclosure of any related party transactions; and
 - qualifications in the draft audit report;
- (vii) Reviewing, with the management, all periodic financial statements, including but not limited to half-yearly and annual financial statements of IndiGrid before submission to the board of directors for approval;
- (viii) Reviewing, with the management, the statement of uses/application of funds raised through an issue of units by IndiGrid (public issue, rights issue, preferential issue, etc.) and the statement of funds utilised for purposes other than those stated in the offer documents/ notice, and making appropriate recommendations to the board of directors for follow-up action;
- (ix) Approval or any subsequent modifications of transactions of IndiGrid with related parties including, reviewing agreements or transactions in this regard;
- (x) Scrutinising loans and investments of IndiGrid;
- (xi) Reviewing all valuation reports required to be prepared under applicable law, periodically, and as required, under applicable law;
- (xii) Evaluating financial controls and risk management systems of IndiGrid;
- (xiii) Reviewing, with the management, the performance of statutory auditors of IndiGrid, and adequacy of the internal control systems, as necessary;
- (xiv) Reviewing the adequacy of internal audit function if any of IndiGrid, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure coverage and frequency of internal audit;
- (xv) Reviewing the findings of any internal investigations in relation to IndiGrid, into matters where there is suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the board of directors;
- (xvi) Reviewing the procedures put in place by the Investment Manager for managing any conflict that may arise between the interests of the unitholders, the parties to IndiGrid and the interests of the Investment Manager, including related party transactions, the indemnification of expenses or liabilities incurred by the Investment Manager, and the setting of fee or charges payable out of IndiGrid's assets;
- (xvii) Discussing with statutory auditors and valuers prior to commencement of the audit or valuation, respectively, about the nature and scope, as well as post-audit/ valuation discussion to ascertain any area of concern;
- (xviii) Reviewing and monitoring the independence and performance of the valuer of IndiGrid;
- (xix) Giving recommendations to the board of directors regarding appointment, re-appointment and replacement, remuneration and terms of appointment of the valuer of IndiGrid;
- (xx) Evaluating any defaults or delay in payment of distributions to the unitholders or dividends by the Portfolio Assets to IndiGrid and payments to any creditors of IndiGrid or the Portfolio Assets, and recommending remedial measures;

- (xxi) Management's discussion and analysis of financial condition and results of operations;
- (xxii) Reviewing the statement of significant related party transactions, submitted by the management;
- (xxiii) Reviewing the management letters/letters of internal control weaknesses issued by the statutory auditors;
and
- (xxiv) Formulating any policy for the Investment Manager as necessary, in relation to its functions, as specified above.

Stakeholders' Relationship Committee

Terms of reference of the Stakeholders' Relationship Committee

The terms of reference of the Stakeholders' Relationship Committee shall include the following:

- (i) Considering and resolving grievances of the unitholders, including complaints related to the transfer of units, non-receipt of annual report and non-receipt of declared distributions;
- (ii) Reviewing of any litigation related to unitholders' grievances;
- (iii) Undertaking all functions in relation to protection of Unitholders' interests and resolution of any conflicts, including reviewing agreements or transactions in this regard;
- (iv) Updating unitholders on acquisition / sale of assets by IndiGrid and any change in the capital structure of the Portfolio Assets;
- (v) Reporting specific material litigation related to unitholders' grievances to the board of directors; and
- (vi) Approving report on investor grievances to be submitted to the Trustee.

Nomination and Remuneration Committee

Terms of reference of the Nomination and Remuneration Committee

The terms of reference of the Nomination and Remuneration Committee include the following:

- (i) Formulation of the criteria for determining qualifications, positive attributes and independence of a director and recommend to the board of directors of the Investment Manager a policy relating to, the remuneration of the directors, key managerial personnel and other employees;
- (ii) Formulation of criteria for evaluation of performance of independent directors and the board of directors;
- (iii) Devising a policy on board diversity;
- (iv) Identifying persons who are qualified to become directors and who may be appointed in senior management in accordance with the criteria laid down and recommend to the board of directors their appointment and removal and evaluation of director's performance;
- (v) Determining whether to extend or continue the term of appointment of the independent director, on the basis of the report of performance evaluation of independent directors;
- (vi) Carrying out any other function as prescribed under applicable law;
- (vii) Endeavour to appoint new key employee to replace any resigning key employee within six months from the date of receipt of notice of resignation and recommend such appointment to the Board, if necessary; and

- (viii) Performing such other activities as may be delegated by the board of directors of the Investment Manager and/or are statutorily prescribed under any law to be attended to by the Nomination and Remuneration Committee.

Allotment Committee

Terms of reference of the Allotment Committee

The terms of reference of the Allotment Committee include the following:

- (i) Deciding the final terms of allotment of debentures;
- (ii) Approving allotment of debentures; and
- (iii) Taking decisions on all authorities conferred by the resolution constituting the Allotment Committee and/or for all the matters which are necessary for effective implementation of the resolution constituting the Allotment Committee.

Policies of the Board of Directors of the Investment Manager in relation to IndiGrid

The Investment Manager has adopted the following policies in relation to IndiGrid, which have previously been published or issued, and shall be incorporated in, and form part of, this Preliminary Placement Document, as on the date of this Preliminary Placement Document:

Sr. No.	Title of Document	Available At
1.	Borrowing Policy	https://www.indigrid.co.in/pdf/Borrowing_Policy.pdf
2.	Policy in relation to Related Party Transactions and Conflict of Interests	https://www.indigrid.co.in/pdf/RPT_Policy.pdf
3.	Policy on Appointment of Auditor and Valuer	https://www.indigrid.co.in/pdf/Policy_on_Appointment_of_Auditor_and_Valuer.pdf
4.	Policy on unpublished price-sensitive information and dealing in units by the parties to IndiGrid	https://www.indigrid.co.in/pdf/Rain_Policy_on_UPSI_and_dealing_in_units_by_the_parties_to_the_Trust.pdf
5.	Policy for Determining Materiality of Information for Periodic Disclosures	https://www.indigrid.co.in/pdf/Amended_Policy_for_determining_Materiality_of_Information_25.07.17.pdf
6.	Document Archival Policy	https://www.indigrid.co.in/pdf/Document_Archival_Policy.pdf

For details of the Distribution Policy in relation to IndiGrid, see the section entitled “*Distribution – Distribution Policy*” on page 205.

2. Portfolio Assets

Representatives on the Board of Directors of each Portfolio Asset

The Investment Manager, in consultation with the Trustee, has the power to appoint the majority of the board of directors of each of the Portfolio Assets. Further, the Investment Manager shall ensure that in every meeting, including annual general meetings of any of the Portfolio Assets, the voting of IndiGrid is exercised.

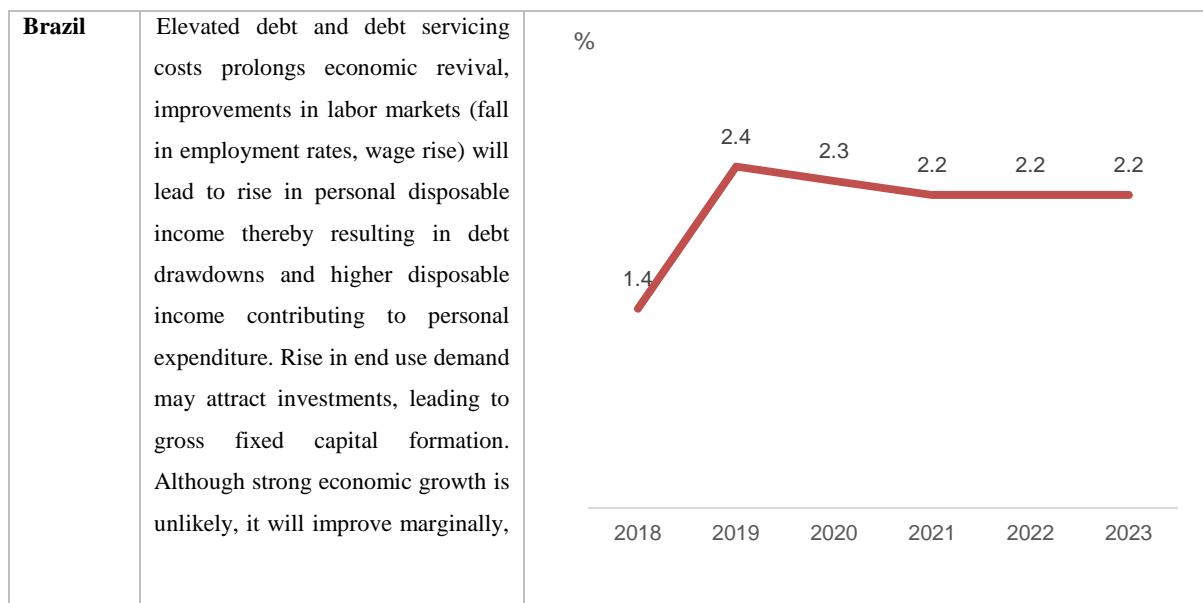
INDUSTRY OVERVIEW

The information in this section is derived from the report “Opportunities in power transmission in India”, March 2019, prepared by CRISIL Research (the “CRISIL Report”) except for other publically available information as cited in this section. We commissioned the CRISIL Report for the purposes of confirming our understanding of the industry in connection with the Issue. Neither IndiGrid, the Sponsor, the Investment Manager, the Trustee, any of the Lead Managers, nor any other person connected with the Issue has verified the information in the CRISIL Report or other publically available information cited in this section. Further, the CRISIL Report was prepared based on information as of specific dates which may no longer be current or reflect current trends and opinions in the CRISIL Report may be based on estimates, projections, forecasts and assumptions that may prove to be incorrect. CRISIL Research, a division of CRISIL Limited (“CRISIL”), has advised that while it has taken due care and caution in preparing the CRISIL Report based on the information obtained by CRISIL from sources which it considers reliable, it does not guarantee the accuracy, adequacy or completeness of the CRISIL Report or the data therein and is not responsible for any errors or omissions or for the results obtained from the use of CRISIL Report or the data therein. Further, the CRISIL Report is not a recommendation to invest / disinvest in any company covered in the report. CRISIL especially states that it has no liability whatsoever to the subscribers / users / transmitters / distributors of the CRISIL Report. CRISIL Research operates independently of, and does not have access to information obtained by CRISIL’s Ratings Division or CRISIL Risk and Infrastructure Solutions Limited (“CRISL”), which may, in their regular operations, obtain information of a confidential nature. The views expressed in the CRISIL Report are that of CRISIL Research and not of CRISIL’s Ratings Division or CRISIL. Prospective investors are advised not to unduly rely on the CRISIL Report.

Indian Economy

According to International Monetary Fund (IMF) forecasts, India is likely to retain its position as the fastest-growing economy in the world in 2019, after overtaking China in 2018. Based on its estimates, India will continue to occupy the top slot among major economies with a growth rate of 7.7%-7.8% until 2019. India’s growth rate will thus be significantly higher than the world average of around 4% and India ranks ahead of other developing economies, such as China, Brazil, Indonesia and sub-Saharan African nations. The ongoing liberalisation of India’s foreign direct investment (FDI) regime has led to a surge in investments, especially after the launch of the ‘Make in India’ campaign in October 2014. FDI inflow has increased significantly since fiscal 2015, and surpassed foreign portfolio investment (FPI) since fiscal 2016. Net FDI inflows have risen to approximately \$44.8 billion in fiscal 2018 from around \$22 billion in 2014. However, growth in 2018 has slowed down significantly, to approximately 3%, as compared to stronger growth of 8.67%, 29% and 27% in fiscals 2017, 2016 and 2015, respectively. Reduced macro-economic vulnerability, coupled with improved government spending in infrastructure sectors, education, etc., has enhanced India’s World Economic Forum global competitiveness index or GCI ranking to 40 in fiscal 2017 from 60 in fiscal 2015.

Real GDP Growth Forecast of Major Economies



	reaching ~2.2% real GDP growth in 2023															
Russia	Slowdown in oil prices and weakening in Ruble rate will be keep GDP growth in check. Investment activity may rise slowly, however low consumer demand, rise in VAT rates, slowdown in global growth will be major dampeners	<p>%</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Real GDP Growth (%)</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>1.7</td> </tr> <tr> <td>2019</td> <td>1.8</td> </tr> <tr> <td>2020</td> <td>1.8</td> </tr> <tr> <td>2021</td> <td>1.6</td> </tr> <tr> <td>2022</td> <td>1.3</td> </tr> <tr> <td>2023</td> <td>1.2</td> </tr> </tbody> </table>	Year	Real GDP Growth (%)	2018	1.7	2019	1.8	2020	1.8	2021	1.6	2022	1.3	2023	1.2
Year	Real GDP Growth (%)															
2018	1.7															
2019	1.8															
2020	1.8															
2021	1.6															
2022	1.3															
2023	1.2															
European Union	The economic growth in the region will continue, albeit at a slower pace. Recovery in employment may lead to improved consumer spending. However ensuing global trade conflicts and uncertainty surrounding Brexit deal will derail recovery in the short to medium term.	<p>%</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Real GDP Growth (%)</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>2.2</td> </tr> <tr> <td>2019</td> <td>2.0</td> </tr> <tr> <td>2020</td> <td>1.8</td> </tr> <tr> <td>2021</td> <td>1.7</td> </tr> <tr> <td>2022</td> <td>1.7</td> </tr> <tr> <td>2023</td> <td>1.6</td> </tr> </tbody> </table>	Year	Real GDP Growth (%)	2018	2.2	2019	2.0	2020	1.8	2021	1.7	2022	1.7	2023	1.6
Year	Real GDP Growth (%)															
2018	2.2															
2019	2.0															
2020	1.8															
2021	1.7															
2022	1.7															
2023	1.6															

<p>China</p>	<p>Strong sustained growth in the country has cooled off amidst trade wars and retaliatory tariffs with the US. Industrial output is slow, export demand has been waning and domestic demand has softened. The policy makers, through expansionary fiscal policy and loosening liquidity in money market have been trying to stoke demand. However, growth is expected to remain subdued due to macro risks looming large and high base effect</p>	<table border="1"> <thead> <tr> <th>Year</th> <th>GDP Growth (%)</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>6.6</td> </tr> <tr> <td>2019</td> <td>6.2</td> </tr> <tr> <td>2020</td> <td>6.2</td> </tr> <tr> <td>2021</td> <td>6</td> </tr> <tr> <td>2022</td> <td>5.8</td> </tr> <tr> <td>2023</td> <td>5.6</td> </tr> </tbody> </table>	Year	GDP Growth (%)	2018	6.6	2019	6.2	2020	6.2	2021	6	2022	5.8	2023	5.6
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2018	6.6															
2019	6.2															
2020	6.2															
2021	6															
2022	5.8															
2023	5.6															
<p>Africa</p>	<p>Tightening of financial conditions in the US, such as raising of benchmark interest rates and winding down of stimulus program, will constrain global liquidity and reduce demand. This may hinder growth in major African economies since they rely on international capital markets for financing needs. Also, waning of commodity prices may hit Africa's GDP owing to weaker export earnings. Going forward, domestic consumption, labor productivity, sectoral gains (industry, agriculture, services), and public expenditure will dictate the region's growth</p>	<table border="1"> <thead> <tr> <th>Year</th> <th>GDP Growth (%)</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>3.4</td> </tr> <tr> <td>2019</td> <td>3.9</td> </tr> <tr> <td>2020</td> <td>4</td> </tr> <tr> <td>2021</td> <td>4</td> </tr> <tr> <td>2022</td> <td>4</td> </tr> <tr> <td>2023</td> <td>4.1</td> </tr> </tbody> </table>	Year	GDP Growth (%)	2018	3.4	2019	3.9	2020	4	2021	4	2022	4	2023	4.1
Year	GDP Growth (%)															
2018	3.4															
2019	3.9															
2020	4															
2021	4															
2022	4															
2023	4.1															
<p>Indonesia</p>	<p>The nation will grow modestly and is expected to remain weak overall in the short term. Strong drawdowns in the Indonesian Rupiah, ongoing trade wars between the nation's two biggest trading partners, US and China have increased import revenues for the country. Further, capital outflows, on the back of Fed Funds rate hike has left the country in the negative balance of payments. Overall, Indonesia will grow tepidly</p>	<table border="1"> <thead> <tr> <th>Year</th> <th>GDP Growth (%)</th> </tr> </thead> <tbody> <tr> <td>2018</td> <td>5.1</td> </tr> <tr> <td>2019</td> <td>5.1</td> </tr> <tr> <td>2020</td> <td>5.2</td> </tr> <tr> <td>2021</td> <td>5.3</td> </tr> <tr> <td>2022</td> <td>5.3</td> </tr> <tr> <td>2023</td> <td>5.4</td> </tr> </tbody> </table>	Year	GDP Growth (%)	2018	5.1	2019	5.1	2020	5.2	2021	5.3	2022	5.3	2023	5.4
Year	GDP Growth (%)															
2018	5.1															
2019	5.1															
2020	5.2															
2021	5.3															
2022	5.3															
2023	5.4															

	with twin problems of trade and current account deficits	
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• Key Projections	• 2015-16	• 2016-17	• 2017-18	• 2018-19F
• GDP growth (%).....	• 8.0	• 7.1	• 6.7	• 7.4
• CPI (% , average)	• 5.0	• 4.5	• 3.6	• 3.7
• CAD (% GDP)	• -1.1	• -0.7	• -1.9	• -2.6
• Fiscal deficit (% GDP)	• 3.9	• 3.5	• 3.5	• 3.3
• Exchange rate (March-end) ..	• 67	• 65.9	• 65	• 71
• G-sec yield (% , March-end) .	• 7.5	• 6.8	• 7.6	• 7.9

With a population of over 1.3 billion and an estimated GDP of Rs. 130 trillion in fiscal 2018, the Indian economy is the third largest economy adjusted for purchasing power parity or PPP and has favorable demographics with the largest working population, with 66.2% of the total population in the working age group of 15-64 years in 2017, and more than half the population below 25 years of age. Going forward, the working population, which rose at a 2% compound annual growth rate, or CAGR, over 2007-2017, is expected to increase further, thereby driving consumption and growth. The working population of India is more than the total population of countries such as Russia, Brazil and the US.

Economic Impact: Transitory



Source: CRISIL Research

In India, 2016 ended with a historic economic event—demonetisation—a move that saw the bulk of cash in the hands of people vanish overnight. What followed was a mix of uncertainty and fear, and also abundant criticism questioning the timing and need of such a move, and the efficacy of its implementation. Yet, the government’s narrative on the benefits of the action—curbing black economy, stamping out illegal funding of activities (including funding of terrorism), elimination of counterfeit notes and pushing the economy towards transacting electronically—struck a chord with the masses. Following demonetisation, India added 9.1 million people to the list of taxpayers in fiscal 2017, experienced a 14.3% increase in direct tax collections in fiscal 2017, added voluntary disclosure schemes to tax collections, experienced a surge in bank deposits and improved transmission lowered lending rates. Furthermore, demonetisation positively impacted the power distribution sector in India. As per the demonetisation guidelines, utility bills could be paid using old Rs. 500 and Rs. 1,000 notes prior to the December 31, 2016 deadline, which resulted in large unrecovered payments to distribution companies (DISCOMs).

Fiscal consolidation has helped keep inflation under check and benefitted the economy by bringing down the cost of borrowing for both the government and private sector. It is expected that consumer price inflation (CPI) will perk up a notch, to 3.7% in fiscal year 2019 as compared with 3.6% recorded in fiscal 2018. Core inflation, which is a better indicator of demand pressures in the economy as it strips out the volatile categories such as food and fuel, also softened in fiscal 2019, suggesting a further slowdown in GDP growth. Accordingly, CRISIL Research sees improved chances of a repo rate cut in the next policy in 2019.

The yield on the 10 year government securities (G-sec) fell more than 50 basis points from the peak reached in September 2018. The yield on 10 year G-sec averaged 7.75% in November 2018. Falling oil prices, RBI's open market operations through the purchase of G-secs to the tune of Rs. 500 billion in November 2018, as compared with Rs. 360 billion in the previous month, cooled G-sec yields.

With these fundamental factors expected to trend in the right direction, coupled with measures initiated by the government, the long term growth potential of India is expected to be healthy, led by re-monetisation and easing of teething troubles faced under the goods and services tax (GST) mechanism. The impact on the power sector of GST imposition is mixed, as coal, which is the primary fuel used in power generation, has been brought under the 5% taxation bracket in the GST regime, as compared to approximately 12% in the previous regime, which included VAT and excise duties. However, the impact has been slightly adverse for the power transmission segment as goods and services utilised in the generation, transmission and distribution segment were earlier getting some tax credits which are absent under the current GST regime, resulting in a rise in the working capital requirement of players. Further, work contracts which come under services are now being taxed at 18%, as compared to approximately 15% earlier (including all cess), resulting in a minimal rise in cost of these projects. While the pain of demonetisation and GST implementation will be frontloaded, the benefits will be felt over a period of time. Hence GDP growth has been strong in 2018 over the weak base of fiscal 2017—with a normal monsoon. Growth will also find support from private consumption, driven by continued government spending on construction activities, benign inflation and revision in government salaries at the state level.

To ensure lasting growth, timely implementation and effective monitoring are crucial. Further reforms are needed, especially with regard to the following:

- *Improving investment climate through ease of doing business* to ensure faster decision making and ensure administrative efficiency. The government has initiated a number of steps to ease the business environment, including big moves such as goods and service tax and insolvency law, and a number of other steps such as introducing an online single window model for providing clearances and filing compliances, removal of the Foreign Investment Promotion Board or FIPB for fast-track foreign investments, and setting up a National Investment and Infrastructure Fund or NIIF.
- *Passing of key bills*, like the recently passed Finance Bill 2017, the Banking Regulation (Amendment) Bill which seeks to amend the Banking Regulation Act, 1949 to insert provisions for handling cases related to stressed assets, the Insolvency and Bankruptcy Code (Amendment) Bill, 2017, which strives to create an enabling environment for expeditious resolution of bankruptcies with least pain to all stakeholders and the GST Bill to herald transparency, reduce the cascading effect of taxes and translating to higher GDP growth. Further going forward with the passage of the Aadhar bill to distribute subsidies, rural wages and pension through an electronic platform will also create an enabling environment in the industry.
- *Boosting infrastructure* by encouraging higher FDI investments in railways and constructions. After a sharp slowdown in capital expenditure this fiscal due to the twin impact of demonetisation and GST, the capex cycle is expected to pick up and grow 13% next fiscal to mark the first double-digit growth since fiscal 2013. Almost two-thirds of the incremental investments are projected to be in roads, railways and urban infrastructure in fiscal 2019. Huge capacity augmentation plans have been laid out in the power transmission and distribution infrastructure in order to improve electricity access.
- *Boosting the manufacturing sector* in India through the 'Skilling India' and 'Make in India' schemes, which are designed to improve labour market efficiency.
- *Keeping inflation and interest rates in check* to support consumption growth in concert with favourable demographics, rising disposable income, and increasing middle class population.
- *Development of financial markets*, especially the bond market. The government has instituted steps such as the Jan Dhan Yojana, higher FDI insurance, a better monetary policy framework, and the passage of the bankruptcy code. The Securities and Exchange Board of India (SEBI) approved the framework for business trusts in India. The government in the Union budget for fiscals 2018 to 2019 has also proposed nudging corporations to increasingly leverage the corporate bond markets for their fund-raising needs, which will help toward deepening the corporate bond market and strengthening the liquidity of financial markets in India.

- *Enhancing digitalisation* by increasing internet connectivity and improving online infrastructure in India through the ‘Digital India’ programme.
- *Ensuring no reliance on excessive leverage*, as India’s GDP growth is not supported by excessive credit creation, averaging 6.2% in fiscals 2016 and 2017, compared with an average 9.1% nominal GDP growth.

Amid these reforms, India’s economic growth is picking up, albeit at a slow pace, after having dropped below 6% in fiscal 2013. Policy focus hasn’t been on boosting the cyclical part through fiscal and monetary stimulus, but rather on improving trend growth by repairing the system and initiating structural reforms. Structural reforms take time to impact the economy and improvements depend on effective implementation of reforms and policies. This isn’t the first time in the past decade that India’s GDP has risen from lows. This time around, though growth is slow to pick up, it appears sustainable and qualitatively better as it is accompanied by prudent fiscal and monetary policies which are ‘repair-and-reform’ oriented.

CRISIL Research expects the real GDP growth to rebound to 7.4% in fiscal 2019, from 6.7% in fiscal 2018, as the transitory disruption from GST implementation would wane and a low base would help. While growth would continue to be driven by consumption, interest rates are expected to remain soft and inflation will be under control. Investments, fired largely by public sector investment in infrastructure too, would start helping growth. Growth would also be mildly supported by public spending (with a rural focus) in infrastructure, especially roads. The government’s Rs. 2.11 lakh crore bank recapitalization plan would mean the banks would be sufficiently funded to support growth. On the external front too, synchronized global recovery is expected to gather pace, which should help Indian exports that were held back to some extent on account of GST-related glitches.

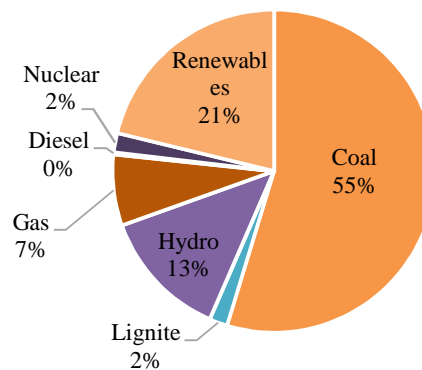
The Indian Power Sector

Overview

India is the third largest consumer and producer of electricity in the world with a global share of 5.5% and 5.6% for electricity consumption and production, respectively, in fiscal 2016. The total installed generation capacity in India as of March 2018 was 344 GW, of which approximately 121 GW of capacity was added in the past five years (over fiscal 2013 to fiscal 2018). Coal-based power generation has maintained its dominant position and accounts for approximately 55% of the installed capacity as of January 2019. Renewable energy installations have also witnessed robust growth over the past few years, and have reached approximately 74 GW capacity in January 2019, compared with 25 GW in March 2012, constituting approximately 21% of total installed generation capacity as of date.

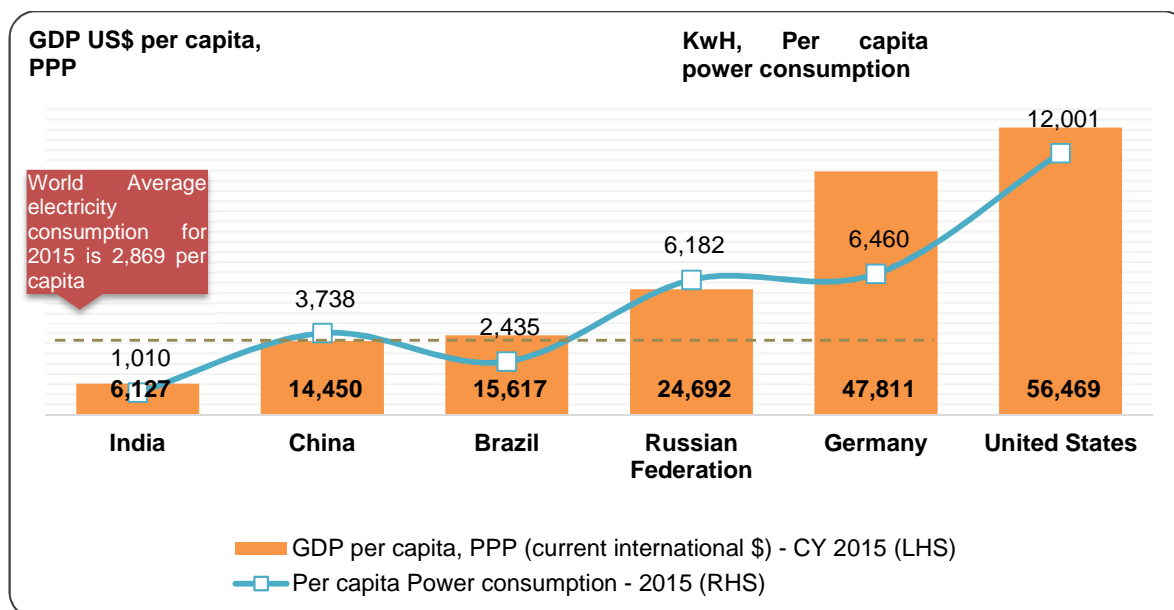
Source-wise generation capacity mix as on 31 Jan 2019

Source: CEA, MNRE, CRISIL Research



India’s per-capita power consumption was almost half of the world’s average 2015 (Jan-Dec)

Source: World Bank, CEA, EIA, CRISIL Research



Note: The GDP per capita, PPP Current International US\$, is taken from the World Bank for 2015.

Note: Per capita electricity consumption for Brazil, China, Germany, Russia and USA is calculated using Population and electricity consumption data provided by EIA; Electricity per capita for 2015 not available on World Bank.

Note: Per capita electricity consumption for India is taken from CEA for fiscal 2015.

Despite the rapid growth of the Indian power industry, per capita electricity consumption in India, as of fiscal 2016, was only 1,075 kwh, which is significantly lower than the world average and is the lowest among the BRICS (Brazil, Russia, India, China and South Africa) nations. Energy deficit (difference between electricity requirement and electricity supply) declined to 0.7% in 2017-2018. The energy deficit in India is regional, with northern, southern, eastern and western regions having deficits of 1.7%, 0.2%, 0.8% and 0.1%, respectively as a percentage of total capacity, during 2017-18.

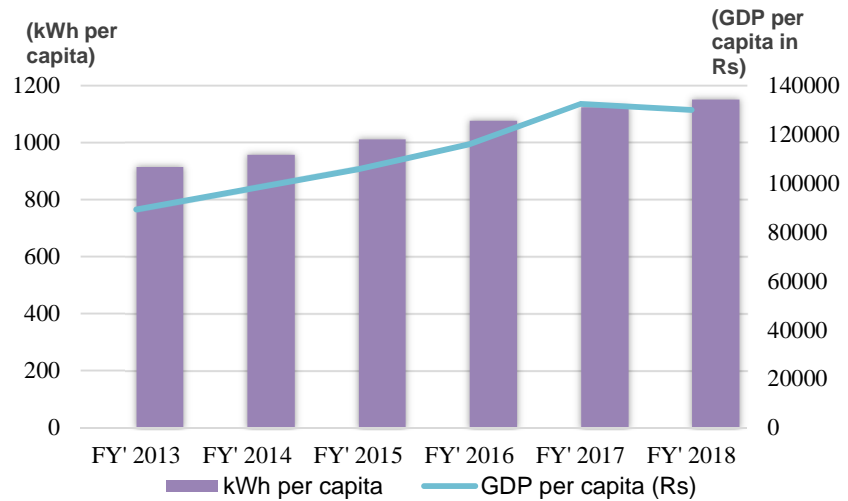
In addition to expanding the transmission network, India must also improve its existing transmission infrastructure and replace low voltage lines with high capacity lines. In the '220 kV and above' segment, the network transformation capacity to installed generation capacity ratio (MVA:MW) has remained low over the years. Moreover, there is a mismatch between the generation capacity and transmission capacity, which is noticeable from 2010 onwards. As of end-March 1985, the MVA:MW ratio was 1.1 and has only improved to 2.5 times by end-January 2019. However, for some of the large states the ratio has been slightly higher, driven by sustained transmission capacity augmentation. Fixing this deficit, which will require significant investments in the transmission and distribution (T&D) segment, should lift confidence and improve viability of the sector. Growth in this sector can be achieved through the following measures, which are discussed in more detail later in the section.

- moving surplus power across to regions in deficit and taking care of past underinvestment in the grid;
- meeting time of day differences in demand through urbanisation and village electrification programmes;
- absorption of highly variable i.e., infirm renewable power with high automation and smart grids; and
- establishing new transmission lines (inter-state and intra-state) for wheeling incremental power capacity.

Growth in per Capita Power Consumption in India Rising in Sync with Rising per Capita GDP

Source: IMF, CEA, CRISIL Research

There are significant investment opportunities in the power sector in India. Total investment in India's power sector has increased from approximately \$1 trillion in fiscal 2012 to approximately \$1.6 trillion in fiscal 2018. With urbanisation and industrialization, demand for power has increased, encouraging private sector participation in the sector. As the per capita electricity consumption closely follows the growth pattern of per capita GDP, it is expected that strong growth in power demand should follow the approximately 8% growth expected in GDP in the medium term.



The power sector value chain comprises generation, transmission and distribution segments. The following figure provides a snapshot of the value chain. The power generation installed capacity is expected to increase from 199 GW in fiscal 2012 to 440 GW in fiscal 2022 (approximately 8.3% CAGR) and the share of inter-regional transmission capacity is expected to increase from 13.9% in fiscal 2012 to 27% in fiscal 2022 (inter-regional transmission capacity as a fraction of total installed generation capacity) resulting in three times growth of investment in the power transmission sector.

Power generation sector in India

Source: CEA, CRISIL Research

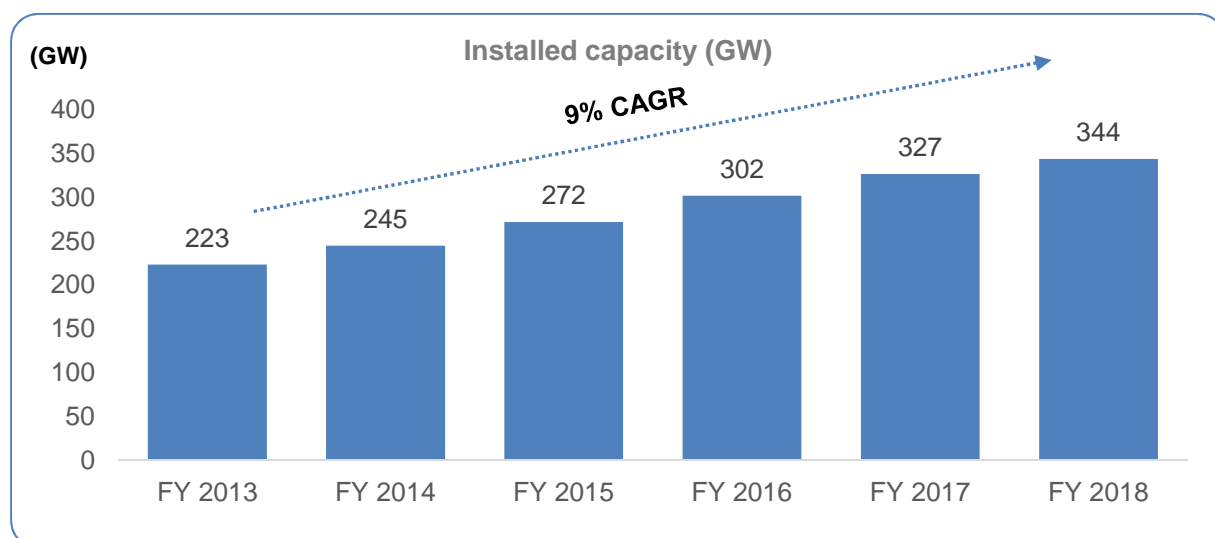
	Generation		Transmission		Distribution	
At the end of XI th plan (2011-2012)	Installed Capacity (MW)	198,676	Total line length (>=220KV) in MVA	409,551	Energy requirement (bn units)	937
	<u>Fuel-Wise breakup</u>		Inter Regional capacity (GW)	28	Peak demand (GW)	130
	Thermal (MW)	130,403	Investment in power transmission (Rs. Tr.)	0.97		
	Hydro (MW)	38,990				
	Nuclear (MW)	4,780				
	RES (MW)	24,503				
At the end of XII th plan (2016-17)	Installed Capacity (MW)	325,728	Total line length (>=220KV) in MVA	740,765	Energy requirement (bn units)	1142
	<u>Fuel-Wise breakup</u>		Inter Regional capacity (GW)	68	Peak demand (GW)	159
	Thermal (MW)	218,330	Investment in power transmission (Rs. Tr.)	2.1-2.2		
	Hydro (MW)	44,478				
	Nuclear (MW)	6,780				
	RES (MW)	57,260				
At the end of XIII th plan (2021-22)	Installed Capacity (MW)	427,873	Total line length (>=220KV) in MVA	979,637	Energy requirement (bn units)	1578
	<u>Fuel-Wise breakup</u>		Inter Regional capacity (GW)	118	Peak demand (GW)	220
	Thermal (MW)	238,652	Investment in power transmission (Rs. Tr.)	3.2-3.3		
	Hydro (MW)	53,070				
	Nuclear (MW)	11,080				
	RES (MW)	125,070				

Note: The installed capacity are CRISIL Research estimates. The investments in the power transmission segment are estimated over a 5 year period

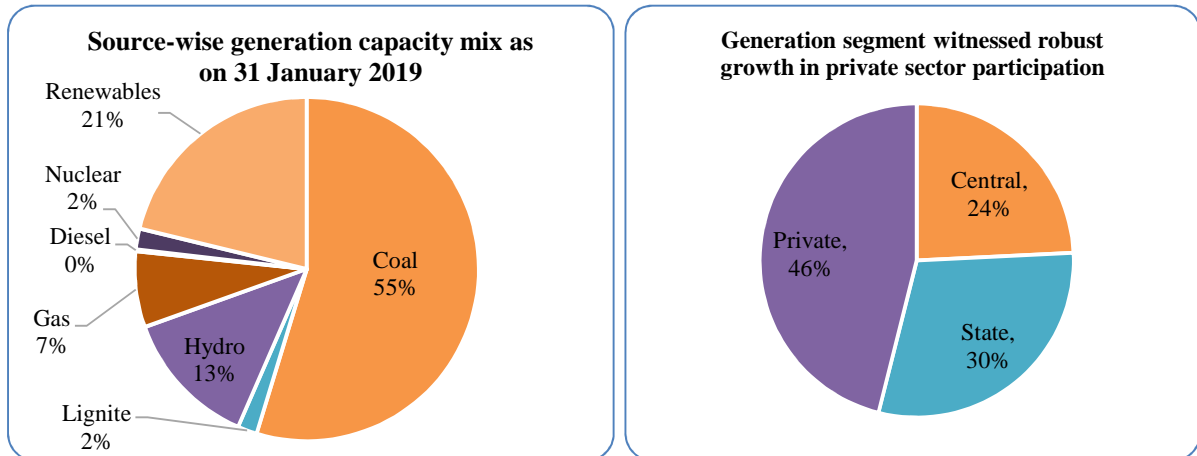
The total installed generation capacity in India is 344 GW as of March 2018. Around 121 GW of capacity was added in the past five years. Coal-based power generation has maintained its dominant position over the years and accounts for 57% of the installed capacity as of March 2018. Renewable energy installations have also witnessed robust growth over the past few years, and have reached approximately 69 GW capacity in March 2018, compared with 25 GW in March 2012, constituting approximately 21% of total generation capacity.

Evolution of Installed Generation Capacity (GW)

Source: CEA, CRISIL Research



Break Up of Installed Capacity as of March 2018 (MW)



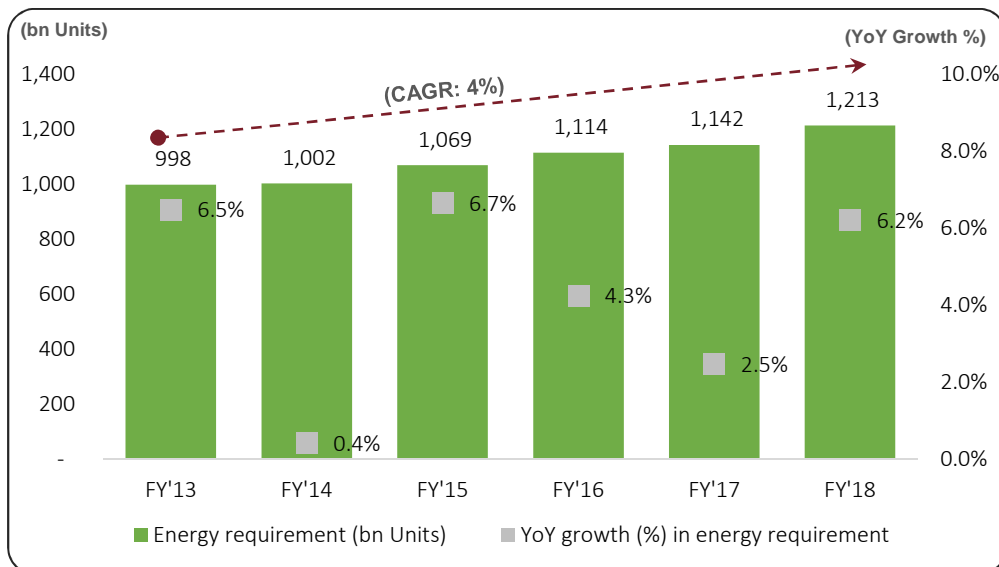
Source: CEA, MNRE, CRISIL Research

Key trends:

Increase in energy requirements and drop in power deficit in India: Energy requirement grew at a CAGR of approximately 4% over the past five years (fiscal 2013 to fiscal 2018). Growth was healthy in 2012-13 at 6.5% due to robust growth in economic activity and improved power availability supported by capacity additions of around 20 GW in each of these years. However, power demand stagnated in fiscal 2014, primarily on account of weak financial health of DISCOMs and slow GDP growth.

India Energy Requirement

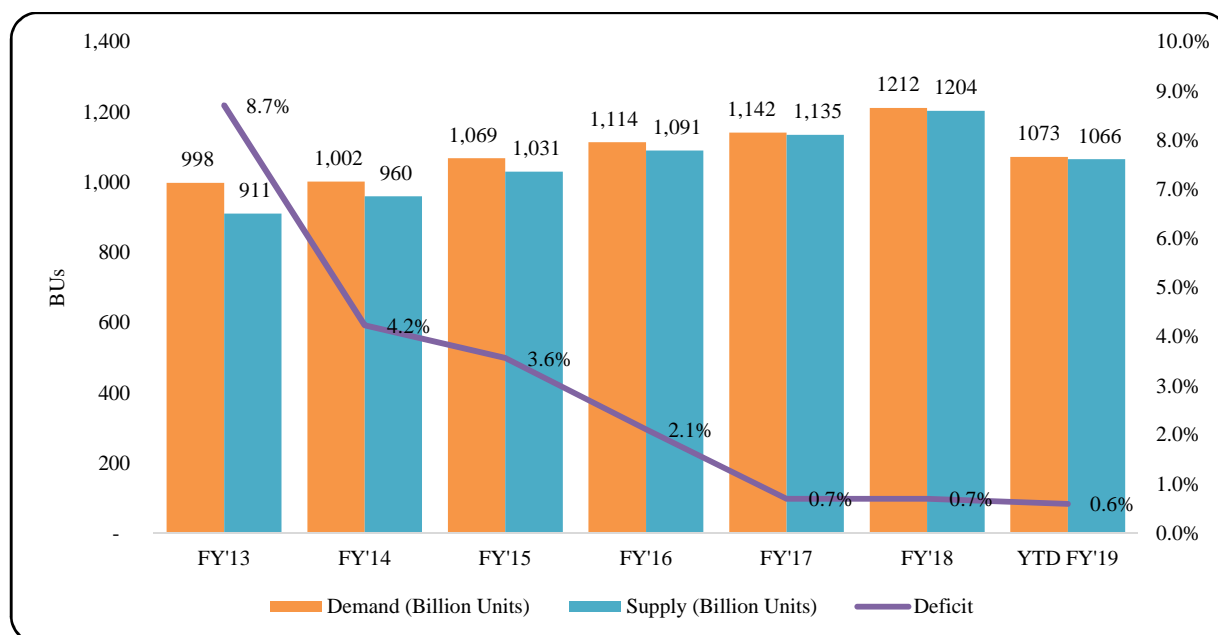
Source: CEA, CRISIL Research



Note: CAGR is calculated between 2012-13 and 2017-18.

Aggregate power demand supply (in billion units)

Source: CEA, CRISIL Research

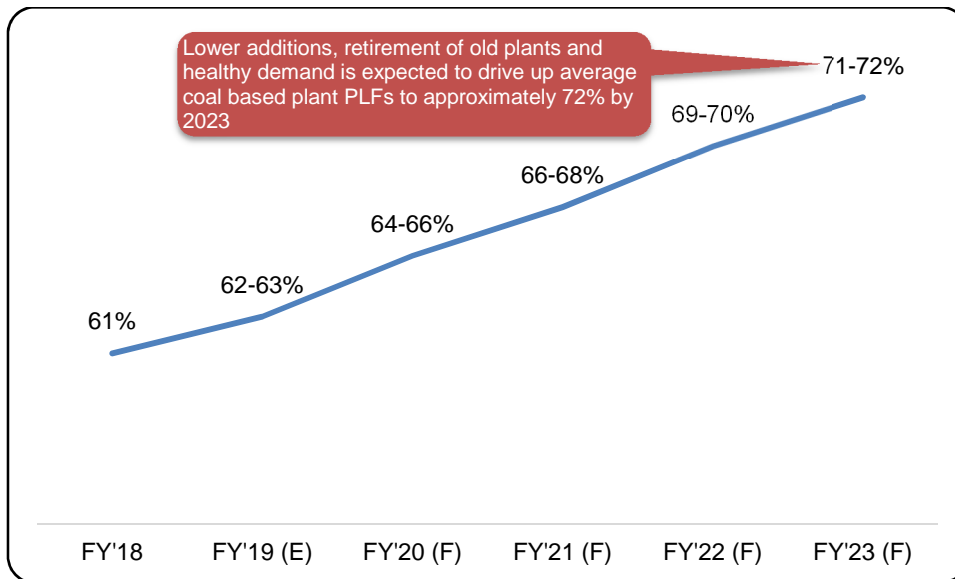


Note: "YTD FY'19" refers to the period from April 1, 2018 to January 31, 2019

In fiscal 2015, demand growth revived to 6.7% led by a pick-up in economic activity. Implementation of the financial restructuring plan for DISCOMs in seven states in fiscal 2014 and fiscal 2015 supported power off-take in these states. The growth tapered subsequently to 4.3% during fiscal 2016 and 2.5% in fiscal 2017 owing to slowdown in manufacturing activity, picking up again in fiscal 2018 to 6.2% driven mainly by rising electrical connections under the rural electrification and Saubhagya schemes. While the demand for power has been increasing, India continues to be a power deficit country. Energy deficit declined to 0.7% in 2017-18. However, energy deficit across regions is different, which implies that transmission capacity augmentation would be critical to effectively utilize assets. Energy deficit in 2017-18 in the southern region was 0.2% and that in the northern region was at 1.7%. On the other hand, energy deficit in the western region was negligible at 0.1%, while in the eastern region it was 0.8%. However, this does not imply that the power deficit is as low as it seemingly appears since off-grid untapped latent demand still persists and rural electrification as well as "24x7 power supply to all" is yet to be achieved.

It is expected that energy requirement growth will continue to be healthy at CAGR of 6.3% over fiscals 2019 to 2023. The growth is in line with the gradual improvement in economic output led by higher demand from key infrastructure and manufacturing sectors such as metals, mining, cement and auto. Power demand by industrial, non-industrial, agricultural and commercial segments is likely to increase, and overall power demand growth is expected to be driven by non-industrial segments.

Expected Trend in Coal Based PLF

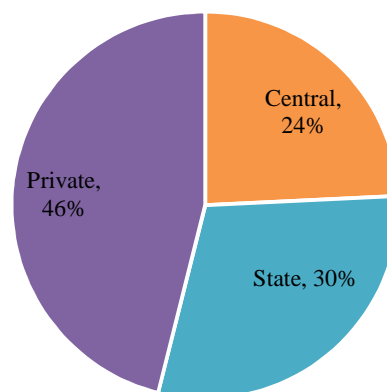


Source: CRISIL Research

- Improvement in PLFs:** Over the years slower growth in domestic coal production in comparison with the coal-based capacity addition resulted in fuel shortage for such plants. This resulted in lower capacity utilization with PLFs declining to 60.7% in fiscal 2018 from 65.6% in fiscal 2014. Additionally, lower power offtake due to deterioration in financial health of the state DISCOMs as well as limited connectivity (particularly connectivity to the southern grid), also contributed to the decline in average PLFs. However, strong economic growth along with recent structural reforms addressing the shortage of coal availability and improving the financial position of DISCOMs through schemes such as UDAY (Ujwal DISCOM Assurance Yojana), are expected to improve PLFs.

- Increased private sector participation:** Electricity Act, 2003 coupled with tariff based competitive bidding or TBCB for power procurement, encouraged private participation in the power transmission sector. Private players have commissioned significant capacity over the past decade. In fact, the share of the private sector in the power transmission segment has risen from nil in fiscal 2007 to almost 7% (in ckm) as of fiscal 2017, and approximately 7.2% as at January 2019, but this is still far behind the private sector penetration in the power generation section which increased considerably from approximately 13% in fiscal 2007 to 44% as of fiscal 2017.

Generation segment witnessed robust growth in private sector participation



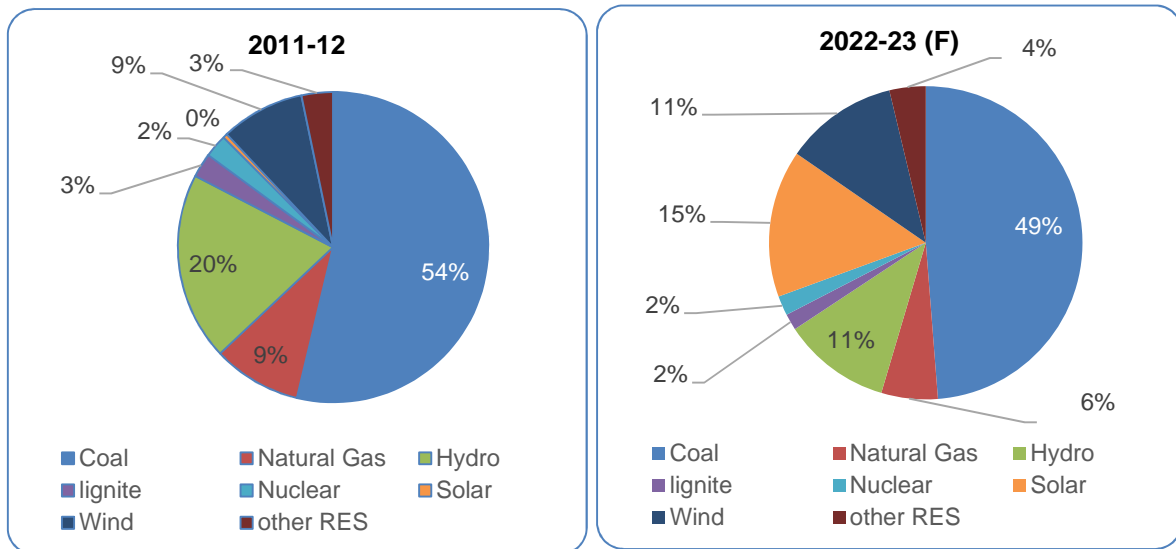
Source: CEA, CRISIL Research

As of January 2019, 46% of total generation projects were owned by private players. Central sector companies, such as the National Thermal Power Corporation (NTPC), the National Hydroelectric Power Corporation (NHPC) and the Nuclear Power Corporation of India (NPCIL) owned 24% of generation capacity, and the state governments owned the balance. As a result of competitive bidding, around 112 GW (from fiscal 2013 to January 2019) was added by the private sector, which accounted for approximately 54% of the total additions. This was primarily due to the implementation of competitive bidding in 2006, which opened the sector to private players.

- Increase in renewable energy generation capacity:** There has been a staggering growth in installed capacity of renewable energy sources from 7.8 GW in fiscal 2007 to 69 GW in fiscal 2018. Further, the government has planned to achieve a total renewable capacity of 175 GW by fiscal 2022 which primarily includes wind and solar capacities. Share of renewable capacity (in terms of installed capacity) would increase from approximately 12% in fiscal 2012 to approximately 30% in fiscal 2023.

Increase in share of renewable energy sources between fiscal 2012-2023

Source: CEA, CRISIL Research



Power transmission and distribution sector in India

Overview

The transmission segment plays a key role in transmitting power continuously from the generation plants to various distribution entities. Transmission and sub-transmission systems supply power to the distribution system, which, in turn, supplies power to end consumers. In India, the T&D system is a three-tier structure comprising distribution networks, state grids and regional grids. The distribution networks and state grids are primarily owned and operated by the respective state transmission utilities or state governments (through state electricity departments). Most inter-state and inter-regional transmission links are owned and operated by the Power Grid Corporation of India Limited (PGCIL), which facilitates the transfer of power between different regions. The transmission system in India operates at several voltage levels, which are listed below.

HVDC: ± 500 kV HVDC, ± 800 kV HVDC

Extra high voltage (EHV): 66 kV, 132 kV, 220 kV, 400 kV and 765 kV

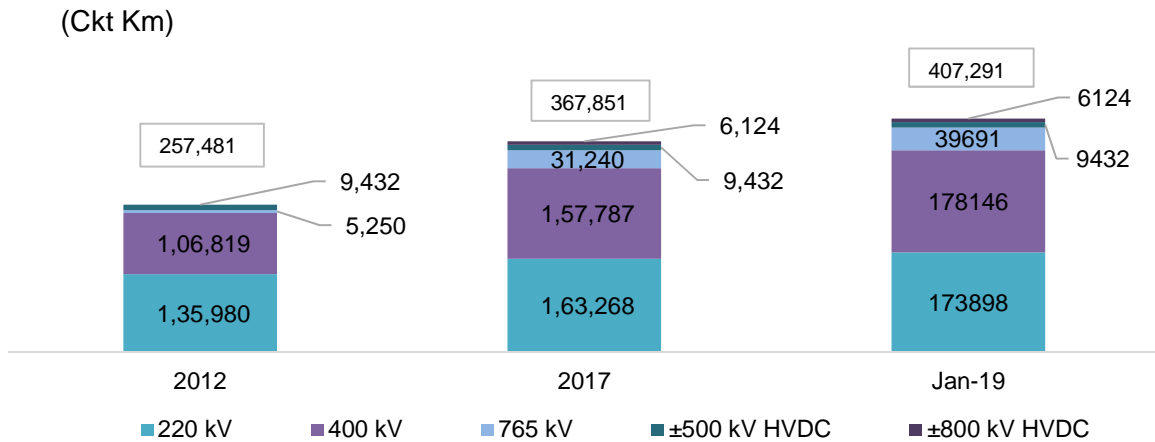
High voltage: 11 kV, 33 kV

Medium voltage: 440 volts

Low voltage: 220 volts

Strong growth in the length of high voltage transmission lines (above 220 kV)

Source: CEA, CRISIL Research



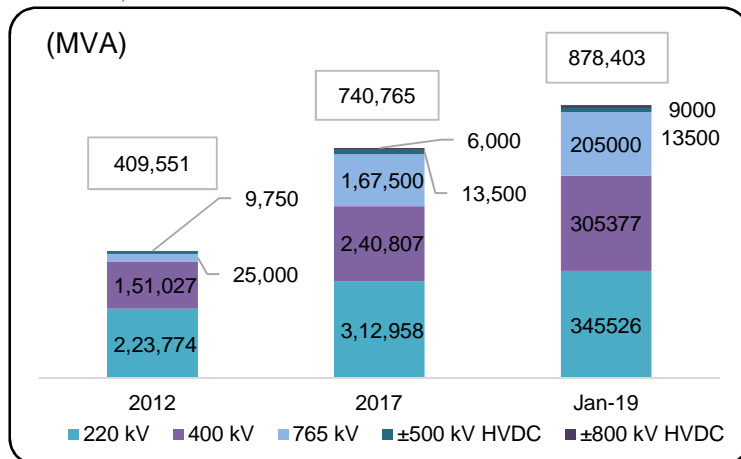
The government's focus on providing electricity to rural areas has led to the T&D systems being extended to remote villages. The total length of transmission lines in the country has increased from 407,569 ckm in fiscal 2010 to 604,193 ckm in fiscal 2018.

There has been strong growth in the transmission system at higher voltage levels and substation capacities. This is a result of an increase in the demand for transmission networks to carry bulk power over longer distances and at the same time optimize the right of way, minimize losses and improve grid reliability. The total length of the '220 kV and above' transmission lines in the country has increased from 257,481 ckm in fiscal 2012 to 407,291 ckm in January 2019.

The total EHV line length has increased at 7.7% CAGR between fiscal 2007 and fiscal 2012, whereas growth has increased by 11% CAGR between fiscal 2012 and fiscal 2017. Similarly, growth in the sub-station capacity addition was 12.9% CAGR between fiscal 2007 and fiscal 2012, and it has increased to 18.2% CAGR between fiscals 2012 and 2017. During 2017-18, the robust growth in capacity additions have continued which witnessed a 15.9% year-over-year rise. This increase can also be attributed to an increase in the commissioning of the 765 kV lines. 765 kV lines have higher transfer capacity and lower technical losses, thereby reducing the overall number

Robust growth in sub-station capacity (220 kV and above)

Source: CEA, CRISIL Research

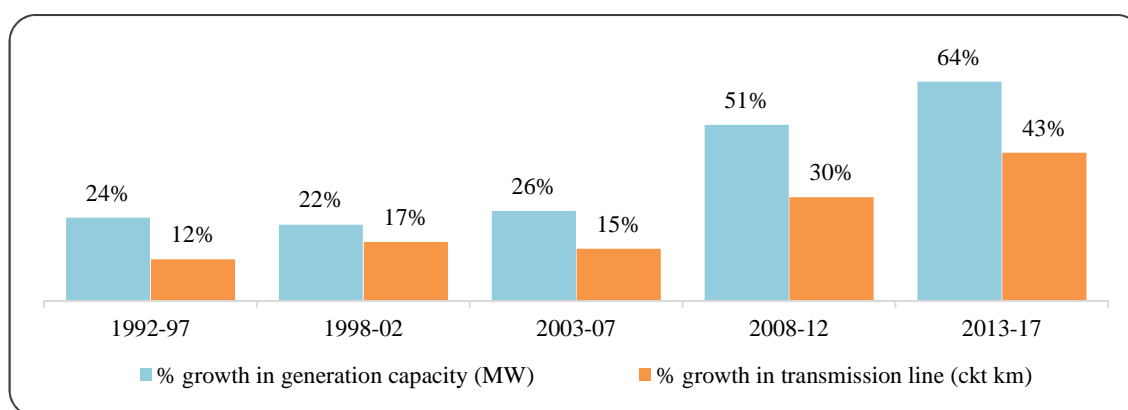


of lines and rights of way required to deliver equivalent capacity. Power performance in a transmission line increases as voltage increases and as 765 kV lines use one of the highest voltages, they experience a comparatively lesser amount of line loss. A growth of 9% year-over-year was recorded in 2017-18.

In spite of this strong growth in the transmission sector, there has been significant under investment in the transmission sector as compared to the generation sector. Historically, the generation segment has dominated investments in the Indian power sector. Of the total power sector investments, more than 60% are for the generation sector, while the transmission and distribution segments have lagged with approximately 20% of the total investments.

Transmission line growth has lagged generation capacity

Source: CEA, CRISIL Research

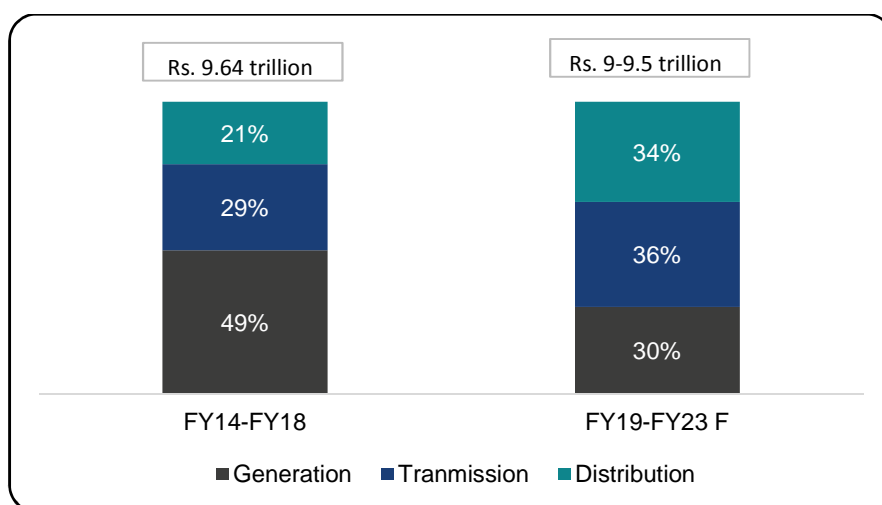


Note: For March 2012 and March 2017, the growth in transmission line is for 220 kV and higher voltage lines.

With the government's focus on alleviating congestion, transmission capacities are expected to witness robust growth. It is expected that the transmission segment share in total power sector investments will rise sharply to 36% over fiscals 2019 to 2023 from 29% over fiscals 2014 to 2018. With such large additions, the estimated investment in the transmission sector is expected to be Rs. 3.3-3.4 trillion over 2019-23. Investments in the sector are expected to be driven by the need for robust and reliable inter and intra state transmission system, to support continued generation addition, a strong push for renewable energy sector and rural electrification.

Share of Transmission Segment in Total Power Sector Investments to Sharply Rise

Source: CRISIL Research



The rising private-sector participation with favourable risk-return profile of transmission projects will also support growth in investments. From 2019-2023, private investment in the power transmission sector is expected to be steady at 10% of the total investment, compared with an estimated 14% in the 12th five year plan. Total investment over 2019-2023 is expected to be between Rs. 3.3 trillion to 3.4 trillion.

To facilitate the transfer of power between neighbouring states, state grids are inter-connected through high-voltage transmission links to form a regional grid. There are five regional grids in India, namely, northern, western, southern, eastern and north-eastern regional grid. As peak demand for power does not take place at the same time in all states, it results in a surplus in one state and a deficit in another and this mismatch has been facilitated by regional or inter-state grids. Additionally, they also facilitate the optimal scheduling of maintenance outages and better coordination between power plants. The Indian national grid has evolved over a period of 60 years and has recently achieved the 'one nation one grid' status. Although the interregional transmission capacity is still low, unification of grid has helped in bridging the gap between load centres and the demand centres in India.

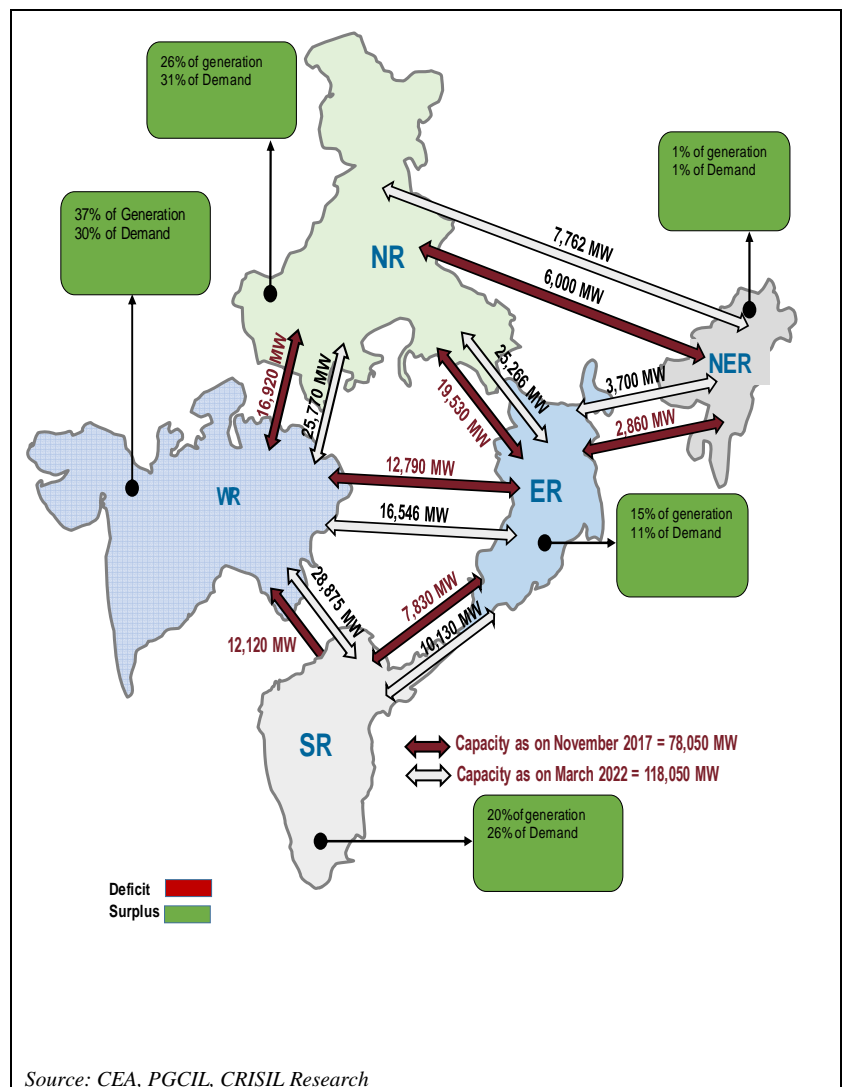
The advantages of a national grid system are:

- flatter demand curve (or a higher system load factor) on account of the exchange of power among regions, resulting in a better PLF and more economical operations;
- lower investments required for new generation capacity;
- Surplus power from one region being made available at economical costs to consumers in other regions;
- better scheduling of planned outages of power plants; and
- improved stability of the grid, as the share of an individual generating station in the total capacity declines with greater integration of the power system.

Key growth drivers for power transmission

The following points are the key growth drivers for power transmission in India:

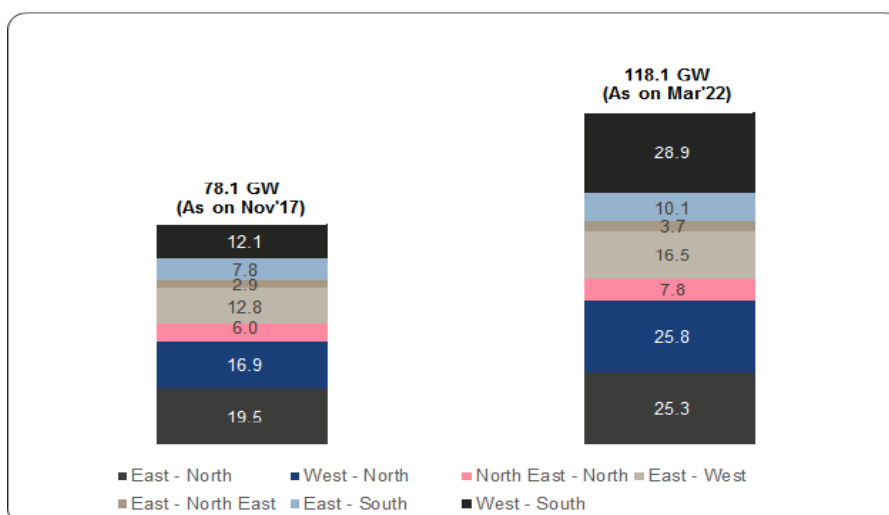
- *Widening gap between inter-regional power demand-supply to drive transmission capacity additions:* It is believed that the total power generation capacity in India would rise to approximately 463 GW by March 2023 from 344 GW in March 2018. However, it is predicted that the upcoming generation capacity will not evenly spread across India. Most upcoming renewable capacities are expected to be concentrated in the western and southern regions of India, while thermal capacities are expected to be concentrated close to the coal mines in the eastern region of India. As a result there will be inter-regional import/export demands, which will have to be catered through inter-regional transmission corridors. Despite healthy inter-regional transmission additions, on account of seasonal differences and time of day demand differences, large inter-regional transmission capacities would be required to prevent grid fluctuations. As per the Ministry of Power (Perspective Transmission Plan for Twenty Years, 2014-2034), it is estimated that the northern region will have a deficit of about 18,500 – 22,200 MW depending on the season, while the southern region will have a deficit of about 13,000 to 19,100 MW depending on the season at the end of fiscal 2022. Surplus in the western region is expected to be 11,500-15,900 MW in the summer peak, winter peak and winter-off peak conditions, while during the monsoon peak, the surplus is expected to drop to about 2,000 MW.



import/export requirement, a number of inter-regional transmission corridors have been planned and some of these high-capacity transmission corridors are in various stages of implementation. According to the PGCIL estimates, the inter-regional transmission capacity requirement is expected to be around 118 GW by fiscal 2021.

Inter-regional transmission capacity up to 2022

Source: CEA, PGCIL, CRISIL Research



Note: As the latest Perspective Transmission plan in accordance with PGCIL's revised inter-regional capacity target by March 2022 is not available, inter-regional capacity as on March 2022 is calculated in proportion to the old capacity augmentation target.

Given the inter-regional power supply differences, trading of power across regions becomes much more important and transmission grid is the key enabler of power trading markets. The price variance across regions will further propel the need for power trading across regions.

India has added approximately 20% (69 GW) of its total power capacity in the past three years (fiscals 2016 to 2018) itself, many of which do not even have a full PPA. Despite overall inter-regional transmission capacity having increased 1.6 times to approximately 75 GW in 2017 from 2015, that available for short-term open access has remained range bound between 10-20% across the period. Consequently, there are under-utilized capacities on one side and power deficits on the other. Improved and enhanced transmission corridors, which should help evacuate power from surplus region through power trading, is an important requirement to bridge this gap and improve PLFs.

- **Strong government support to drive transmission investments:** The Government has supported the transmission segment through several measures – increasing the concession period of a transmission asset, relaxation of norms to speed up project construction and implementation of UDAY scheme to boost power demand, which in turn will eventually result in a rise in transmission requirements.

The UDAY scheme aims to improve finances of DISCOMs and in turn boost power demand by reducing power purchase costs, improving efficiency, ensuring financial discipline on DISCOMs and reducing interest costs. Through this scheme the government aims to make power DISCOMs sustainable with a single-minded focus on cost-cutting. The UDAY scheme proposes to improve the financials through a three pronged approach – reducing power purchase costs, improving efficiency and reducing interest costs. The government acknowledges the need to improve transmission, especially in the southern grid and reduce coal and finance cost. It also emphasizes on the need to lower aggregate technical and commercial or AT&C losses, which are very high at 20-33% in some of the major states. The government aims at nominalizing AT&C costs to 15% in the top six states, as a result of which DISCOMs in these states could save a considerable amount by fiscal 2019.

State	AT&C losses% (Fiscal 2014)	AT&C % loss target by Fiscal 2019	Potential saving if AT&C loss reduces to target (Rs. bn)
Haryana	34	15	54
Uttar Pradesh.....	25	15	52
Rajasthan.....	27	15	47
Madhya Pradesh.....	28	15	45
Maharashtra.....	14	15	31
Bihar.....	46	15	29
Total.....			257

Source: Ministry of Power; CRISIL Research

As of March 2018, 32 States and Union Territories have agreed to be a part of the UDAY scheme. These states represent approximately 98% of the total outstanding debt of the DISCOMs' Rs. 3.8 trillion (as on March 2015). Out of Rs. 2.7 trillion worth of bonds to be issued, 86.3% (or Rs. 2.3 trillion) are already issued. Lower debt burden and subsequent reduction in power purchase cost and gradual decline in AT&C losses is expected to improve the financial health of distribution companies. This in turn will not only improve power offtake but also lead to more timely payment to generators by DISCOMs.

Through the 'Power for All' scheme, the government envisages to invest approximately US\$ 250 billion in the power sector, with a focus on upgrading the distribution and transmission infrastructure over fiscals 2016 to 2020 to augment the T&D network and drive investments. The objective is to connect the unconnected consumers in phased manner by fiscal 2018, and to ensure continuous quality, reliability and affordability of power to all domestic, commercial, agricultural and industrial consumers.

To cater to the above import/export requirement, a number of inter-regional transmission corridors have been planned and some of these high capacity transmission corridors are in various stages of implementation. The Government has eased norms to cut down approval time and administrative delays that could arise during the project execution period of a transmission line. Transmission line projects are mainly delayed on account of forest clearances and right of way issues. In order to address these issues, the government has taken steps to speed up approvals for transmission routes, forest and wildlife clearances.

The government has also boosted private sector participation in the sector, with an objective of increasing transmission capacity and reducing the power deficit. All future procurement of transmission enhancements are compulsorily being made through the TBCB route, with PGCIL itself bidding through TBCB except for certain high technology projects.

- *Upgradation of existing lines:* India has approximately 3.9 lakh ckm of transmission network as of March 2018 and most lines use aluminum core steel reinforced or ACSR conductors. The ACSR conductors have low current carrying and temperature withholding (85 degree Celsius) capacity as compared to other latest available technologies and substitutes such as Aluminum Conductors Composite Core and Copper Clad Composite Conductors which are high tension low sag conductors. These lines also have low efficiency which leads to increased losses. The World Bank in a recent study concluded that T&D losses in fiscal 2012 cost the Indian economy approximately 1% of its GDP. Upgradation and re-conducting efforts can augment capacity without the need for heavy investments and are less likely to give rise to right of way issues. Upgrading transmission networks to higher voltage also increases the power handling capacity of the system and the gestation period for upgrading a line is much less as compared to erecting a new line. Power transmission lines have reaped huge benefits in terms of increased power transmission capacity with such upgradation efforts.
- *Strong renewable energy capacity additions to drive transmission capacity:* Power generation in India is dominated by coal based generation, which is the primary fuel for approximately 56% of the total installed capacity in India. The use of other resources, such as renewable energy, is experiencing a staggering growth in installed capacity, from 7.8 GW in 2006-07 to 69 GW as of fiscal 2018. Going forward, it is expected that the growth in renewable energy capacity additions will be healthy. The government has already announced plans to increase renewable capacity to 175 GW by 2022.

Such expansion plans require large scale development in transmission sector. This is mainly because large solar and wind power plants are usually located in the far flung areas with limited infrastructure to support generation and transmission. Renewable energy is not well distributed across states and is infirm

in nature. The government has already implemented measures to develop the transmission capacities to support renewable capacity additions in India. Such initiatives include setting up of solar pooling stations and integrating solar and wind projects into the National Grid under the ‘Green Energy Corridors.’

- *Conventional power generation capacity additions to necessitate concomitant transmission capacity:* As of March 2018, there exists approximately 50 GW of under construction power generation projects, out of which, approximately 32 GW worth of power generation projects are expected to be commissioned over fiscals 2018 to 2023. Such commissions coupled with an estimated increase of approximately 6.3% in power demand is expected to necessitate augmenting of transmission capacities.
- *Cross border power trading in south Asian countries:* Power deficit in India has been on a declining trajectory. India is expected to further expand its generation capacity (conventional power) by approximately 32 GW over the next five years. India is also evaluating opportunities to tap neighboring countries such as Nepal, Bangladesh, Sri Lanka, Maldives and Bhutan for better integration and synergies by interlinking electricity transmission systems and allowing surplus power to be exported to other grids. These capacity expansion plans are expected to provide opportunities for private players in the transmission sector.

Financing transmission assets

Investments of Rs. 3.3-3.4 trillion over fiscals 2019-23 is not expected to be challenging given the past track record of both public and private sectors’ ability to generate funds. In fact both public and private developers have been successful in tapping the capital markets, apart from traditional bank financing options. PGCIL, for instance, has undertaken about 10 private placements since January 2014 raising up to Rs. 272 billion. Similarly, Adani Transmission has done 7 private placements aggregating to approximately Rs. 46 billion. ENICL, a project of SPGVL, in January 2016, issued the first SPV level bond in the sector for an amount of Rs. 925 crore with a credit rating of AAA (SO) from CRISIL and India Ratings. These companies have been successful in raising debt via bond market owing to lower associated risks and higher revenue reliability of the underlying assets. Transmission line businesses enjoy longer asset life of 50 years as compared to other infrastructure projects such as roads. Further, they have higher payment security and lower counter party risk owing to the involvement of central transmission utility or CTU as a collection agency for payments under point of connection or PoC mechanism.

Regulatory

Overview

The electricity sector in India was largely controlled by government owned entities. With rapid industrialization, demand for power witnessed an upsurge, which necessitated significant investments. This compelled the government to open this sector to private participation. The table below highlights the evolution of the regulatory regime in the transmission sector in India:

Timeline of regulatory changes

Source: CRISIL Research

1910	1948	1998	2003	2005	2006	2008	2014	2016
Indian Electricity Act - Amendment in 1991	The Electricity (Supply) Act - Amendment in 1998	Electricity Regulatory Commission Act	The Electricity Act: 2003	National Electricity Policy	National Tariff Policy	Open Access (Revision)	Electricity Amendment bill	National Tariff Policy
Covered technical and operating standards of Indian Power sector	<ul style="list-style-type: none"> Creation of SEB's, CEA and CGU's. Creation of CTU, STU. Specified licensing role of CERC & SERC. 	<ul style="list-style-type: none"> Separate regulatory bodies at state and centre Creation of central and state transmission utilities 	<ul style="list-style-type: none"> Unbundling & corporatisation of Electricity sector Open Access in T&D sector Power Trading to be encouraged Captive generation to be encouraged ABT introduced 	<ul style="list-style-type: none"> Commercial viability Access of power Protection of consumer interest 	<ul style="list-style-type: none"> Competitive bidding in transmission Competitive bidding in power procurement cost plus regulated returns under Gen,trans.& dist. 	<ul style="list-style-type: none"> NLDC appointed as nodal agency for bilateral transactions PoC methodology for collective transactions 	<ul style="list-style-type: none"> Segregation of carriage & content Promotion of renewables Tariff Rationalisation Enhancing grid safety and security 	<ul style="list-style-type: none"> Competitive bidding in transmission Solar RPO increased to 8% by FY22 Bundling of renewable power No transmission charges and losses for solar & wind
2017-18			2017-18			Note:		
Amendments (Draft) National Tariff Policy and other regulatory changes			Other regulatory/Non-regulatory changes in Power sector in India			<ul style="list-style-type: none"> CEA - Central Electricity Authority SEB - State Electricity Boards STU - State Transmission Utilities CTU - Central Transmission Utilities CGU - Central Generating Units CERC - Central Electricity Regulatory Commission SERC - State Electricity Regulatory Commission ABT - Availability based tariff NLDC - National Load Despatch Centre PoC -Point of Connection NATAF - Normative Annual Transmission Availability Factor HVDC - High Voltage Direct Current RPO - Renewable purchase obligation 		
<ul style="list-style-type: none"> Provision of penalty against discoms for un scheduled load shedding without valid reasons. Introduction of smart pre-paid meters Increase fixed monthly rentals in line with two part tariffs. Computation of tariffs factoring in 15% AT&C losses and capping cross subsidies at 20% of APPC of the discom Low cost benefits arising out of depreciated assets (Generation, Transmission and Distribution) shall be passed on to the consumer. Further, in order to prevent squatting of ISTS transmission connections and promoting inter state transmission of RE power CERC revised its grant of connectivity and general network access regulations 			<ul style="list-style-type: none"> As per the new RBI notification on stressed assets, projects with payment delays (both principal and Interest) to banks of 30 days will fall under special mention accounts category. Foreign direct investment (FDI) and investments by foreign portfolio investor (FPI) were allowed upto 49 percent of investments under power exchanges of India. 					

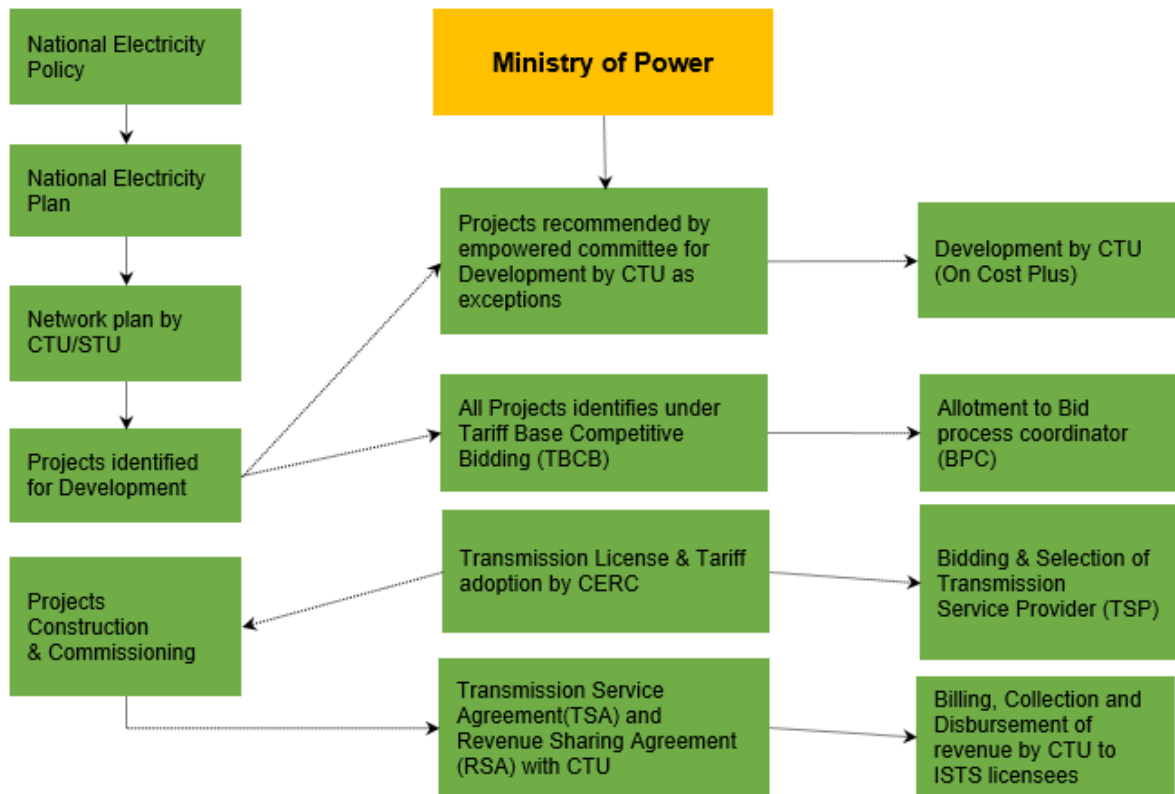
Electricity Act, 2003

The electricity sector in India has undergone significant structural changes, particularly over the last decade, with the enactment of The Electricity Act 2003. The act lowered barriers to private participation in the transmission sector and established competitive bidding for certain transmission projects under the TBCB scheme, with both public utilities and private businesses being allowed to participate in the bidding for these projects, either individually or through joint ventures. The Act also gave CERC and the state regulatory boards the mandate to grant licenses for the construction, maintenance and operation of transmission lines.

National tariff policies

Under the National Tariff Policy, 2006, the government further emphasized competitive bidding for new transmission projects by introducing the TBCB scheme for all transmission projects. The policy also promoted competition in the construction of transmission infrastructure, encouraged greater investment by private business in the sector and increased transparency. India is one of the few countries which has opened up its transmission sector for private participation, and has garnered significant interest from private business. In May 2018, the government proposed amendments to the national tariff policy, which aim to improve power supply, provide clarity to competitively bid projects, reduce cost burden on consumers, and boost the renewable energy segment.

The Indian transmission business framework

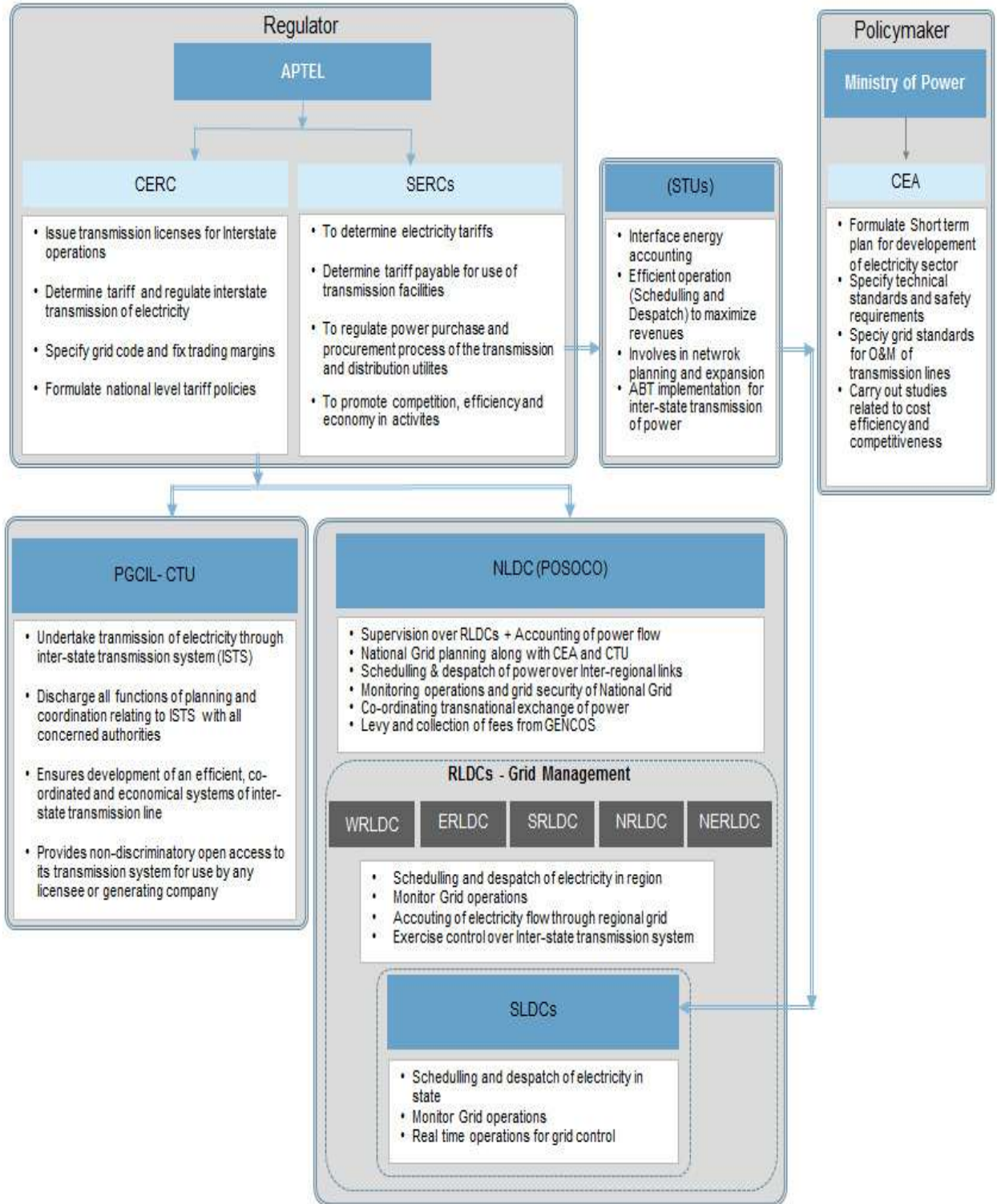


Role of various agencies

Transmission of power in India takes place under a comprehensive framework involving multiple organisations including, state transmission utilities or STUs, central transmission utility or CTU, Power System Operation Corporation or POSOCO, state load dispatch centres or SLDCs, regional load dispatch centres or RLDCs, and National Load Dispatch Centre or NLDC. Other agencies such as the Central Electricity Authority or CEA and Regional Power Committees or RPCs play an advisory role in shaping up the transmission sector policies, ensuring grid stability, smooth and economical operation of the grid. The following table depicts the role and hierarchy of various agencies.

Schematic depicting role and hierarchy of various agencies

Source: CRISIL Research



Tariff Structure

Overview

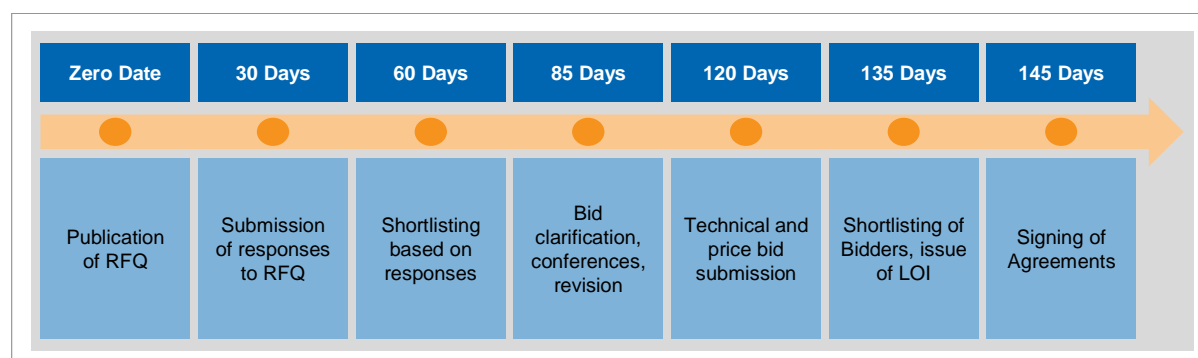
Being a critical link in the power sector value chain, the transmission sector needed more attention to cater to the growing power demand and the increasing generation capacity. Investments in the form of budgetary allocations, internal accruals and PSU borrowings were unable to fund this growing need. Keeping this in mind, the Electricity Act permitted private sector participation through the tariff based competitive bidding or TBCB route in the power transmission sector. Guidelines for the TBCB process were laid down in the National Tariff Policy, 2006.

Tariff based competitive bidding

Under the TBCB, tariff for projects is not on a cost plus basis and bidders are required to quote tariff for a period of 35 years for establishing transmission lines. The bidder quoting the lowest levelised tariff, is selected. The successful bidder is then required to acquire a special purpose vehicle or SPV incorporated by the bid process coordinator or BPC. Once the process of acquisition is complete, the SPV approaches CERC to obtain a transmission license.

The bidding process is coordinated by the Bid Process Coordinator or BPC under a well-defined framework stipulated by Ministry of Power. The Ministry of Power has notified bid documents i.e., the RFQ and RFP for the purpose of bidding. The bid documents include details of the project, such as, construction milestones, financial and technical qualification requirements to be met by the bidders, details of the model TSAs, other technical, operational and safety criteria, bid evaluation methodology, demonstration of financial commitments from lenders at the time of submission of the bids. After the submission of bids, a bid evaluation is undertaken by a committee constituting at least one member from the CEA. The bidder who has quoted the lowest transmission charge as per the evaluation procedure, is considered for the award. After selection, the bidder is required to acquire the project SPV from the BPC and make an application for grant of transmission license to CERC. The successful bidder is designated as the transmission service provider or TSP. The TSP commissions the line as per the schedule specified in the TSA with the long term service customers, the effective date for start of project development being the date of acquisition of SPV by the TSP. In case the TSP commissions the project early, he is eligible to get early transmission revenues as well as incentives.

The timeline of the bidding process is as follows:



Source: CERC regulations, CRISIL Research

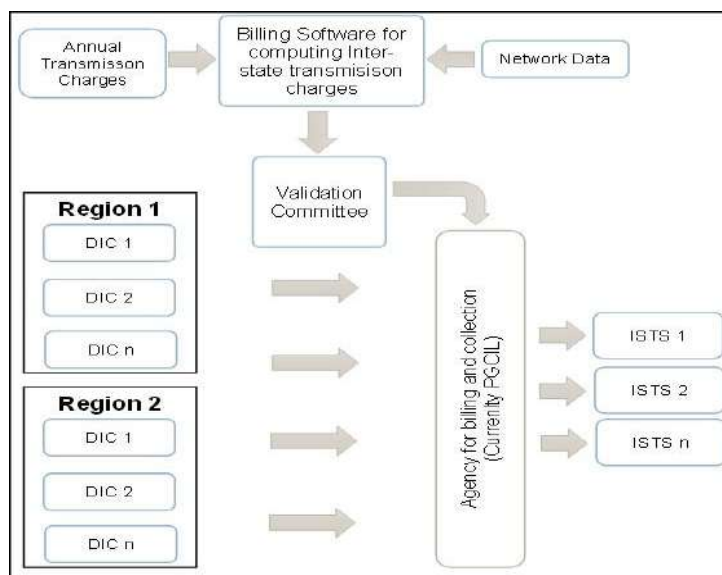
Point of connection mechanism

- **Overview:** In 2011, CERC introduced the point of connection or PoC mechanism under the Central Electricity Regulatory Commission (Sharing of inter-state Transmission Charges and Losses) Regulations, 2010 for determining inter-state transmission charges. The PoC methodology was introduced to meet the requirements of an integrated grid with rapidly increasing inter-regional transmission of power. It replaced the regional postage stamp method, which was more suited to simple power flows restricted to a small geographical area or electric network. With the new system, the regulator aims to promote an efficient transmission pricing regime that is sensitive to distance, direction and quantum of power flow – factors which were not addressed by the postage stamp method.
- **About PoC:** In the PoC method, the transmission charges to be recovered from the entire system are allocated between users based on their location in the grid. The inter-state grid has been divided into generation and withdrawal (demand) zones, and prices for each zone are determined by an algorithm based on the load profile of the zone. Separate transmission charges are attributable to both generators

and distribution companies as they are both deemed to be beneficiaries of the transmission network. However, in almost all cases, transmission charges attributed to the generator are recovered from the DISCOMs. The transmission grid is divided into injection and withdrawal nodes and for the sake of simplicity, various nodes of a contiguous region have been further aggregated into zones. The charges for each node are determined by an algorithm. The algorithm is based on load flow analysis of the entire transmission network and how a change in injection or withdrawal of 1 MW of power at each node affects the network. Thus, it captures the network utilisation of each zone. The algorithm also takes into account the electrical distance and direction of power flows for each node in the system.

The total PoC charges to be paid for a transaction between two locations is the sum of the PoC charges and losses of a generator zone and injection zone. With the PoC mechanism, a universal TSA and RSA is in place and all beneficiaries including ISTS licensees, deemed ISTS licensees, other non-ISTS licensees whose assets have been certified as being used for interstate transmission by the RPCs will be default signatories to the TSA and RSA approved by CERC. The RSA determines the terms and conditions for billing, collection and disbursement procedure for the ISTS licenses and DICs while TSA determines the terms and conditions for revenue accrual and other operation related parameters.

- **Procedure for payment:** Under the PoC mechanism, the CTU or PGCIL acts as the revenue aggregator and collects payments from all the DICs based on the inputs received related to utilization of the transmission network. The CTU is responsible for billing and collecting these charges from the various users and disbursing them to transmission licensees. CTU functions as a single point of contact between transmission licensees and the users.



Source: CERC, CRISIL Research

Components of tariff

Tariffs comprise fixed and variable components and are billed, collected and paid to us through the PoC mechanism.

- **Availability based tariff:** Inter-state power transmission projects receive tariffs on the basis of availability, irrespective of the quantum of power transmitted through the line. These ‘availability-based’ tariffs incentivize transmission system operators to provide the highest possible system reliability, which is defined as the time in hours during a given period for which the transmission system is capable of transmitting electricity at its rated voltage, expressed as a percentage of total hours in the period. The transmission line developer is entitled to get an incentive amount (if availability is more than 98.5% for HVDC and more than 99.75% for HVAC). Also, in the case of low availability of a transmission line, a penalty is to be paid by the transmission service provider, which will be apportioned in favour of the long term transmission customers in the ratio of transmission charges paid or actually payable at the end of contract year. However adequate training and deployment of advanced techniques such as use of helicopters for live line aerial patrolling, hot line maintenance, equipment condition monitoring including

dynamic testing and use of thermos-vision scanning may result in higher transmission network availability.

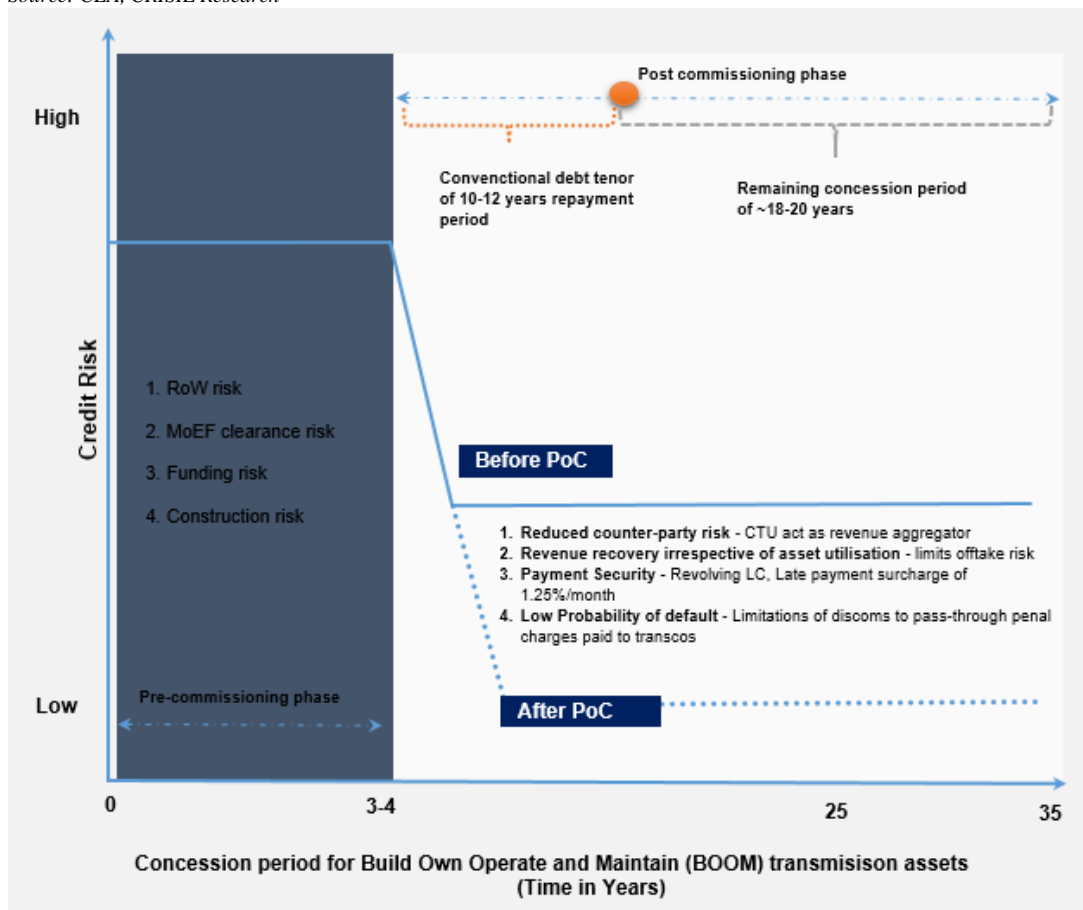
- *Transmission charges:* The electricity transmission tariff is paid to license holders in the form of transmission charges by PGCIL. The tariff rates are comprised of a fixed non-escalable charge and a variable escalable charge which is linked to the inflation index in India which is published by CERC every 6 months. In addition to this, there might be an incentive payment, as described above.

Factors Encouraging Investments In Power Transmission In India

- *Operational power transmission projects have minimal risks:* In the project construction phase, transmission assets face execution risks including right of way, forest and environment clearances, increase in raw material prices etc. However, post commissioning, with the implementation of PoC mechanism, there is limited offtake and price risk. Thus, operational transmission projects have annuity like cash flows and steady project returns. Tariffs payable to the ISTS have a fixed escalable component which ensures stability in cash flows. The variable component is linked to the inflation index in India, which is relatively a smaller component of the tariff. The yearly transmission tariffs are recovered from all existing users of the ISTS, regardless of the commissioning of the associated generation plant and utilization of the line. Hence, revenue recovery is not linked to volume of power flowing through transmission assets as long as normative line availability is met.

Credit risk through a transmission project life cycle

Source: CEA, CRISIL Research



- *Availability based regime:* As per the TSA, the transmission line developer is liable to get an incentive amount (if availability is more than 98.5% for HVDC and more than 99.75% for HVAC) in the ratio of the transmission charge paid or actually payable at the end of the contract year. Also, in case of low availability, a transmission licensee is liable to pay a penalty under the TSA, which will be apportioned in favour of the customers. Maintaining availability in excess of the targeted availability gives the

relevant asset the right to claim incentives at pre-determined rates, ensuring an adequate upside to maintaining availability.

- Counter-party risk diversified:** Given pan-India aggregation of revenue among all TSPs and not asset specific billing, the counter party risk is diversified. As the load growth increases, the pool of beneficiaries as well as transmission providers is likely to go up resulting in further diversification. Considering that no single counter party is over 15% of the pool, weighted average credit quality of the pool is significantly better than individual constituents. If a particular beneficiary delays or defaults, the delay or shortfall is prorated amongst all the licensees. Thus, delays or defaults by a particular beneficiary will have limited impact, which will be proportionate to its share in overall ISTS. For example, assuming the system has 3 ISTS licensees (L1, L2 and L3). The total transmission charge for any given period is INR 100 /- which is to be paid to the 3 licensees in the proportion of 50%, 30% and 20%. Assuming the recovery or total amount aggregated by PGCIL is INR 90 /- (shortfall of INR 10/-), the collection would be distributed to the 3 licensees in the proportion of their billing amounts as illustrated in the table. Also, if for some reason, some beneficiary have defaulted or submitted the request for relinquishing long term open access, transmission charges per MW per month for the subsequent quarters are adjusted upwards for the remaining beneficiary. This methodology ensures that there is inbuilt gross up to ensure that there are no sustained delays or defaults without mitigation.

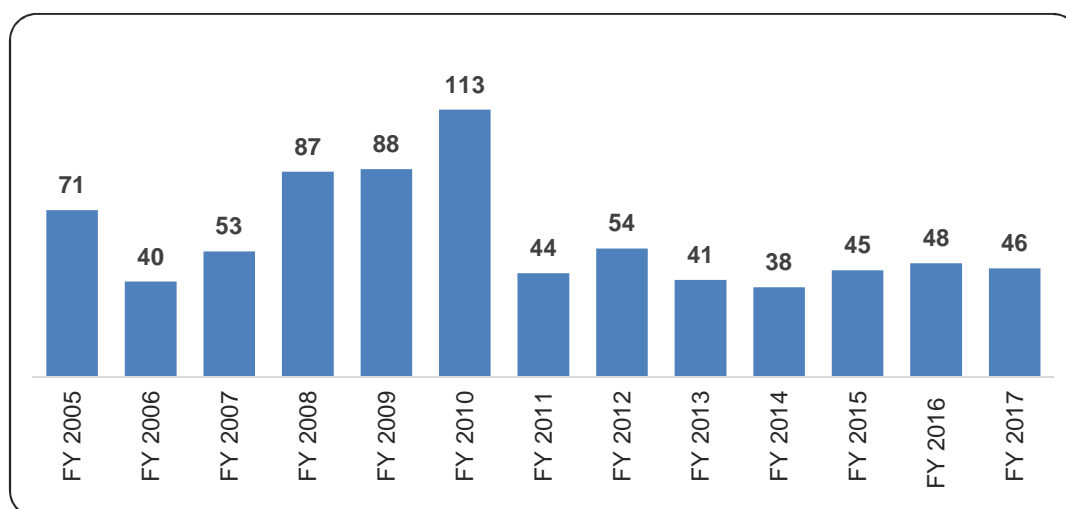
ISTS Licensee	Transmission Change (INR)	Collection from DICs (INR)	Proceeds to ISTS Licensees (INR)
L1	50	90	45
L2	30		27
L3	20		19
Total	100		90

Source: CRISIL Research

- Collection risk offset owing to presence of CTU:** According to CERC (sharing of inter-state transmission charges and losses) regulations, 2010, PGCIL has been assigned the responsibility of carrying out activities including raising of transmission charge bills on behalf of all ISTS licensees, collecting the amount and disbursing the same to ISTS licensees. The CTU functions as a single point of contact between transmission licensees and the users. Thus, a private transmission licensee no longer needs to collect transmission charges from multiple DISCOMs for each transmission project. Instead, the transmission revenue payable to the licensee is disbursed by the CTU on a monthly basis. Moreover, the collection track-record of the CTU is fairly good and the receivable collection cycle has shown considerable improvement over the past few years. PGCIL do not possess any history of payment default to the TSP under the PoC mechanism.

Trend in Receivable Days of PGCIL

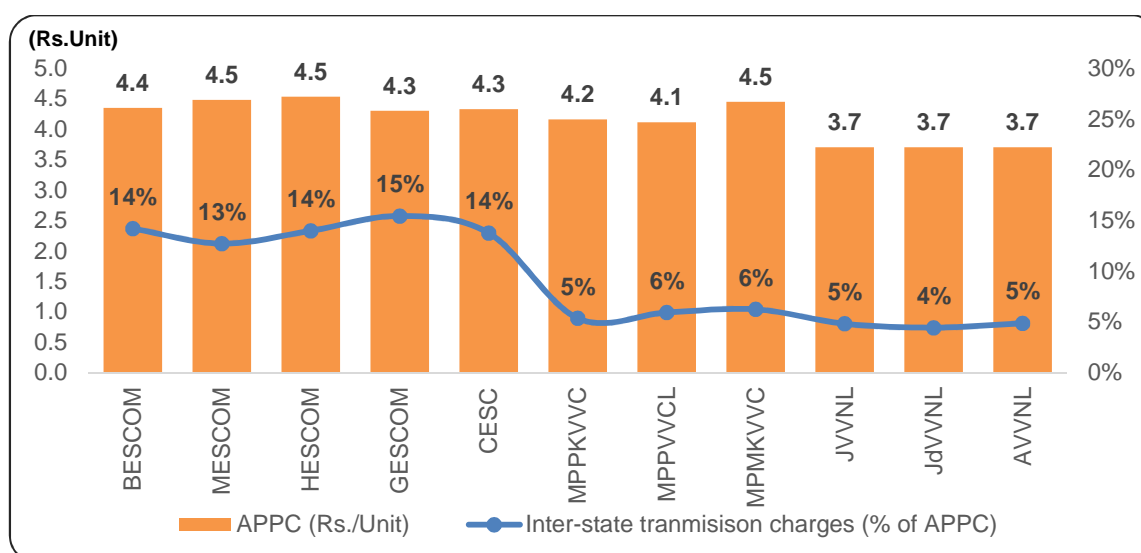
Source: PGCIL Annual Reports, CRISIL Research



- *Payment security:* The TSA includes an arrangement for payment security, which reduces under-recovery of revenues. Payment security is available in terms of a revolving letter of credit of required amount that can be utilized to meet the revenue requirement in case of a shortfall. Further, in the event of default by DISCOMs the impacted generation company can sell the regulated volumes of power to third party buyers and proceeds from such transaction will be paid to the transferring company on a pro-rata basis, after adjustment of energy charges and incidental expense by the generating company.
- *Relatively low probability of default:* Beneficiaries are less likely to default on transmission charges as there exists limited alternative infrastructure to supply/off-take the power. In fact, transmission licensees have the right to restrict long-term/medium-term access to transmission network. As per the CERC's order dated September 2, 2015 on regulation of power supply, PGCIL in consultation with power system operation corporation limited or POSOCO can deny STO/MTOA/LTA to the defaulting utility which can be treated as a transmission constraint and POSOCO may issue a schedule to the defaulting beneficiary in case of the transmission constraint. Also, there exists a late payment surcharge of 1.25% per month for delay in payment beyond 60 days from the date of billing. Further there are limitations on transmission utilities to pass on the additional cost incurred on account of penal interest to the end users. Given a confluence of the above factors, the beneficiaries are less likely to default. Moreover, transmission costs form a relatively lower proportion of the total operational costs. In fact, for Karnataka, Madhya Pradesh and Rajasthan the interstate transmission charges account for less than 5% of the total power purchase cost.

Inter-state Transmission Cost as Percentage of Average Power Purchase Cost of DISCOMS

Source: MYT Tariff petitions of DISCOMs, CRISIL Research



Pace of awarding projects under TBCB has gathered steam: Between fiscals 2011 and 2015, the pace of awarding a project was slow with only Rs. 180-190 billion of projects being awarded. However, it has significantly increased with projects aggregating to approximately Rs. 260 billion being awarded in fiscal 2016. The government is expected to continue its focus on accelerating the award of transmission projects in fiscal 2019. Below is a list of projects as of March 2018 which are expected to be awarded under the TBCB model.

The list of projects expected to be awarded under the TBCB mode as of December 2018

Source: CEA, PFCL India, RECTPCL, CRISIL Research

Name of Tender	Type	Stage of Tender	Location	Est. Cost (INR bn)
WRSS-21 Part-A (TBCB)-Transmission system strengthening for relieving over loadings observed in	ISTS	Approved in 3 rd ECT	Gujarat	8.56

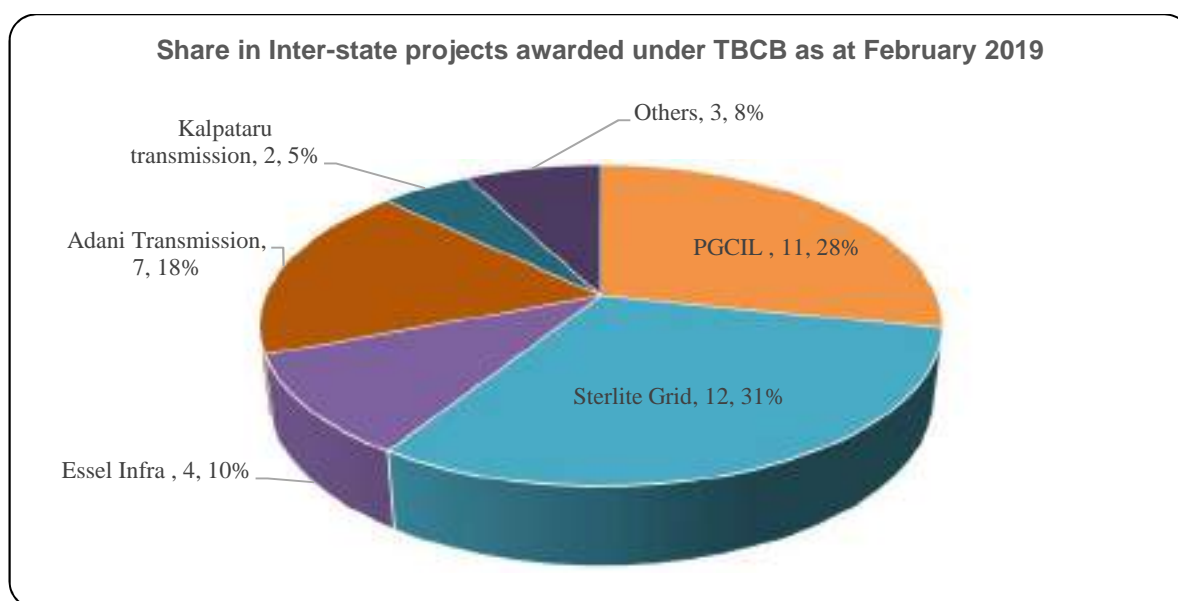
Gujarat Intra-state system due to RE injections in Bhuj PS				
WRSS-21 Part-B-Transmission system strengthening for relieving over loadings observed in Gujarat Intra-state system due to RE injections in Bhuj PS	ISTS	Approved in 3 rd ECT	Gujarat	18.65
Transmission system associated with RE generations at Bhuj-II, Dwarka & Lakadia	ISTS	Approved in 3 rd ECT	Gujarat	10.75
Transmission system for providing connectivity to RE projects at Bhuj-II (2000 MW) in Gujarat	ISTS	Approved in 3 rd ECT	Gujarat	6.45
Jam Khambhaliya pooling station and interconnection of Jam Khambhaliya pooling station for providing connectivity to RE projects (1500 MW) in Dwarka (Gujarat) and installation of 400/220 kV ICT along with associated bays at M/s CGPL Switchyard	ISTS	Approved in 3 rd ECT	Gujarat	4.35
Construction of Ajmer (PG)-Phagi 765 kV D/C line along with associated bays for Rajasthan SEZ	ISTS	Approved in 3 rd ECT	Rajasthan	5.83
Scheme transmission system associated with LTA applications from Rajasthan SEZ Part- B	ISTS	Approved in 3 rd ECT	Rajasthan	6.76
Scheme to control transmission system associated with LTA applications from Rajasthan SEZ Part- C	ISTS	Approved in 3 rd ECT	Rajasthan	13.65
Scheme transmission system associated with LTA applications from Rajasthan SEZ Part- D	ISTS	Approved in 3 rd ECT	Rajasthan	12.08
Strengthening in Jharkhand (Package 1)	InSTS	RFP	Jharkhand	10.3
Strengthening in Jharkhand (Package 2)	InSTS	RFP	Jharkhand	9.6
Strengthening in Jharkhand (Package 3)	InSTS	RFP	Jharkhand	7.0
Strengthening in Jharkhand (Package 4)	InSTS	RFP	Jharkhand	11.8

400 kV Udipi (UPCL)-Kasargode D/C line	ISTS	RFQ	Karnataka, Kerala	6.7
Intra-state transmission work associated with construction of 400 kV Substation near Guna (Dist-Guna)	InSTS	RFQ Submitted	Madhya Pradesh	7.1
Western Region Strengthening Scheme- XIX (WRSS-XIX) and North Eastern Region Strengthening Scheme IX (NERSS- IX)	ISTS	RFP	WR/NR	6.0

Market share captured by two players under TBCB: As on February 2019, 39 interstate (1 project scrapped) transmission projects have been awarded through the TBCB system, of which almost 27 are won by private players while the remaining 11 are won by PGCIL. Among private developers, SPGVL is the leading market player with a market share of 31%. Based on the transmission assets under operation, SPGVL is operating maximum line length of approximately 7,875 ckms and approximately 14,800 MVA of transformation capacity across 15 states. Some of the other major players include Adani Transmission and Essel Infra.

Share in 34 Number of Projects Awarded under TBCB

Source: Monthly Progress Report of Transmission Projects awarded through Tariff Based Competitive Bidding (TBCB) Route (CEA), CRISIL Research



- Short term open access availability is limited, which is likely to drive transmission capacity additions:* There exist significant transmission constraints for availing short-term open access between two regions. Despite overall inter-regional transmission capacity having increased 1.6 times to approximately 75 GW in 2017 from 2015, that available for short-term open access has remained range bound between 10-20% across the period. This is reflected from the significant disparity in merchant prices on power exchanges between power surplus and power deficit regions. For instance, prices in Tamil Nadu, Kerala and Puducherry were relatively high at Rs. 3.2-3.3/unit during high demand. Apart from high demand of electricity in the region, prices were high on account of congestion (lack of transmission infrastructure) between southern regions and other regions of India, coupled with market splitting on the power exchanges. Although, transmission connectivity to the southern region has increased, availability for short-term open

























access has been constrained. Going forward, the congestion to the southern region is expected to reduce with the commissioning of the 6000 MW Raipur-Pugalur HVDC system.




- *Investments in 765 kV transmission lines to reduce congestion and merchant prices:* 765 kV lines have higher transfer capacity and lower technical losses thereby reducing the overall number of lines and rights of way required to deliver equivalent capacity. Power performance in a transmission line improves as voltage increases and as 765 kV lines use the highest voltage, they experience the least amount of line loss.
- *Transmission projects have favorable risk return profile as compared to other infrastructure projects:* Returns from various infrastructure projects like roads, ports and power generation rely mostly on the operational performance of the assets, which in turn is dependent on factors where developers have limited control. While in the case of ISTS transmission projects the revenue counter party is a pool of distribution and generation companies, thus reducing the counterparty risk based on account of diversification. Also, in the case of an inter-state transmission asset, the revenue stream is consistent based on the unitary charge (₹ million/annum) determined at the time of bidding for the entire concession period of 35 years. These charges are independent of the total power transmitted through the transmission lines and hence factors such as volume and traffic do not fluctuate the revenues. Moreover, inter-state transmission assets have limited operation and maintenance or O&M costs as compared to other infrastructure assets. Typically, transmission projects incur relatively low O&M costs of 7-8% of revenues in order to ensure normative availability. In comparison, road projects incur costs as high as 35-40%.

In addition, transmission lines could also be used for providing telecom services thereby diversifying the revenue profile. Telecom and data service companies leverage reach of the transmission towers in potential semi-urban and rural regions to offer their services. Thus, other infrastructure projects, over and above the construction risk, also bear the risk of poor returns in case of lower utilization of assets. Transmission projects, on the other hand, are insulated from such risk, thus making it an attractive investment.

The Chart Given Below Compares Other Infrastructure Assets to the Transmission Assets

Source: CRISIL Research

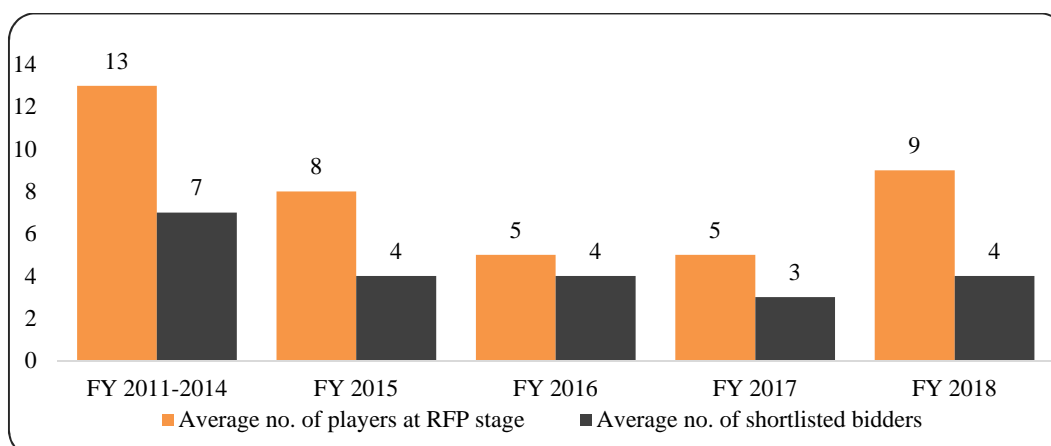
	Inter State Power Transmission	Power Generation	Roads	Ports
Certainty of Cash Flows	 Driven by long-term agreements	 Offtake and cost of fuel key risk	 Traffic risk in BOT projects	 End-user industry risk
Counter Party Risk	 Exposure limited to systemic risk	 Direct exposure to debt-laden SEBs	 Cost over runs, limited O&M impact toll collection	 Exposure to multiple end-users
Operational Risk	 Limited O&M requirements	 Substantial periodic maintenance needs	 High O&M required	 Limited O&M requirements
Future Growth Potential	 Severe deficit in power transmission capacity	 High potential given power deficit situation	 High growth potential	 Good potential, limited by feasible locations
Competitive Environment	 Few credible private players	 High competitive given multiple players	 Highly competitive given multiple private players	 Few private players
Summary				

 Most Favourable
 Favourable
 Marginally Favourable

- Aggression in competition waning away:* Prior to the competitive bidding, transmission projects were allocated on the fixed 15.5% return on equity basis. However, post 2011, competitive bidding for all interstate transmission lines were made mandatory which has led to rising competition among players intending to establish their presence in the sector. Players were competing to establish their presence and garner higher share in the market. Transmission business was perceived as a low risk business as annual levelised tariffs are independent of demand-supply dynamics and fluctuation in electricity tariffs. Further due to better payment security mechanism and assurance of payment from central and state transmission utilities, this business model has attracted many new players. Competition intensity in the sector was high across projects awarded in fiscal 2012 and fiscal 2014 as reflected from participation of several players across related spaces but limited experience in end to end project execution. Post fiscal 2014, competition intensity in the sector has started waning away as reflected from presence of major credible players in the private sector with relevant experience. In fact, the average number of players participating in the bids reduced from 7 between fiscal 2011-2014 to 4 in the bids in fiscal 2018. This is because few developers experienced difficulties in commissioning projects in time, which led to escalation in the project cost and revenue loss due to delay in commissioning. Hence, the projects have been bid more rationally, keeping equity returns in mind.

Average Number of Participants during Various Stages of Bidding (RFQ, Shortlisted & at RFP Stage)

Source: PFFCL, RECTPCL, Industry; CRISIL Research



- Key technology trends:** To meet the long-term power transfer requirement by fiscal 2022 as well as for the optimal utilization of right of way, there is a need for large power evacuation corridors, which requires advancements in the transmission voltage, conductor technology, substation equipment and infrastructure and increase in the transfer of large quantum of power from various generation complexes. Advancements have been made on the conductor technology, such as use of high temperature low sag, high surge impedance loading and gas insulated line conductors are in place. These conductors have been used in recent 132kV lines bid out by the Odisha Power Transmission Corporation Limited, 400 kV Meerut-Kaithal D/C line and in the Naptha-Jhakri hydro project in order to increase the transfer capacity of the transmission line and simultaneously reduce line losses. Further due to growing urbanization and high real estate prices in cities, gas insulated switchgear or GIS substations are used, which not only reduces the space requirement but also cuts down on the maintenance costs and improves reliability. With the advent of smart grid networking infrastructure and communication solutions synchronous, digital hierarchy is utilized to communicate between substations, which not only helps to quickly address the fault but also helps in maintaining the grid frequency. There have also been new innovative techniques used in the construction of transmission lines. For instance, there have been use of light detection and ranging or LIDAR technology, which uses laser distance measuring technology to conduct topographic mapping with the help of aircrafts. Further, helicopters are used for stringing (heli-stringing) of transmission lines. Drones are used to monitor lines spread over long distances and thermos-vision scanning, punctured insulator detector, corona measurement devices etc., are used for preventive maintenance of transmission lines.

Snapshot of competitive landscape

Source: Company presentations; CRISIL Research

S.No.	Player	Approximate length of line (CKM)	No. of projects won	Inter-state projects
1	SPGVL Limited	7,875	12	12
2	Adani Transmission Limited*	10,355	7	7
3	Essel Infra Projects**	850	4	4
4	Kalpataru Power Transmission Ltd.	NA	2	2

Note:

*- Includes Reliance Infrastructure's acquired transmission assets.

**- In October 2018, Essel Infra Projects entered into an agreement with Sekura Energy Ltd to sell its power transmission assets. This sale is expected to be concluded after regulatory approvals.

OUR BUSINESS

Overview

We are an infrastructure investment trust (“**InvIT**”) established to own inter-state power transmission assets in India. IndiGrid was established on October 21, 2016 by our Sponsor, Sterlite Power Grid Ventures Limited and is registered with SEBI pursuant to the InvIT Regulations. Sterlite Power Grid Ventures Limited also serves as the Project Manager with the responsibility of operating and managing our power transmission assets and is one of the leading independent power transmission companies operating in the private sector, with extensive experience in bidding, designing, financing, constructing and maintaining power transmission projects across India.

We are focused on providing stable and sustainable distributions to our Unitholders. We believe that we are well positioned to take advantage of the growth potential of India’s power transmission industry given the quality of our power transmission assets and our financial position, support from our Sponsor and the robust regulatory framework for power transmission in India.

We believe the infrastructure necessary to transmit and deliver electricity is vital to India’s continued economic advancement given the inter-regional power deficit in India resulting from a mismatch between power generation and load centers and the demand-supply deficit which is expected to result from India’s projected GDP growth. For further details, see “*Industry Overview*” on page 129.

We own six fully commissioned projects, BDTCL, JTCL, PKTCL, RAPP and MTL that we acquired from our Sponsor in fiscal 2018, and PTCL that we acquired for a third party in fiscal 2019 (together the “**Portfolio Assets**”). These assets have a total network of 13 power transmission lines of approximately 3,362 ckms across nine states and three substations having 7,000 MVA of transformation capacity across three states in India.

Our Sponsor is one of the leading independent power transmission companies operating in the private sector in India. Our Sponsor has developed 12 inter-state power transmission projects with a total network of 38 power transmission lines of approximately 8,001 ckms and 10 substations having 14,995 MVA of transformation capacity in India. Some of these projects have started commercial operations and were transferred to us in fiscal 2018, while others are at different stages of development. Recently, our Sponsor has won bids for ten transmission projects in Brazil with a total network of approximately 4,424 ckms having 7,890 MVA of transformation capacity, in auctions conducted by the Brazilian electricity regulatory authority, Agência Nacional de Energia Elétrica. Presently, under the InvIT Regulations, we are not permitted to acquire transmission projects outside of India, including the Sponsor’s projects in Brazil. Our Sponsor generated consolidated total income of ₹8,864.67 million in fiscal 2018 and had total consolidated assets of ₹69,749.54 million as of March 31, 2018.

Pursuant to the Framework Agreement among the Sponsor, the Trustee and the Investment Manager, IndiGrid has agreed to acquire three additional projects, GPTEL, KTL and NER from our Sponsor (the “**Framework Assets**”), and pursuant to the ROFO Deed, as amended, we have a ‘right of first offer’ to acquire one project, ENICL from our Sponsor (**ROFO Asset**). IndiGrid has agreed to acquire, two projects, NTL and OGPTL, which were part of the ROFO Deed (the “**Target Assets**”) from our Sponsor, with the proceeds of this Issue, for which we have executed definitive share purchase agreements with our Sponsor on April 30, 2019. For further details, see “*Use of Proceeds*” on page 199. For further details on the Framework Agreement, the ROFO Deed and the share purchase agreements, see “*Related Party Transactions*” on page 228.

The Portfolio Assets, other than PTCL, were originally awarded to our Sponsor under the “tariff based competitive bidding” mechanism (“**TBCB**”) on a “build-own-operate-maintain” (“**BOOM**”) basis. The power transmission projects earn revenue pursuant to long-term transmission services agreements (“**TSAs**”) and tariff orders passed by CERC in accordance with the Electricity Act, 2003 (“**Tariff Orders**”). These projects receive availability-based tariffs under the TSAs irrespective of the quantum of power transmitted through the line. The tariff for inter-state power transmission projects in India, including the Portfolio Assets, is contracted for the period of the TSA, which is up to 35 years from the scheduled commission date of the asset, which may be renewed in accordance with the TSA and the Electricity Act, 2003. With periodic maintenance, transmission assets enjoy a longer asset life of approximately 50 years compared to other infrastructure projects, according to CRISIL. For further details on the TBCB and the Indian electricity transmission industry, see “*Industry Overview*” on page 129.

Tariffs under these TSAs are billed and collected pursuant to the “point of connection” (“**PoC**”) mechanism, a regulatory payment pooling system offered to Inter State Transmission Systems (“**ISTS**”) such as the systems operated by the Portfolio Assets. Under the PoC mechanism, payments are made to a central payment pool and

the proceeds are distributed proportionately to all transmission services providers, such as the Portfolio Assets. The availability-based tariffs and PoC payment mechanism enable a stable and certain cash flow stream. For further details, see “*Industry Overview*” on page 129.

While infrastructure investment trusts are required to distribute at least 90% of their net distributable cash flows to unitholders once at least every six months in every financial year, according to the InvIT Regulations, we have adopted a quarterly distribution policy. For further details on our distribution policy, see “*Distribution*” on page 205. We believe our power transmission assets, financial position and business model will enable us to offer stable distributions to our Unitholders.

We have been given a corporate credit rating of AAA/Stable by CRISIL, “IND AAA”/Stable by India Ratings and “ICRA AAA” (pronounced as ICRA triple A) with stable outlook by ICRA. Following the utilization of the Issue Proceeds, our aggregate consolidated borrowings and deferred payments (net of cash and cash equivalents) will not exceed 49% of the total value of our assets. We may increase our aggregate consolidated borrowings and deferred payments (net of cash and cash equivalents) from the current level up to the maximum permitted limit under the InvIT Regulations of 70% of the total value of our assets. The industry standard debt to equity ratio for inter-state power transmission projects is 70% debt, according to CRISIL.

Our total income was ₹9,909.54 million in fiscal 2019. Our EBITDA on a combined basis was ₹9,168.00 million for fiscal 2019.

On the basis of our strengths and through the implementation of our strategies, we believe that we are well-positioned to capitalize on the growth potential of India’s power transmission industry.

Recent Developments

Prior to this Issue, the Trustee, our Sponsor and our Investment Manager have entered into definitive agreements with affiliates of KKR, which, if fully completed, will result in a change of control of the Investment Manager and a transfer of a significant Unitholding in IndiGrid from our Sponsor to an affiliate of KKR following receipt of approvals for its designation as a sponsor of IndiGrid (collectively, the “**KKR Transaction**”). Pursuant to these agreements, Electron, an affiliate of KKR has agreed to acquire up to 74% of the share capital of the Investment Manager in a series of transactions. Upon the purchase of 19.99% of such shares at the initial closing expected to occur on the Closing Date, Electron will have the right to appoint a director on the board of directors of the Investment Manager and obtain certain affirmative voting rights with respect to certain matters such as amendments to charter documents of the Investment Manager, transfer of assets and declaration of dividends, and, upon the change of control, Electron will have the right to appoint three out of ten directors to the board of directors of the Investment Manager and the right to recommend candidates for the appointment of three other directors. In addition, we have received a commitment letter from Esoteric, another affiliate of KKR, indicating an interest in purchasing up to an aggregate of approximately ₹ 10,800 million of the Units to be allotted in this Issue, representing approximately 42.2% of the Units offered and to be allotted in this Issue. If Esoteric determines to subscribe to, and our Trustee and the Investment Manager determine to so allot, all of these Units, Esoteric will hold, after the completion of this Issue, approximately 21.86% of our issued and outstanding Units. In addition Esoteric has also agreed to acquire up to 15% of our issued and outstanding Units on a post-Issue basis and to be designated as a “Sponsor” of IndiGrid together with our Sponsor, subject to unitholders approval. If these transactions are completed, KKR, through its affiliate, will hold approximately 36.87% of the issued and outstanding Units of IndiGrid on a post-Issue basis.

The completion of these transactions is subject to a number of conditions precedent, including, among others, the approval by Unitholders and the receipt of approval from SEBI, in accordance with the InvIT Regulations. The Investment Manager has scheduled an extraordinary general meeting of our Unitholders to be held on May 24, 2019 to evaluate the proposed KKR Transaction. However, there is no assurance that the Unitholders of IndiGrid and SEBI will approve the proposed KKR Transaction.

For more details on the transaction, see “*Key Developments related to IndiGrid and the Issue*” on page 224, “*Risk Factors— A significant portion of the Units offered and sold in this Issue may be allotted to a few investors who have indicated an interest in purchasing Units*” on page 58, “*Risk Factors—We have entered into definitive agreements which, if fully completed, will result in a change of control of the Investment Manager and a transfer of a significant Unitholding in IndiGrid from our Sponsor to an affiliate of KKR*” on page 59 and “*Risk Factors— The completion of the KKR Transaction is subject to the receipt of approval from Unitholders and SEBI, which may impose conditions that could have an adverse effect on us, if not obtained, and could prevent completion of*”

the KKR Transaction” on page 59.

Competitive Strengths

Stable cash flows from assets with minimal counterparty risks

- Our revenues are derived out of contracted tariffs under long-term contracts (up to 35 years) from assets with relatively low operating and maintenance costs.
- Inter-state power transmission projects receive tariffs on the basis of availability, irrespective of the quantum of power transmitted through the line.
- Power transmission projects are characterized by low levels of operating risk. The Portfolio Assets are operational power transmission projects. All our Portfolio Assets have an operating history of at least one year. The Portfolio Assets have minimal construction risks or major capital expenditure requirements.
- We have maintained an annual availability for each of the Portfolio Assets in excess of 98% since commissioning for which we have earned maximum incentive revenues under the respective TSAs. Maintaining availability of the Portfolio Assets in excess of 98% gives us the right to claim incentives under the TSA, ensuring an adequate upside to maximize availability. The amount of incentive revenue earned increases as our availability levels increase, with a maximum incentive revenue earned for maintaining 99.75% availability.

Tariffs under the TSAs are billed and collected pursuant to the PoC mechanism. Under the PoC mechanism, payments are made to a central payment pool and the proceeds are distributed proportionately to all transmission services providers, such as the Portfolio Assets. Any shortfall in collection of transmission charges by the CTU is shared on a *pro rata* basis by all transmission service providers. Payment securities in the form of a revolving letter of credit, a surcharge of 1.25% for late payments and lack of alternate power infrastructure deter beneficiaries from defaulting. This mechanism diversifies counterparty risk, ensures a stable cash flow independent of asset utilization and provides payment security.

Strong financial position

- We have been given a corporate credit rating of AAA/Stable by CRISIL, “IND AAA”/Stable by India Ratings and “ICRA AAA” (pronounced as ICRA triple A) with stable outlook by ICRA. Following the utilization of the Issue Proceeds, our aggregate consolidated borrowings and deferred payments (net of cash and cash equivalents) will not exceed 49% of the total value of our assets. We may increase our aggregate consolidated borrowings and deferred payments (net of cash and cash equivalents) from the current level up to the maximum permitted limit under the InvIT Regulations of 70% of the total value of our assets. The industry standard debt to equity ratio for inter-state power transmission projects is 70% debt, according to CRISIL.

Ownership and location of assets

- Each of the Portfolio Assets is located in strategically important areas for electricity transmission connectivity, delivering power from generating centers to load centers to meet inter-regional power deficits. Once a transmission project has been commissioned, it requires relatively low levels of expenditure to operate and maintain, which means that each of the Portfolio Assets will have the benefit of owning a critical asset without incurring significant operational costs. With periodic maintenance, transmission assets enjoy a longer asset life of approximately 50 years compared to other infrastructure projects, according to CRISIL.
- The transmission lines of the Portfolio Assets are predominantly located in areas where developing alternate lines may be challenging due to the terrain, challenges in obtaining rights of way, limited corridors and high construction costs. This puts us in an advantageous position to capitalize the opportunities to increase our power transmission capacity through the same corridor by upgrading our existing systems.

Strong lineage and support from the Sponsor

- We leverage the experience and expertise of our Sponsor, to gain a competitive advantage within the Indian power transmission industry. Our Sponsor is one of the leading power transmission companies in the private

sector, with extensive experience in identifying, successfully bidding, designing, financing, constructing, operating and maintaining power transmission projects across India.

- Our Sponsor has developed 12 inter-state power transmission projects, comprising 38 power transmission lines and 10 substations, with a total network of approximately 8,001 ckms of power transmission lines with 14,995 MVA of transformation capacity, at different stages of development in India. Recently, our Sponsor has won bids for ten transmission projects in Brazil with a total network of 4,424 ckms having 7,890 MVA of transformation capacity, in auctions conducted by the Brazilian electricity regulatory authority, Agência Nacional de Energia Elétrica. Our Sponsor has worked alongside third party contractors, vendors, financial institutions, government agencies and regulators for the proper execution, development and functioning of the Portfolio Assets, except for PTCL, the Framework Assets, the ROFO Asset and other power transmission assets.
- Our Sponsor has been awarded more projects through the TBCB process, for the development of transmission lines by the Indian Government, than any other private player in the market, according to CRISIL. See “*Industry Overview*” on page 129 for further details. In fiscal 2018, our Sponsor was awarded two inter-state power transmission projects of NER II Transmission Limited (“NER”) and Goa Tamnar Transmission Project Limited (“GTTPL”), respectively, through the TBCB process.
- The experience of our Sponsor’s operation and maintenance team lends significant expertise in respect of the operation and maintenance of our assets as our Sponsor has also been appointed as our Project Manager. Members of the Sponsor’s board of directors and management team have extensive experience in the power transmission industry and have established track records in negotiating, structuring and financing investments in power transmission assets and managing those assets. For one of the Portfolio Assets, BDTCL, the Ministry of Power awarded SGL1 a Silver Shield for the year 2013-2014 in the category of “Early Completion of Transmission Projects”.

Rights to our Sponsor’s pipeline of power transmission projects

Pursuant to the Framework Agreement, among the Sponsor, the Trustee and the Investment Manager, IndiGrid has agreed to acquire the three Framework Assets from the Sponsor through separate share purchase agreements. The Framework Assets have a transmission network of 14 power transmission lines of approximately 1,712 ckms and 6 substations, with a transformation capacity of 7,260 MVA. All three Framework Assets are under various stages of development.

Pursuant to the ROFO Deed, we have a “right of first offer” in respect of ENICL which is under restoration. Under the ROFO Deed or otherwise, any potential acquisitions of power transmission projects are assessed for their suitability with our investment objective and are subject to mutual agreement between our Sponsor and the Investment Manager on behalf of us.

In addition, we intend to acquire 100% of the issued, paid-up and subscribed equity share capital of the Target Assets, which were part of the ROFO Deed, with the proceeds of this Issue. For further details, see “*Use of Proceeds*” on page 199.

Strong corporate governance and skilled and experienced Investment Manager

We benefit from the skills and experience of the board of directors and the management teams of our investment manager, Sterlite Investment Managers Limited (the “**Investment Manager**”) in investing and financially managing our power transmission assets for the beneficial interest of our Unitholders. Some of the members of our Investment Manager’s board of directors and management teams have extensive experience in the power transmission sector and have established track records in negotiating, structuring and financing investments in power transmission assets and financially managing these assets as well as governing similar trusts internationally. For further details, see “*Parties to IndiGrid*” on page 97.

The InvIT Regulations set out the statutory requirements for, among other things, the board composition of an investment manager, which promotes strong corporate governance in IndiGrid. The key features of our corporate governance structure are as follows:

- The chairman of the board of our Investment Manager is an independent director with experience in governing international infrastructure trusts.

- The Investment Manager has constituted crucial committees of the board, including, the stakeholders' relationship committee, the audit committee and the investment committee. All these committees are chaired by independent directors.
- All related party transactions with our Sponsor are required to be approved by the investment committee of the Investment Manager, which is comprised of independent directors.
- All acquisitions made by IndiGrid must be approved by a majority of our Unitholders excluding the Sponsor with respect to the Framework Assets, ROFO Asset or any other proposed acquisition from our Sponsor. See "*Corporate Governance – Investment Manager*" and "*- Recent Developments*" on page 123 and 162 respectively, for more details.

Business Strategy

Focused business model

We focus on owning power transmission assets with long-term contracts, low operating risks and stable cash flows consistent with the characteristics of the Portfolio Assets. We believe that by focusing on this asset class and leveraging our Sponsor's and Investment Manager's industry knowledge and experience, we will maximize our strategic opportunities and overall financial performance.

We are focused on the Indian market, where we believe that private participation in the power transmission sector will continue to grow significantly. This also allows us to leverage our Sponsor's existing relationships and proven track record of identifying, developing, constructing and acquiring critical infrastructure assets.

Pursue additional transmission revenue

We aim to achieve high availability to earn incentive revenue on a sustainable basis by deploying prudent asset management practices, conducting routine and predictive maintenance and using advanced technology, such as drones to monitor and maintain lines, thermo-vision scanning, puncture insulator detectors and corona measurement devices for preventive maintenance. We also intend to continue following prudent maintenance practices, which improve business performance, reduce our costs and increase revenues generated by the Portfolio Assets by maintaining high transmission availability. Maintenance of high availability rates entitle our projects to receive incentive revenues under the applicable TSA and tariff regulations. We intend to continue applying advanced technology to better manage and operate our Portfolio Assets.

We also intend to capitalize on such capacity enhancement opportunities, once the framework for compensating existing transmission lines is crystalized by the government.

Pursue non-transmission revenues

We believe that transmission assets provide potential for non-transmission revenues, including as follows:

- ***Optical ground wire leasing:*** Given the rapid growth in internet usage in India, there is a need to install optical fiber lines to improve speed of communication, and we have incurred necessary capital expenditures to use our transmission lines as high-speed optical power ground wires. However, for commercial viability, optical power ground wires need to have extensive connectivity and leasing of optical fiber networks also requires certain government approvals. We intend to enter into licensing arrangements with companies (including the Sponsor and its affiliates) having wider networks and requisite approvals, in compliance with applicable law.
- ***Tower leasing:*** Given the rapidly increasing smartphone penetration and expanding data usage in India, telecommunications companies are required to incur significant capital expenditures to expand their tower network. Transmission towers provide ready-made installation sites for base transceiver station equipment, and can be leased by telecommunication companies as a cost-efficient alternative to constructing new towers. We intend to enter into licensing arrangements with companies (including the Sponsor and its affiliates), in compliance with applicable law.

BDTCL and JTCL have agreed to license optical power ground wire use and tower use to Sterlite Power Transmission Limited, an affiliate of our Sponsor. We intend to pursue similar arrangements for the other Portfolio

Assets and for each new power transmission project that we acquire, including each of the other Framework Assets and ENICL, which have optical power ground wires.

Institute and maintain optimal capital structure

We intend to maintain a balanced capital structure and consolidated leverage to provide for a stable and predictable cash flow. Following the utilization of the Issue Proceeds, our consolidated borrowings and deferred payments net of cash and cash equivalents will be below 70% of the total value of our assets, as prescribed by the InvIT Regulations. If such borrowings and payments exceed 49%, we are required to obtain a credit rating of “AAA” or equivalent for the consolidated borrowing and proposed borrowing under the InvIT Regulations. The industry standard debt to equity ratio for inter-state power transmission projects is 70% debt, according to CRISIL.

We intend to consider both private and public markets for debt capital to provide the most balanced and optimal capital structure to acquire additional power transmission projects. We also intend to maintain appropriate risk policies to help mitigate foreign exchange and market risks.

Value accretive growth through acquisitions

Our future growth will be derived mainly from our Investment Manager’s value accretive acquisition strategy, which will be focused primarily on acquiring power transmission projects, which provide long-term, regular and predictable cash flows, demonstrate potential to maintain or enhance returns to Unitholders and the potential for long-term capital growth in accordance with our investment objectives. In addition, to potentially acquiring the Framework Assets or the ROFO Asset from our Sponsor, we may also acquire power transmission projects from other parties. In Fiscal 2018 and pursuant to the ROFO Deed, we acquired PKTCL, RAPP and MTL from our Sponsor. We also acquired PTCL from Techno Electric & Engineering Company Ltd. (“**TEECL**”) and Techno Power Grid Company Limited (“**TPGCL**”) on August 31, 2018. With these acquisitions, we own 13 power transmission lines of approximately 3,362 ckm across nine states and three substations having 7,000 MVA of transformation capacity across three states in India.

We may also acquire other power transmission projects that may be at an early stage where they have not yet generated regular and predictable cash flows. We expect that the experience of our Investment Manager and our financial position will competitively position us to acquire power transmission assets.

Distribution Policy

We intend to distribute at least 90% of our net distributable cashflows available to Unitholders once in every quarter. See “*Distribution*” on page 205 for further details in relation to the Distribution Policy.

We aim to pursue additional transmission and non-transmission revenues for the Portfolio Assets as well as acquire additional portfolio assets under the Framework Deed, ROFO Deed or otherwise, in order to increase the cash available for distribution and, as a result, increase our distribution per Unit.

Our ability to grow the revenues from our power transmission portfolio and thereby increase the cash available for distribution and distributions per Unit, is subject to a number of factors and other risks described under “*Risk Factors*” on page 58.

IndiGrid Structure

IndiGrid is an infrastructure investment trust that was established on October 21, 2016 by our Sponsor, Sterlite Power Grid Ventures Limited, which is also our Project Manager, and is registered with SEBI pursuant to the InvIT Regulations. Prior to this Issue, the Investment Manager, SPTL and Electron IM Pte. Ltd., an affiliate of KKR, which, if fully completed, will result in the acquisition of up to 74% of the issued, paid-up and subscribed capital of the Investment Manager, in a series of transactions, and a consequent change of control of the Investment Manager. In addition, Esoteric II Pte. Ltd., an affiliate of KKR, has expressed an interest in investing in the Units for an amount up to ₹ 10,800 million of the Units issued pursuant to this Issue. For further details, please see the section entitled “*Key Developments related to IndiGrid and the Issue*” on page 224. For further details, please see the section entitled “*Parties to IndiGrid*” on page 97.

Our Sponsor

Our Sponsor is one of the leading independent power transmission companies operating in the private sector, with extensive experience in bidding, designing, financing, constructing and maintaining power transmission projects across India. Our Sponsor has developed 12 inter-state power transmission projects in India, comprising 38 power transmission lines and 10 substations, with a total network of approximately 8,001 ckms of power transmission lines with 14,995 MVA of transformation capacity, at different stages of development. Recently, our Sponsor has won bids for ten transmission projects in Brazil with a total network of approximately 4,424 ckms having 7,890 MVA of transformation capacity, in auctions conducted by the Brazilian electricity regulatory authority, Agência Nacional de Energia Elétrica. Our Sponsor generated consolidated total income of ₹8,864.67 million in fiscal 2018 and had total consolidated assets of ₹69,749.54 million as of March 31, 2018.

We acquired five fully commissioned projects from our Sponsor in fiscal 2018 and one commissioned project from a third party in fiscal 2019, and we currently have a total network of 13 power transmission lines of approximately 3,362 ckms across nine states in India and three substations across three states in India having 7,000 MVA of transformation capacity.

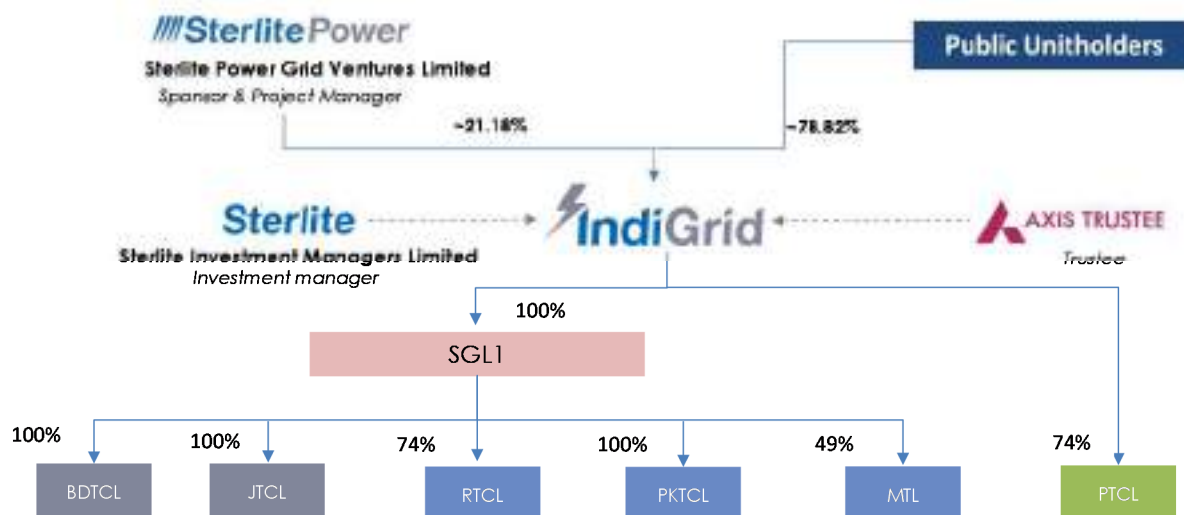
Pursuant to the Framework Agreement, among the Sponsor, the Trustee and the Investment Manager, IndiGrid has agreed to acquire the three Framework Assets. The Framework Assets have a transmission network of 14 power transmission lines of approximately 1,712 ckms and 6 substations, with a transformation capacity of 7,260 MVA. All three Framework Assets are under various stages of development. Pursuant to the ROFO Deed, we have a “right of first offer” in respect of ENICL which is under restoration. In addition, we intend to acquire 100% of the issued, paid-up and subscribed equity share capital of the Target Assets. For further details, please see the section entitled “*Use of Proceeds*” on page 199.

With support from our Sponsor, we aim to be the largest infrastructure investment trust in the power transmission sector by achieving significant growth through acquisitions. Our Sponsor is an affiliate of our Investment Manager. We expect support from our Sponsor to provide us with the following benefits:

- By building on the track record of our Sponsor and its familiarity with the power transmission business and regulatory regime in India, we seek to establish and further develop strong working relationships with the relevant regulators within the Indian power transmission sector.
- The Investment Manager will be able to draw on our Sponsor’s national reach and business network in sourcing acquisition opportunities.
- While under no obligation to do so, our Sponsor may give us an opportunity to acquire additional power transmission projects, other than the Framework Assets and ROFO Assets, that it may be awarded or acquire. Any such acquisition from our Sponsor, including under the Framework Agreement or ROFO Deed, will be subject to mutual agreement between our Sponsor and the Investment Manager on our behalf, and approval of our Unitholders other than the Sponsor.
- Our Sponsor has a dedicated internal team drawing on relevant power transmission expertise to assist the Investment Manager in identifying acquisition opportunities for us.

Our Sponsor will also fulfil the role of Project Manager in respect of IndiGrid, with responsibility for operating and maintaining the Portfolio Assets.

The following chart illustrates our relationships and alignment with the Project Manager and its affiliates as on March 31, 2019:



For further details, see “Parties to IndiGrid – The Sponsor” on page 97.

The Project Manager

In its capacity as the Project Manager under the Project Implementation and Management Agreement, our Sponsor is responsible for the implementation, development, operation and management of the Portfolio Assets as per the InvIT Regulations and the Project Implementation and Management Agreement.

For further details, see “Parties to IndiGrid” on page 97.

The Investment Manager

Sterlite Investment Managers Limited, an affiliate of our Sponsor, is our Investment Manager and takes decisions concerning our assets for the beneficial interest of our Unitholders. The Investment Manager has overall responsibility for setting our strategic direction and deciding on the acquisition, divestment or enhancement of our assets in accordance with its stated investment strategy.

The Investment Manager has the key objective of generating sustainable income with long-term growth potential and investing in power transmission assets to provide our Unitholders with regular distributions at a competitive rate of return, in accordance with the InvIT Regulations and the Investment Management Agreement.

For further details, see “Parties to IndiGrid – The Investment Manager” on page 106.

The Trustee

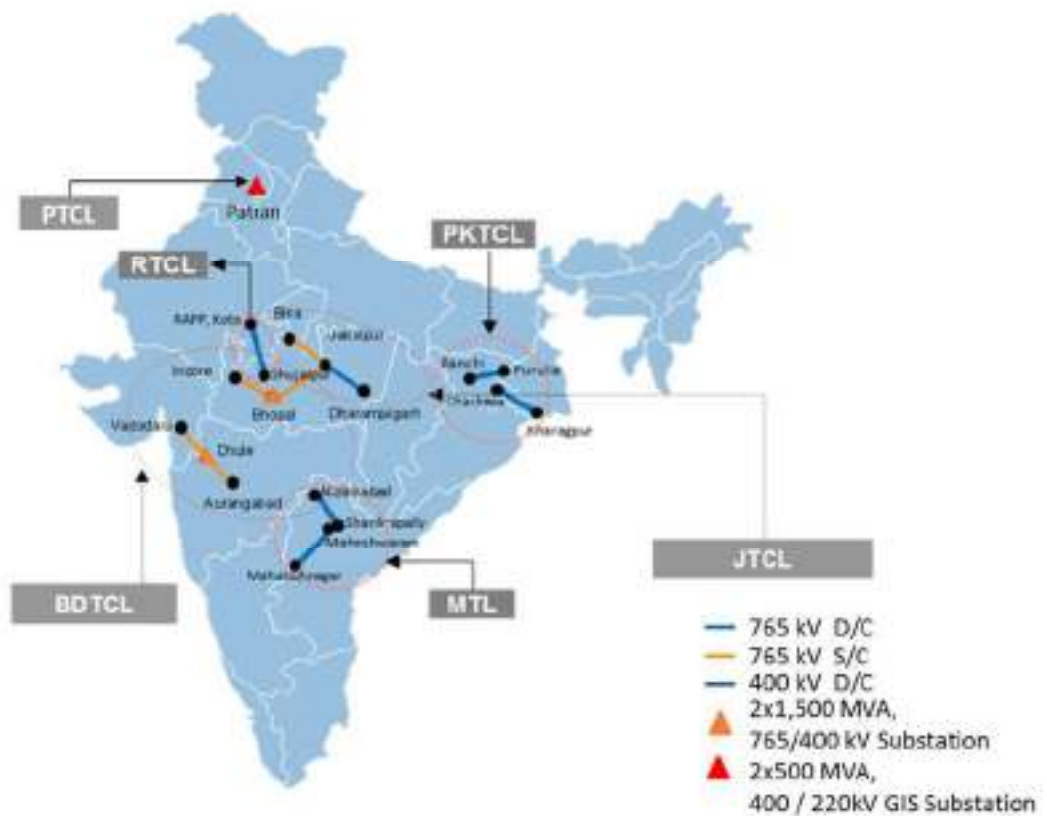
Axis Trustee Services Limited is the trustee in respect of IndiGrid (the “Trustee”). On behalf of our Unitholders, the Trustee is responsible for ensuring that our business activities and investment policies comply with the provisions of the InvIT Documents and the InvIT Regulations as well as monitoring the activities of the Investment Manager under the Investment Management Agreement and the Project Manager under the Project Implementation and Management Agreement.

For further details, see “Parties to IndiGrid – The Trustee” on page 100.

The Portfolio Assets

The Portfolio Assets comprise six power transmission projects located across nine states in India. These projects comprise 13 extra high voltage (“EHV”) overhead power transmission lines, comprising six 765 kV transmission lines and seven 400 kV transmission lines, with a total circuit length of approximately 3,362 ckms across nine states, and three substations with 7,000 MVA of transformation capacity across three states in India. Each of the Portfolio Assets has in place long-term TSAs of 35 years from the scheduled commercial operation date of the relevant Portfolio Asset. The TSAs have a contract term of 35 years from the scheduled commercial operation date, after which we can apply to CERC for renewal if not unilaterally extended by CERC.

The following map shows the locations and breakdown of the Portfolio Assets:



The Portfolio Assets, except for PTCL, are owned by us indirectly through our wholly-owned subsidiary, Sterlite Grid 1 Limited (“SGL1”). SGL1 owns 100% of the outstanding shares of JTCL, BDTCL and PKTCL, and 74% of the outstanding shares of RAPP and 49% of the outstanding shares of MTL. We directly own 74% of the outstanding shares of PTCL and pursuant to the terms of the share purchase agreement dated February 19, 2018, we have agreed to purchase the remaining outstanding shares of PTCL from TEECL.

The following table sets forth a summary description of the Portfolio Assets:

Project Name	Transmission Line /Substation	Configuration	Route Length (ckms)	Actual commission date	Expiry of the term of the TSA
BDTCL	Bhopal – Indore	765 kV S/C transmission line	176	November 19, 2014	March 2049
	Dhule – Aurangabad	765 kV S/C transmission line	192	December 5, 2014	
	Dhule – Vadodara	765 kV S/C transmission line	263	June 13, 2015	
	Bhopal – Jabalpur	765 kV S/C transmission line	260	June 9, 2015	
	Dhule – Dhule	400 kV D/C transmission line	36	December 6, 2014	
	Bhopal – Bhopal	400 kV D/C transmission line	17	August 12, 2014	
	Bhopal substation	2 x 1,500 MVA 765/400 kV	-	September 30, 2014	
	Dhule substation	2 x 1,500 MVA 765/400 kV	-	December 6, 2014	
JTCL	Jabalpur-Dharamjaigarh	765 kV D/C transmission line	757	September 14, 2015	March 2049
	Jabalpur-Bina	765 kV S/C transmission line	235	July 1, 2015	
PKTCL	Kharagpur (WBSETCL)-Chaibasa (PG)	400 kV D/C transmission line	322	June 18, 2016	April 2051
	Purulia PSP (WB)-Ranchi PG	400 kV D/C transmission line	223	January 7, 2017	
RAPP	RAPP—Shujalpur	400 kV D/C transmission line	403	March 1, 2016	February 2051
MTL	Maheshwaram (PG)—Mehboob Nagar	400 kV D/C transmission line	197	December 14, 2017	December 2053
	Nizamabad—Yeddumailaram (Shankarpalli)	400 kV D/C transmission line	279	October 14, 2017	October 2053
	Mehboob Nagar substation of TSTRANSCO	2 x 400 kV line	-		
	Yeddumailaram (Shankarpalli) substation of TSTRANSCO	2 x 400 kV line	-		
PTCL	Patiala—Kaithal	400 kV D/C	-	November 12, 2016	November 2051
	Patran substation	2x500MVA, 400/220kV Substation at Patran with; i. 6 nos 400kV Bays ii. 8 nos 220kV Bays	-	November 12, 2016	
Total		7,000 MVA	3,362		

The total revenue earned by each of the Portfolio Assets in fiscals 2017, 2018 and 2019 is set forth in the following tables. The results for the periods presented below are not necessarily indicative of the results to be expected for any future period and the results for any interim period are not necessarily indicative of the results that may be expected for a full year.

BDTCL⁽¹⁾			
	FISCAL		
<i>(₹ in million)</i>	2017	2018	2019
Tariff.....	2,505	2,505	2,523
Incentive	88	88	60
Late Payment Surcharge	18	10	18
Total revenue⁽²⁾	2,611	2,603	2,600
(1) We acquired BDTCL from our Sponsor in May 2017.			
(2) Gross revenue earned (i.e. without adjustment of rebate)			
JTCL⁽¹⁾			
	FISCAL		
<i>(₹ in million)</i>	2017	2018	2019
Tariff.....	1,996	2,379	2,083
Incentive	70	83	73
Late Payment Surcharge	12	10	10
Total revenue⁽²⁾	2,077	2,472	2,166
(1) We acquired JTCL from our Sponsor in May 2017.			
(2) Gross revenue earned (i.e. without adjustment of rebate)			
RAPP⁽¹⁾⁽³⁾			
	FISCAL		
<i>(₹ in million)</i>	2017	2018	2019
Tariff.....	311	311	440
Incentive	11	4	15
Late Payment Surcharge	-	1	35
Total revenue⁽²⁾	321	316	491
(1) As RAPP started commercial operations in March 2016, it did not earn incentive fees in fiscal 2016.			
(2) Gross revenue earned (i.e. without adjustment of rebate).			
(3) We acquired RAPP from our Sponsor in February 2018.			
PKTCL⁽¹⁾⁽³⁾			
	FISCAL		
<i>(₹ in million)</i>	2017	2018	2019
Tariff.....	272	511	724
Incentive	10	18	25
Late Payment Surcharge	0.37	2	2
Total revenue⁽²⁾	282	531	752
(1) One transmission line at PKTCL started commercial operations in June 2016 and the second transmission line at PKTCL started commercial operations in January 2017. Accordingly, PKTCL did not earn revenue in fiscal 2016.			
(2) Gross revenue earned (i.e. without adjustment of rebate).			
(3) We acquired PKTCL from our Sponsor in February 2018.			
MTL⁽¹⁾⁽³⁾			
	FISCAL		
<i>(₹ in million)</i>	2017	2018	2019
Tariff.....	-	224	556
Incentive	-	8	19
Late Payment Surcharge	-	0	1
Total revenue⁽²⁾	-	232	576
(1) MTL started commercial operations in fiscal 2018.			
(2) Gross revenue earned (i.e. without adjustment of rebate).			
(3) We acquired MTL from our Sponsor in February 2018.			
PTCL⁽¹⁾⁽³⁾			
	FISCAL		
<i>(₹ in million)</i>	2017	2018	2019
Tariff.....	84.24	225.71	259
Incentive.....	0	6.86	8
Late Payment Surcharge.....	0	12.09	0.20
Total revenue⁽²⁾	84.24	244.67	268
(1) PTCL started commercial operations in fiscal 2017.			

(2) Gross revenue earned (i.e. without adjustment of rebate).
(3) We acquired PTCL in August 2018.

Each of the Portfolio Assets are located in strategically important areas for the power grid in India, which we believe makes their existence critical and their high replacement cost makes the transmission assets indispensable.

JTCL alleviates transmission capacity bottlenecks and expands the reliability and stability of the power grid in western and northern India by providing open access to transmit power from the independent power projects in the east of India.

BDTCL facilitates the transfer of electricity from coal-fired power generation sources in the states of Odisha and Chhattisgarh to power load centers in India's western and northern regions.

PKTCL supports the interconnection of the state grids and the regional grids and facilitates the exchange of additional power between them. PKTCL was established to strengthen the transmission system in the states of West Bengal and Jharkhand.

RAPP facilitates the strengthening of the transmission capability between the northern and western sectors of India's power grid by evacuating electricity from an atomic power plant near Kota in Rajasthan to central Madhya Pradesh. The project was undertaken in conjunction with the Rajasthan Atomic Power Project established by Nuclear Power Corporation of India.

MTL constitutes a key component in enabling the southern region of India to draw more power from the rest of the grid and seeks to address the issue of power stability in the state of Telangana. This improved grid connectivity is expected to facilitate power procurement from the ISTS network to meet electricity demands in certain states in south India.

PTCL constitutes a key component in strengthening the power transmission system in the state of Punjab in India.

Tariff – Portfolio Assets

Power transmission projects, including the Portfolio Assets, earn revenue from electricity transmission tariffs pursuant to TSAs and Tariff Orders. These projects receive availability-based tariffs under the TSAs irrespective of the quantum of power transmitted through the line. The tariff for the Portfolio Assets is contracted for the period of the relevant TSA, which is up to 35 years from the scheduled commission date. The tariff rates are comprised of a fixed non-escalable charge, a variable escalable charge, and incentives for maintaining targeted availability. See "Industry Overview" on page 129 for further details. The following tables reflects the contracted non-escalable and escalable tariffs for each of the Portfolio Assets remaining for the term of the applicable TSA.

Non-Escalable Tariff for the Portfolio Assets

The following tables reflect the non-escalable tariffs for the Portfolio Assets.

Anniversary of Scheduled Commission Date	REMAINING NON-ESCALABLE TARIFF FOR THE PORTFOLIO ASSETS (₹ in million)					
	BDTCL	JTCL	PKTCL	RAPP	MTL	PTCL
	March 31, 2014	March 31, 2014	Scheduled Commission Date April 9, 2016	Scheduled Commission Date March 1, 2016	June 6, 2018	June 6, 2016
2018	2,419.92	1,864.42	500.29	304.10		220.00
2019	2,417.28	1,862.74	713.12	433.47	548.18	252.50
2020	2,414.53	1,302.86	712.51	433.10	548.18	282.73
2021	2,411.76	1,300.97	711.87	432.70	548.18	299.95
2022	2,408.70	1,298.97	711.18	432.29	548.18	299.95
2023	2,405.60	1,296.85	710.46	431.85	548.18	299.95
2024	1,669.27	1,294.60	709.69	431.38	548.18	299.95
2025	1,665.92	1,292.22	708.87	430.88	548.18	299.95
2026	1,662.44	1,289.69	708.01	430.36	548.18	299.95
2027	1,658.81	1,287.01	707.10	429.81	548.18	299.95
2028	1,655.04	1,284.17	706.13	429.22	548.18	299.95
2029	1,651.11	1,281.16	705.11	428.60	548.18	299.95
2030	1,647.02	1,277.97	704.02	427.94	548.18	299.95

REMAINING NON-ESCALABLE TARIFF FOR THE PORTFOLIO ASSETS (₹ in million)						
Anniversary of Scheduled Commission Date	BDTCL	JTCL	PKTCL	RAPP	MTL	PTCL
	March 31, 2014	March 31, 2014	Scheduled Commission Date April 9, 2016	Scheduled Commission Date March 1, 2016	June 6, 2018	June 6, 2016
2031	1,642.77	1,274.59	702.88	427.24	548.18	299.95
2032	1,638.35	1,271.01	701.66	426.50	548.18	237.98
2033	1,633.74	1,267.21	700.37	425.71	548.18	237.42
2034	1,628.95	1,263.18	699.00	424.88	548.18	236.82
2035	1,623.97	1,258.91	697.56	424.00	548.18	236.19
2036	1,618.79	1,254.39	574.62	423.07	548.18	255.52
2037	1,613.39	1,249.60	481.00	422.09	548.18	254.81
2038	1,607.78	1,244.52	479.28	421.04	548.18	254.06
2039	1,601.94	1,239.14	477.45	419.93	548.18	253.36
2040	1,595.86	1,233.43	475.52	418.76	548.18	252.41
2041	1,589.53	1,227.38	473.48	417.52	548.18	251.52
2042	1,582.95	1,220.97	471.31	416.20	548.18	260.57
2043	1,576.11	1,214.17	469.02	322.09	548.18	259.57
2044	1,568.98	1,206.97	466.59	283.61	548.18	258.50
2045	1,561.57	1,199.34	464.01	282.05	548.18	257.38
2046	1,553.86	1,191.25	461.29	280.39	548.18	256.18
2047	1,545.83	1,182.68	458.40	278.63	548.18	254.92
2048	1,537.48	1,173.59	455.34	276.77	548.18	253.58
2049		1,164.41	452.10	274.80	548.18	252.16
2050	TSA TERM EXPIRED	TSA TERM EXPIRED	448.66	272.72	548.18	250.66
2051			445.03	270.51	548.18	249.07
2052			TSA TERM EXPIRED	TSA TERM EXPIRED	548.18	249.00
2053					548.18	TSA TERM EXPIRED
2054					TSA TERM EXPIRED	
2055					TSA TERM EXPIRED	

Escalable Tariff for the Portfolio Assets

The following tables reflect the current contracted escalable tariffs for the Portfolio Assets.

ESCALABLE TARIFFS FOR THE PORTFOLIO ASSETS (₹ in million)						
	JTCL	BDTCL	PKTCL	RAPP	MTL⁽¹⁾	PTCL⁽²⁾
Initial escalable tariff (year)	22.80 (2014)	56.64(2014)	8.88(2016)	5.39(2016)	7.75(2019)	4.71(2017)
2019 escalable tariff	35.73	88.46	11.05	6.73	7.97	6.48

(1) MTL started commercial operations in fiscal 2018.

(2) We acquired PTCL from TEECL and TPGCL on August 31, 2018

Jabalpur Transmission Company Limited

JTCL was incorporated on September 8, 2009. JTCL entered into a TSA dated December 1, 2010 and a TSA dated November 12, 2013 with PGCIL (together the “JTCL TSAs”). The JTCL project was awarded to SGL1 by the Ministry of Power on January 19, 2011 for a 35-year period from the scheduled commercial operation date of the JTCL project, on a BOOM basis. We acquired JTCL from our Sponsor on May 30, 2017.

JTCL alleviates transmission capacity bottlenecks and expands the reliability and stability of the power grid in western and northern India by providing open access to transmit power from the independent power projects in the east of India. The corridors thus created are crucial links, on the basis of which the CTU has entered long-term open-access agreements with several generation companies in the eastern region of India.

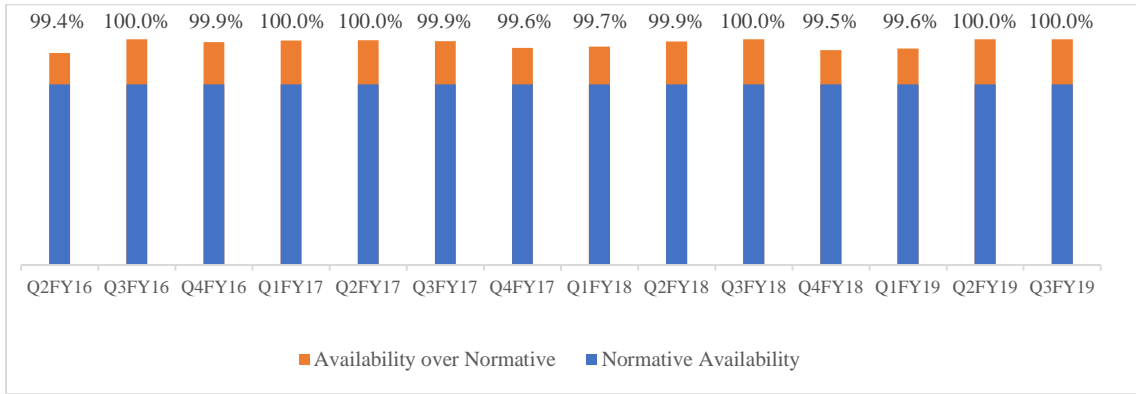


JTCL operates two EHV overhead transmission lines of approximately 992 ckms in the states of Chhattisgarh and Madhya Pradesh comprising one 765 kV double circuit line of approximately 757 ckms from Dharamjaigarh (Chhattisgarh) to Jabalpur (Madhya Pradesh) and one 765 kV single circuit line of approximately 235 ckms from Jabalpur to Bina in Madhya Pradesh. The Jabalpur - Bina line of JTCL is the first 765 kV transmission line developed by a private company in India, according to CRISIL. The JTCL project was fully commissioned in September 2015 at a total cost of ₹18,874 million. The net depreciated value of the asset as of March 31, 2019 is ₹13,909.49 million.

Details of JTCL's transmission lines are set forth as follows:

Transmission Line	Location	Route Length (ckms)	Specifications	Commission Date	Expiry of TSA term	Contribution to Total Tariff
Jabalpur-Dharamjaigarh	Chhattisgarh, Madhya Pradesh	757	765 kV D/C	September 14, 2015	March 31, 2049	72%
Jabalpur-Bina	Madhya Pradesh	235	765 kV S/C	July 1, 2015	March 31, 2049	28%
Total		992				

The average quarterly availability of JTCL since commissioning is set forth in the table below, which is higher than the target availability of 98% under the JTCL TSA. As a result, JTCL earned annual incentive revenue of ₹73 million in fiscal 2019.



As of March 31, 2019, the JTCL TSA had a remaining term of 30 years.

The JTCL transmission lines could not be commissioned on the scheduled commission date due to change in law and force majeure events including the amendment of the Forest Guidelines, delay in grant of forest clearance and delay in obtaining authorization under Section 164 of the Electricity Act. The delay was acknowledged by CERC following an initial petition by JTCL and the scheduled commercial operation date was revised accordingly. To compensate for the loss in revenue, JTCL filed an additional petition with CERC to quantify the increase in transmission charges. The CERC, through its order dated May 8, 2017 (in petition number 310/MP/2015) (the “**CERC Order**”), allowed an increase of 9.8903% per annum on the quoted non-escalable charges of the respective years from the date of commercial operation of the respective transmission lines on account of change in law, resulting in an increase in the cost of the project by ₹1,699.90 million (the “**Approved Cost Escalation**”). In accordance with the Project Implementation and Management Agreement, our Project Manager was entitled to an allotment of our Units for an amount equivalent to ₹1,359.92 million pursuant to the CERC Order, which is 80% of the Approved Cost Escalation. We allotted 13.6 million Units to the Project Manager, which is the same entity as our Sponsor at an issue price of ₹100 per Unit.

Bhopal Dhule Transmission Company Limited



BDTCL was incorporated on September 8, 2009. BDTCL entered into a TSA dated December 7, 2010 and a TSA dated November 12, 2013 with PGCIL (together, the “**BDTCL TSAs**”). The BDTCL project was awarded to SGL1 by the Ministry of Power on January 31, 2011 for a 35-year period from the scheduled commercial operation date of the BDTCL project, on a BOOM basis. We acquired BDTCL from our Sponsor on May 30, 2017.

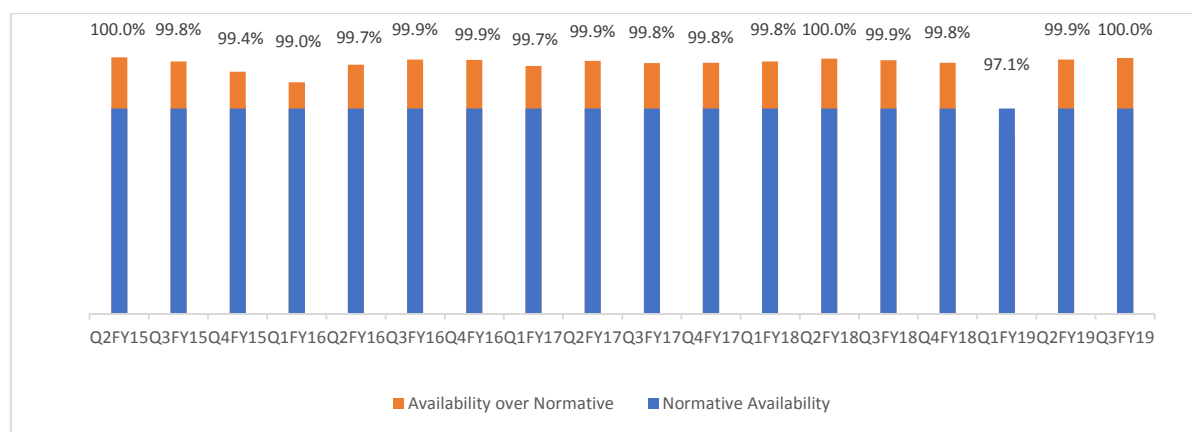
BDTCL facilitates the transfer of electricity from coal-fired power generation sources from the states of Odisha and Chhattisgarh to power load centers in India’s western and northern regions. As our largest power transmission

power transmission project, BDTCL operates six EHV overhead transmission lines of approximately 945 ckms comprising four 765 kV single circuit lines of approximately 891 ckms and two 400 kV double circuit lines of approximately 53 ckms. The single circuit lines comprise an approximately 260 ckms line from Bhopal to Jabalpur in Madhya Pradesh, an approximately 176 ckms line from Bhopal to Indore in Madhya Pradesh, an approximately 192 ckms line from Aurangabad to Dhule in Maharashtra and an approximately 263 ckms line from Dhule (Maharashtra) to Vadodara (Gujarat). The double circuit lines consist of an approximately 36 ckms line within Dhule and an approximately 17 ckms line within Bhopal. In addition, the project includes two 3,000 MVA substations, one each in Bhopal and Dhule.

BDTCL was fully commissioned in June 2015 at a total cost of ₹21,330 million. The net depreciated value of the asset as of March 31, 2019 is ₹18,321.80 million. BDTCL was awarded a Silver Shield for the year 2013-2014 in the category of “Early Completion of Transmission Projects” by the Ministry of Power for its Dhule substation. Details of BDTCL’s transmission lines and substations are set forth as follows:

Transmission Line / Substation	Route Length (ckms)	Specifications	Commission Date	Expiry term of TSA	Contribution to Total Tariff
Bhopal—Jabalpur	260	765 kV S/C	June 9, 2015	March 31, 2049	22%
Bhopal—Indore	176	765 kV S/C	November 19, 2014	March 31, 2049	12%
Bhopal—Bhopal (MPPTCL)	17	400 kV D/C	August 12, 2014	March 31, 2049	2%
Aurangabad—Dhule (IPTC)	192	765 kV S/C	December 5, 2014	March 31, 2049	10%
Dhule (IPTC)—Vadodara	263	765 kV S/C	June 13, 2015	March 31, 2049	16%
Dhule (IPTC)—Dhule (MSETCL)	36	400 kV D/C	December 6, 2014	March 31, 2049	4%
Bhopal Substation	—	2 x 1,500 MVA 765/400 kV	September 30, 2014	March 31, 2049	17%
Dhule Substation	—	2 x 1,500 MVA 765/400 kV	December 6, 2014	March 31, 2049	17%

The average quarterly availability of BDTCL since commissioning is set forth in the following table, which is higher than the target availability of 98% under the BDTCL TSA. As a result, BDTCL earned annual incentive revenue of ₹60 million in fiscal 2019.



As of March 31, 2019, the BDTCL TSA had a remaining term of over 30 years.

The BDTCL transmission lines could not be commissioned on their scheduled commission dates due to change in law and force majeure events, including the amendment of Forest Guidelines, delay in grant of forest clearance, delay in receiving authorisation under Section 164 of the Electricity Act, delay in allotment of land for the construction of the Bhopal substation and change in applicable rates of taxes. The delay was acknowledged by CERC and the scheduled commercial operation date was revised accordingly. To compensate for the loss in revenue, BDTCL filed a tariff revision petition with CERC, pursuant to which the CERC through its order dated

June 25, 2018 sought further documents to establish BDTCL’s claim in respect of cost escalation. For further details, see “*Litigation*” on page 239.

BDTCL had its 765 KV S/C Bhopal – Indore transmission line rendered inoperable for 51 days in fiscal 2015 when gale force winds damaged a transmission tower. BDTCL obtained a deemed availability certificate from CERC to receive tariffs for this period and substantially all of the repair and restoration costs were covered by our Sponsor’s insurance. For further details, see “*Litigation*” on page 239.

Purulia & Kharagpur Transmission Company Limited



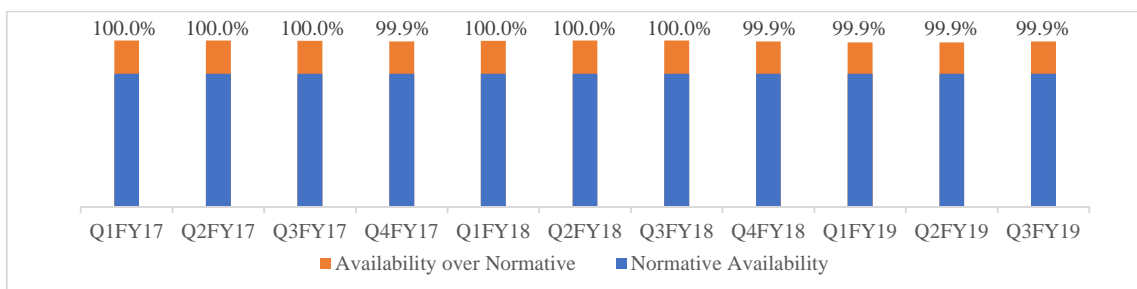
PKTCL was incorporated on December 15, 2012. PKTCL entered into a TSA (the “**PKTCL TSA**”) on August 6, 2013. The PKTCL project was awarded by the Ministry of Power on September 17, 2013 for a 35-year period from the scheduled commercial operation date of the PKTCL project, on a BOOM basis. We acquired PKTCL from our Sponsor on February 14, 2018.

PKTCL supports the interconnection of the West Bengal state grid and the ISTS and facilitates the exchange of additional power between them. PKTCL was established to strengthen the transmission system in the states of West Bengal and Jharkhand.

PKTCL operates two EHV overhead transmission lines with a total circuit length of approximately 545 ckms in the states of West Bengal and Jharkhand, comprising one 400 kV D/C line of approximately 322 ckms from Kharagpur (West Bengal) to Chaibasa (Jharkhand) and one 400 kV D/C line of approximately 223 ckms from Purulia (West Bengal) to Ranchi (Jharkhand). The Kharagpur-Chaibasa 400 kV D/C transmission line was commissioned in June 2016, while the Purulia – Ranchi 400 kV D/C transmission line was commissioned in January 2017. The project was fully commissioned in January 2017 at a total cost of ₹4,405 million. The net depreciated value of the asset as of March 31, 2019 is ₹4,041.90 million. Details of PKTCL’s transmission lines are set forth as follows:

Transmission Line	Route Length (ckms)	Specifications	Commission Date	Expiry of term of TSA	Contribution to Total Tariff
Kharagpur (WBSETCL)—Chaibasa (PG)	322	400 kV D/C	June 18, 2016	April 19, 2051	54%
Purulia PSP (WB)—Ranchi PG	223	400 kV D/C	January 7, 2017	April 19, 2051	46%

The average quarterly availability of PKTCL since commissioning is set forth in the following table, which is higher than the target availability of 98% under the PKTCL TSA. As a result PKTCL earned annual incentive revenue of ₹25 million in fiscal 2019.



As of March 31, 2019, the PKTCL TSA had a remaining term of over 32 years.

PKTCL filed a petition dated July 7, 2016 under Section 79(1)(f) read with Section 79(1)(c) of the Electricity Act before the CERC seeking compensatory and declaratory reliefs under the PKTCL TSA on account of force majeure and changes in law, including due to delay in application for forest diversion proposal, shifting of final termination point of Purulia substation, delay in grant of forest clearance and law and order issues which adversely affected and subsequently, delayed the construction of the 400 kV D/C Purulia – Ranchi transmission line and 400 kV D/C Kharagpur – Chaibasa transmission line. There can be no assurance that the claimed amount will be granted. For further details, see “*Litigation*” on page 239.

RAPP Transmission Company Limited

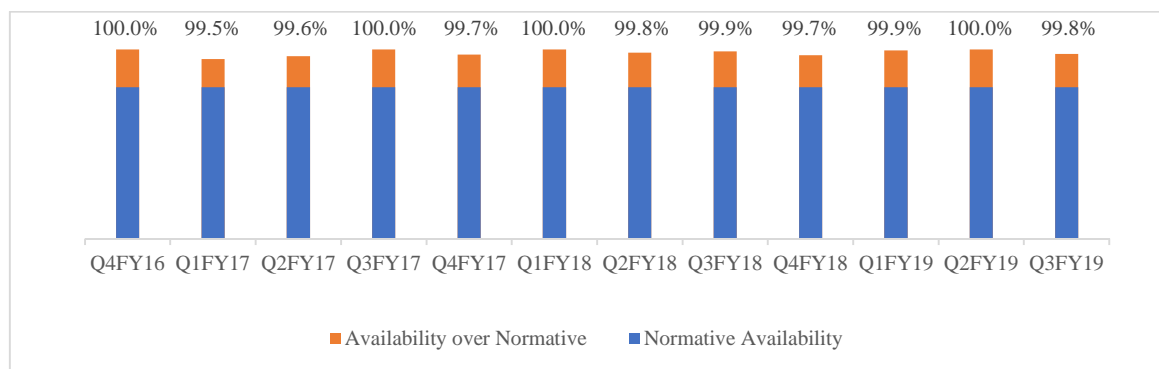


RAPP was incorporated on December 20, 2012. RAPP entered into a TSA (the “**RAPP TSA**”) on July 24, 2013. The RAPP project was awarded by the Ministry of Power on September 17, 2013 for a 35-year period from the scheduled commercial operation date of the RAPP project, on a BOOM basis. We acquired RAPP from our Sponsor on February 14, 2018. RAPP facilitates the strengthening of the transmission capability between the northern and western sectors of India’s power grid by evacuating electricity from an atomic power plant near Kota in Rajasthan to central Madhya Pradesh. The project was undertaken in conjunction with the Rajasthan Atomic Power Project established by Nuclear Power Corporation of India.

RAPP operates one EHV overhead transmission line of approximately 403 ckms in the states of Rajasthan and Madhya Pradesh, comprised of one 400 kV D/C line from Rajasthan to Madhya Pradesh. The project was fully commissioned in November 11, 2016 at a total cost of ₹2,600 million. The net depreciated value of the asset as of March 31, 2019 is ₹2,322.27 million. Details of RAPP’s transmission line are set forth as follows:

Transmission Line	Route length (ckms)	Specifications	Commission Date	Expiry of term of TSA	Contribution to Total Tariff
RAPP— Shujalpur	403	400 kV D/C	March 1, 2016	February 2051	100%

The average quarterly availability of RAPP since commissioning is set forth in the following table, which is higher than the target availability of 98% under the RAPP TSA. As a result, RAPP earned annual incentive revenue of ₹15 million in fiscal 2019.



As of March 31, 2019, the RAPP TSA had a remaining term of approximately 32 years.

RAPP filed a petition dated March 11, 2016 under Section 79(1)(f) read with Section 79(1)(c) of the Electricity Act seeking payment of monthly transmission charges for the period starting from December 26, 2015 under the RAPP TSA and the revenue sharing agreement and the order dated July 15, 2015 issued by the Ministry of Power entitled “Policy for Incentivizing Early Commissioning of Transmission Projects” under which RAPP contended that it is entitled to the payment of monthly transmission charges from the actual date of commercial operation, December 26, 2015, which is in advance of the scheduled commercial operation date of February 2016. CERC, by its order dated September 21, 2016 declared that RAPP was entitled to the payment of transmission charges accrued from the scheduled commercial operation date until bays are developed by the Nuclear Power Corporation of India Limited (“NPCIL”). NPCIL filed an application to stay the CERC order on November 4, 2016 before the Appellate Tribunal for Electricity which has been replied to by RAPP. Through an order passed on January 18, 2019 (the “Order”), APTEL dismissed the Interim Application. APTEL also granted liberty to RTCL to regulate the power supply of NPCIL if NPCIL failed to make the payment within 30 days of the Order. RTCL has accordingly sent letters to NPCIL for the disbursement of the withheld amounts along with applicable charges. NPCIL has filed an appeal before the Supreme Court of India against the Order. For further details, see “Litigation” on page 239.

Maheshwaram Transmission Limited

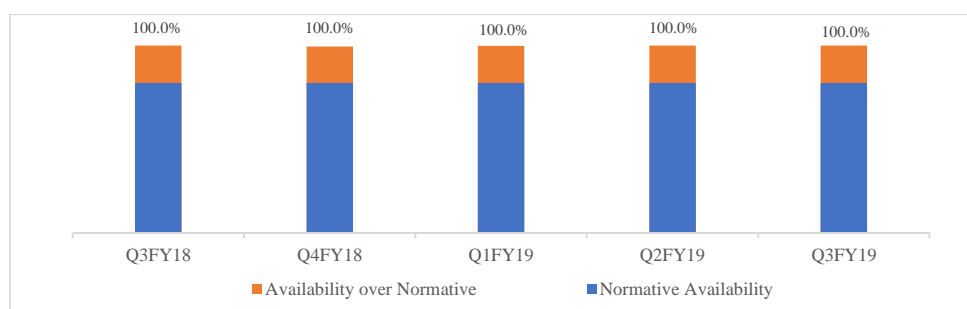


MTL was incorporated on August 14, 2014. MTL entered into a TSA (the “MTL TSA”) on June 10, 2015. The MTL project was awarded by the Ministry of Power on July 21, 2015 for a 35-year period from the scheduled commercial operation date of the MTL project, on a BOOM basis. We acquired MTL from our Sponsor on February 14, 2018. MTL constitutes a key component in enabling the southern region of India to draw more power from the rest of the grid and seeks to address the issue of power stability in the state of Telangana. This improved grid connectivity is expected to facilitate power procurement from the ISTS network to meet electricity demands in south India.

MTL operates two EHV overhead transmission lines with a total circuit length of approximately 477 ckms in the state of Telangana, comprising one 400kV D/C line of approximately 197 ckms from Maheshwaram to Mehboob Nagar in Telangana and one 400kV D/C line of approximately 279 ckms from Nizamabad to Yeddumailaram in Telangana. MTL also has four 400kV line bays. The Maheshwaram – Mehboob Nagar 400 kV D/C transmission line was commissioned on December 14, 2017, while the Nizamabad – Yeddumailaram 400 kV D/C transmission line was commissioned on October 14, 2017. The project was fully commissioned on December 14, 2017 at a total cost of ₹3,878 million. The net depreciated value of the asset as of March 31, 2019 is ₹3,707.34 million. Details of MTL’s transmission lines and line bays are set forth as follows:

Transmission Line	Route Length (ckms)	Specifications	Commission Date	Expiry of TSA Term	Contribution to Total Tariff
Maheshwaram (PG)—Mehboobnagar	197	400 kV D/C	December 14, 2017	December 14, 2053	35%
2 Nos. of 400 kV line bays at Mehboob Nagar S/S of TSTRANSCO	-	-	-	-	
Nizamabad—Yeddumailaram (Shankarpalli)	279	400 kV D/C	October 14, 2017	October 14, 2053	61%
2 Nos. of 400kV line bays at Yeddumailaram (Shankarpalli) S/S of TSTRANSCO	-	-	-	-	

The average quarterly availability of MTL since commissioning is set forth in the following table, which is higher than the target availability of 98% under the MTL TSA. As a result, MTL earned annual incentive revenue of ₹19 million in fiscal 2019.



As of March 31, 2019, the MTL TSA had a remaining term of over 33 years.

Patran Transmission Company Limited

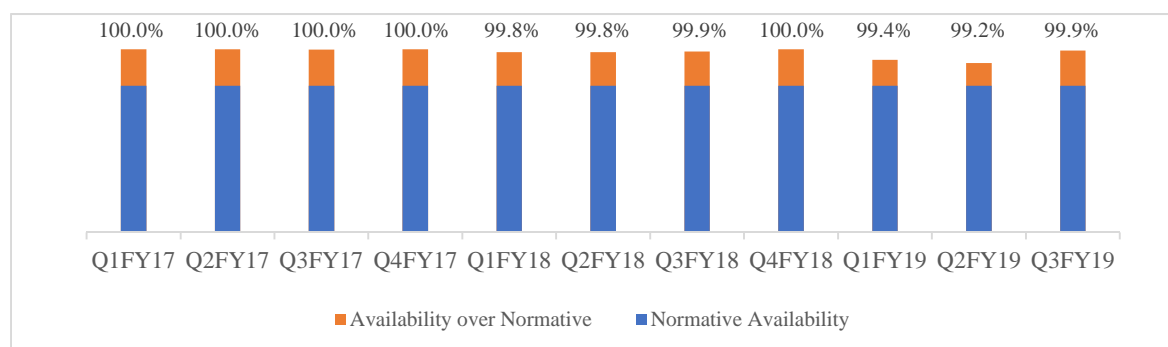
PTCL was incorporated on December 19, 2012. PTCL entered into a TSA (the “PTCL TSA”) on May 12, 2014. The PTCL project was awarded by the Ministry of Power to TEECL and TPGCL through a letter of intent dated September 8, 2013 for a 35-year period from the scheduled commercial operation date of the PTCL project, on a BOOM basis. On August 31, 2018, we completed the acquisition of 74% of the equity shares of PTCL from TEECL and TPGCL. As a result, we now own PTCL’s one substation having 1,000 MVA of transformation capacity.

PTCL constitutes a key component in strengthening the power transmission system in the state of Punjab. PTCL operates one 400 kV D/C line from Patiala to Kaithal in Punjab and has a 1000 MVA, 400/220 kV substation at Patran and 14 kV line bays. The Patiala – Kaithal 400 kV D/C transmission line was commissioned in June 2016. Details of PTCL’s transmission lines are set forth as follows:

Transmission Line / Substations	Route Length (ckms)	Specifications	Commission Date	Expiry of term of the TSA	Contribution to Total Tariff
Patiala—Kaithal	-	400 kV D/C	November 12, 2016	November 12, 2051	-

Patran substation	-	2*500MVA, 400/220kV Substation at Patran with; i. 6 nos 400kV Bays ii. 8 nos 220kV Bays	November 12, 2016	November, 12 2051	100%
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The average quarterly availability of PTCL since commissioning is set forth in the following table, which is higher than the target availability of 98% under the PTCL TSA. As a result, PTCL earned annual incentive revenue of ₹8 million in fiscal 2019.



As of March 31, 2019, the PTCL TSA had a remaining term of over 32 years.

Sponsor Assets

Our Sponsor has developed 12 inter-state power transmission projects in India, comprising 38 power transmission lines and 10 substations, with a total network of approximately 8,001 ckms of power transmission lines with 14,995 MVA of transformation capacity, at different stages of development. Of the 12 inter-state transmission assets developed by our Sponsor, we acquired five power transmission projects in fiscal 2018, which are part of the Portfolio Assets. Of the remaining seven power transmission assets owned by our Sponsor, three assets form part of the Framework Agreement, one asset forms part of the ROFO Deed and we intend to acquire the Target Assets with the proceeds of this Issue. The remaining one asset owned by our Sponsor, GTTPL, is not part of the Framework Assets or the ROFO Assets.

The following table provides a summary of the assets owned by our Sponsor in India:

Project Name	Transmission Line / Substation	Route Length (ckms)
NRSS XXIX Transmission Limited ⁽²⁾	Punjab, Jammu and Kashmir	830
Odisha Generation Phase - II Transmission Limited ⁽²⁾	Odisha and Chhattisgarh	711
Gurgaon-Palwal Transmission Limited ⁽¹⁾	Rajasthan, Haryana and Uttar Pradesh	270
Khargone Transmission Limited ⁽¹⁾	Madhya Pradesh and Maharashtra	620
NER – II Transmission Limited ⁽¹⁾	Assam, Arunachal Pradesh, Tripura	821
East North Interconnection Company Limited ⁽³⁾	Assam, Bihar, West Bengal	909
Goa Tamnar Transmission Project Limited ⁽⁴⁾	Goa, Karnataka, Chhattisgarh	478

(1) The assets form part of the Framework Agreement, pursuant to which we have agreed to acquire these assets once they are commissioned and revenue generating. For further details, see “*Related Party Transactions*” on page 228.

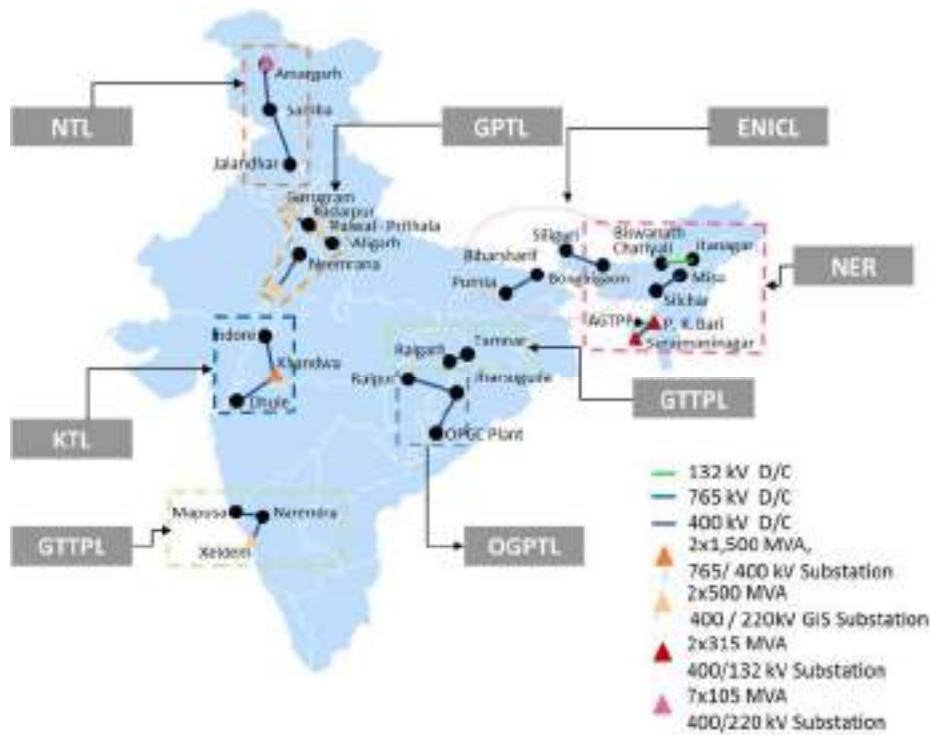
(2) We intend to acquire 100% of this asset from the proceeds of this Issue. For further details, see “*Use of Proceeds*” on page 199.

(3) This asset forms part of the ROFO Deed pursuant to which, we have a “right of first offer” to acquire this asset. For further details, see “*Related Party Transactions*” on page 228.

(4) This asset is not a ROFO Asset or a Framework Asset.

Additionally, the Sponsor won bids for ten transmission projects with a total network of approximately 4,424 ckms having 7,890 MVA of transformation capacity in Brazil, in auctions conducted by the Brazilian electricity regulatory authority, Agência Nacional de Energia Elétrica. Presently, under the InvIT Regulations, we are not permitted to acquire transmission projects outside of India, including the Sponsor’s projects in Brazil.

The following map shows the locations of the Sponsor Assets:



Target Assets, Framework Assets and ROFO Assets

The following table sets forth a summary description of the Target Assets, Framework Assets and ROFO Assets:

Project	Location	Status	Description	Route Length (ckms)	Term of TSA
NTL ⁽¹⁾⁽²⁾	Punjab, Jammu and Kashmir	JS line commissioned in June 2016 and SA line commissioned in September 2018 respectively.	Three 400 kV D/C lines and one 400/220 kV D/C GIS substation with 735 MVA transformation capacity.	830	35 years
OGPTL ⁽¹⁾⁽²⁾	Chhattisgarh, Odhisa	OPGC-J line commissioned in August 2017 and JR line commissioned in April 2019 respectively.	One 765 kV D/C transmission line and one 400 kV D/C transmission line.	711	35 years
GPTL ⁽¹⁾	Haryana, Rajasthan, Uttar Pradesh	Expected to be fully commissioned by September 2019	Five 400 kV D/C transmission lines, three 400/220 kV GIS substations with 1,000 MVA transformation capacity each and two 400 kV line bays at 400 kV Dhonanda substation.	270	35 years

Project	Location	Status	Description	Route Length (ckms)	Term of TSA
KTL ⁽¹⁾	Madhya Pradesh and Maharashtra	Expected to be fully commissioned by July 2019	Two 400 kV D/C transmission lines, two 765 kV D/C transmission line, one 765/400 kV substation with 2 x1,500 MVA transformation capacity at Khandwa and two 765 kV line bays and 7x80 MVAR Switchable line reactors (1 unit as spare) along 800Ω NGR and its auxiliaries for Khandwa Pool-Dhule 765 kV D/C at 765/400 kV Dhule substation.	620	35 years
NER ⁽¹⁾	Arunachal Pradesh, Assam and Tripura	Expected to be fully commissioned by November 2020	Two 132kV D/C transmission lines, two 400kV D/C transmission lines; two 400/132kV, 2*315 MVA substations	821	35 years
ENICL ⁽³⁾	Assam, Bihar, West Bengal	Fully commissioned in November 2014	Two 400 kV D/C lines.	909	25 years

(1) The assets form part of the Framework Agreement, pursuant to which we have agreed to acquire these assets once they are commissioned and revenue generating. For further details, see “*Related Party Transactions*” on page 228.

(2) We intend to acquire 100% of this asset from the proceeds of this Issue. For further details, see “*Use of Proceeds*” on page 199.

(3) This asset forms part of the ROFO Deed pursuant to which we have a “right of first offer” to acquire this asset. For further details, see “*Related Party Transactions*” on page 228.

Pursuant to the Electricity Act, all transmission projects have to procure permits and clearances from various government departments in India, in order to be commissioned and receive tariffs. The status of the approvals and clearances for each Use of Proceeds Asset, Framework Asset and ROFO Asset as of March 31, 2019 is set forth in the table below:

Project	SPV acquisition	Approval for overhead lines (S.68 of EA)	Transmission license (CERC)	Tariff orders (CERC)	Financial closure	Forest clearance	Wildlife clearance	Construction	Approval under S.164 of EA
NTL ⁽¹⁾⁽²⁾	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100%	Yes
OGPTL ⁽¹⁾⁽²⁾	Yes	Yes	Yes	Yes	Yes	Yes	-	100%	Yes
GPTL ⁽¹⁾	Yes	Yes	Yes	Yes	Yes	In progress	-	In progress	Yes
KTL ⁽¹⁾	Yes	Yes	Yes	Yes	Yes	Yes	-	In progress	Yes
NER ⁽¹⁾	Yes	Yes	Yes	Yes	Yes	In progress	-	In progress	Yes
ENICL ⁽³⁾	Yes	Yes	Yes	Yes	Yes	Yes	-	100%	Yes

(1) the assets form part of the Framework Agreement, pursuant to which we have agreed to acquire these assets once they are commissioned and revenue generating. For further details, see “*Related Party Transactions*” on page 228.

(2) We intend to acquire 100% of this asset from the proceeds of this Issue. For further details, see “*Use of Proceeds*” on page 199.

(3) This asset forms part of the ROFO Deed pursuant to which we have a “right of first offer” to acquire this asset. For further details, see “*Related Party Transactions*” on page 228.

The construction status of the Target Assets, Framework Assets and ROFO Assets is set forth in the following table:

Project	Foundations	Tower erection	Stringing
NTL ⁽¹⁾⁽²⁾	100%	100%	100%
OGPTL ⁽¹⁾⁽²⁾	100%	100%	100%
GPTL ⁽¹⁾	In progress	In progress	In progress
KTL ⁽¹⁾	In progress	In progress	In progress
NER ⁽¹⁾	In progress	In progress	In progress
ENICL ⁽³⁾	100%	100%	100%

(1) The assets form part of the Framework Agreement, pursuant to which we have agreed to acquire these assets once they are commissioned and revenue generating. For further details, see “*Related Party Transactions*” on page 228.

(2) We intend to acquire 100% of this asset from the proceeds of this Issue. For further details, see “Use of Proceeds” on page 199.

(3) This asset forms part of the ROFO Deed pursuant to which we have a “right of first offer” to acquire this asset. For further details, see “Related Party Transactions” on page 228.

Tariff – Target Assets, Framework Assets and ROFO Assets

The tariff for each Use of Proceeds Asset, Framework Asset and ROFO Asset is contracted for the period of its TSA, which is up to 35 years from the scheduled commission date, except for ENICL for which the contracted period under the TSA is 25 years from the date of issue of the transmission license. The tariff rates are comprised of a fixed non-escalable charge, a variable escalable charge, and incentives for maintaining targeted availability. See “Industry Overview” on page 129.

The following tables reflect the contracted non-escalable and escalable tariffs for the commissioned and non-commissioned Target Assets, Framework Assets and ROFO Assets.

Non-Escalable Tariff for Commissioned Assets

The following tables reflects the contracted non-escalable tariffs for two Use of Proceeds Assets and the ROFO Asset, which have been commissioned, remaining for the term of the TSAs.

REMAINING NON-ESCALABLE TARIFF FOR COMMISSIONED PROJECTS (₹in million)			
Anniversary of Scheduled Commission Date	ENICL ⁽¹⁾	NTL ⁽²⁾⁽³⁾	OGPTL ⁽²⁾⁽³⁾
	Scheduled Commission Date	Scheduled Commission Date	Scheduled Commission Date
	March 31, 2013	October 2018	August 2019
2018	1,181.65	N/A	N/A
2019	1,181.65	4,817.97	N/A
2020	1,181.65	4,814.38	1,587.20
2021	1,181.65	4,811.06	1,587.20
2022	1,181.65	4,807.52	1,549.91
2023	1,181.65	4,803.75	1,513.49
2024	1,181.65	4,799.74	1,477.93
2025	1,181.65	4,795.46	1,443.20
2026	1,181.65	4,790.90	1,409.28
2027	1,181.65	4,786.05	1,376.17
2028	1,181.65	4,780.88	1,343.83
2029	1,181.65	4,775.37	1,312.26
2030	1,181.65	4,769.50	1,281.42
2031	1,181.65	4,763.25	1,251.31
2032	1,181.65	4,756.59	1,221.91
2033	1,181.65	3,314.24	1,193.19
2034	1,181.65	3,306.68	1,165.16
2035	1,181.65	3,298.63	1,137.78
2036	TSA TERM EXPIRED	3,290.05	1,126.91
2037		3,280.91	1,126.91
2038		3,271.18	1,126.91
2039		3,260.81	1,126.91
2040		3,249.76	1,126.91
2041		3,237.99	1,126.91
2042		3,225.45	1,126.91
2043		3,212.09	1,126.91
2044		3,197.86	1,126.91
2045		3,182.71	1,126.91
2046		3,166.56	1,126.91
2047		3,149.35	1,126.91
2048		3,131.03	1,126.91
2049		3,111.50	1,126.91
2050		3,090.71	1,126.91
2051		3,068.55	1,126.91
2052		3,044.95	1,126.91
2053		3,019.80	1,126.91
2054		2,993.02	1,126.91
2055		TSA TERM EXPIRED	1,126.91
2056		TSA TERM EXPIRED	TSA TERM

			EXPIRED
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(1) This asset forms part of the ROFO Deed pursuant to which we have a “right of first offer” to acquire this asset. For further details, see “*Related Party Transactions*” on page 228.

(2) We intend to acquire 100% of this asset from the proceeds of this Issue. For further details, see “*Use of Proceeds*” on page 199.

(3) The assets form part of the Framework Agreement, pursuant to which we have agreed to acquire these assets once they are commissioned and revenue generating. For further details, see “*Related Party Transactions*” on page 228.

Non-Escalable Tariff for Non-Commissioned Assets

The following table reflects the contracted non-escalable tariffs for the Framework Assets, which have not been commissioned for the 35-year term of the applicable TSA.

NON-ESCALABLE TARIFF FOR NON-COMMISSIONED ASSETS (₹in million)			
	GPTL	KTL	NER
Anniversary of Scheduled Commissioned Date	Scheduled commission date		
	September 2019	July 2019	November 2020
2018	N/A	N/A	N/A
2019	N/A	N/A	N/A
2020	1,435.22	1,860.82	N/A
2021	1,435.22	1,860.82	3938.4
2022	1,401.50	1,817.10	3938.4
2023	1,368.56	1,774.40	3938.4
2024	1,336.40	1,732.70	4591.23
2025	1,305.00	1,691.99	4497.53
2026	1,274.34	1,652.23	4403.83
2027	1,244.39	1,613.41	4403.83
2028	1,215.15	1,575.50	4310.13
2029	1,186.60	1,538.47	4216.43
2030	1,158.72	1,502.32	4122.73
2031	1,131.49	1,467.02	4029.03
2032	1,104.90	1,432.55	3938.4
2033	1,078.94	1,398.89	4988.39
2034	1,053.59	1,366.02	5069.34
2035	1,028.83	1,333.92	5147.84
2036	1,019.00	1,321.18	5177.32
2037	1,019.00	1,321.18	5290.06
2038	1,019.00	1,321.18	5374.04
2039	1,019.00	1,321.18	5369.5
2040	1,019.00	1,321.18	5364.1
2041	1,019.00	1,321.18	5357.71
2042	1,019.00	1,321.18	5350.23
2043	1,019.00	1,321.18	5429.96
2044	1,019.00	1,321.18	5455.23
2045	1,019.00	1,321.18	5443.72
2046	1,019.00	1,321.18	5430.61
2047	1,019.00	1,321.18	5415.7
2048	1,019.00	1,321.18	5398.8
2049	1,019.00	1,321.18	5379.29
2050	1,019.00	1,321.18	5339.45
2051	1,019.00	1,321.18	5339.45
2052	1,019.00	1,321.18	5339.45
2053	1,019.00	1,321.18	5339.45
2054	1,019.00	1,321.18	5339.45
2055	1,019.03	1,321.18	5339.45
2056			5339.45
2057	TSA TERM EXPIRED	TSA TERM EXPIRED	TSA TERM EXPIRED
2058			

Escalable Tariff for Commissioned Assets

The following tables reflect the current contracted escalable tariffs for the commissioned assets.

ESCALABLE TARIFFS FOR COMMISSIONED ASSETS (₹in million)			
	ENICL ⁽¹⁾	NTL ⁽²⁾⁽³⁾	OGPTL ⁽²⁾⁽³⁾
Initial escalable tariff (year)	58.61 (2017)	47.28 (2018)	16.01 (2019)
2019 escalable tariff	100.96	10.94 ⁽³⁾	1.05

(1) This asset forms part of the ROFO Deed pursuant to which we have a “right of first offer” to acquire this asset. For further details, see “Related Party Transactions” on page 228.

(2) We intend to acquire 100% of this asset from the proceeds of this Issue. For further details, see “Use of Proceeds” on page 199.

(3) The assets form part of the Framework Agreement, pursuant to which we have agreed to acquire these assets once they are commissioned and revenue generating. For further details, see “Related Party Transactions” on page 228.

Escalable Tariff for Non-Commissioned Assets

The following tables reflect the initial contracted escalable tariffs for the non-commissioned assets for the 35-year term of the applicable TSA.

INITIAL ESCALABLE TARIFF FOR NON-COMMISSIONED ASSETS (₹in million)		SCHEDULED COMMISSION DATE
GPTL⁽¹⁾	14.50	September 2019
KTL⁽¹⁾	17.05	July 2019
NER⁽¹⁾	0.00	November 2020

(1) The assets form part of the Framework Agreement, pursuant to which we have agreed to acquire these assets once they are commissioned and revenue generating. For further details, see “Related Party Transactions” on page 228.

NRSS XXIX Transmission Limited



NTL was incorporated on July 29, 2013. NTL entered into a TSA (the “NTL TSA”) on January 2, 2014. The NTL project was awarded by the Ministry of Power on May 23, 2014 for a 35-year period from the scheduled commercial operation date of the NTL project, on a BOOM basis.

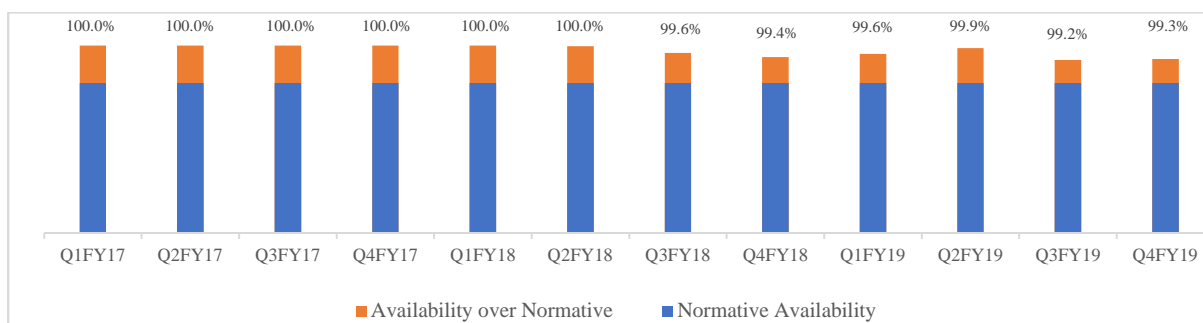
The NTL project is expected to deliver over 2,000 MW of electricity from Punjab to the Kashmir Valley by strengthening the transmission system in the states of Jammu and Kashmir and Punjab. The Jalandhar-Samba 400 kV D/C transmission line was commissioned in June 2016 and the Uri-Wagoora transmission line was commissioned in September 2, 2018. The project was fully commissioned in September 2018 at a total cost of ₹28,082 million. Details of NTL’s transmission lines and substations are set forth as follows:

Transmission Line / Substation	Route Length (ckms)	Specifications	Commissioned Date	Expiry of TSA term
Samba—Amargarh	547	400 kV D/C	September 2, 2018	September 2053
Uri—Wagoora	14		September 2, 2018	September 2053
Jalandhar—Samba	270	400 kV D/C	June 24, 2016	June 2051

Amargarh Substation	—	400/220 kV D/C GIS Substation with 735 MVA of transformation capacity	September 2, 2018	September 2053
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NTL filed a petition dated June 22, 2016 under Section 79(1)(f) read with Section 79(1)(c) of the Electricity Act against PGCIL (in its capacity as a Central Transmission Utility) and the lead long term customers before the CERC seeking payment of monthly transmission charges for the period starting from April 7, 2016 under the NTL TSA and an order dated July 15, 2015 issued by the Ministry of Power entitled “Policy for Incentivizing Early Commissioning of Transmission Projects” under which NTL is entitled to the payment of monthly transmission charges from the actual date of commercial operation, April 7, 2016, which is in advance of the scheduled commercial operation date of June 3, 2017. Pursuant to CERC’s order, NTL received tariffs for the stated period for the Jalandhar-Samba line, after which, NTL withdrew its petition. For further details, see “*Litigation*” on page 239.

The average quarterly availability of NTL since commissioning is set forth in the table below:



The total revenue earned by NTL in fiscals 2017, 2018 and 2019 is set forth below:

NTL			
(₹ in million)	Fiscal		
	2017	2018	2019
Tariff	827	1,075	2,939
Incentive	29	38	89
Late Payment Surcharge	1	5	5
Total revenue⁽¹⁾	855.10	1,117	3,033

(1) Gross revenue earned (i.e. without adjustment of rebate)

We intend to acquire 100% of NTL with the proceeds of this Issue. See “*Use of Proceeds*” on page 199 for more details.

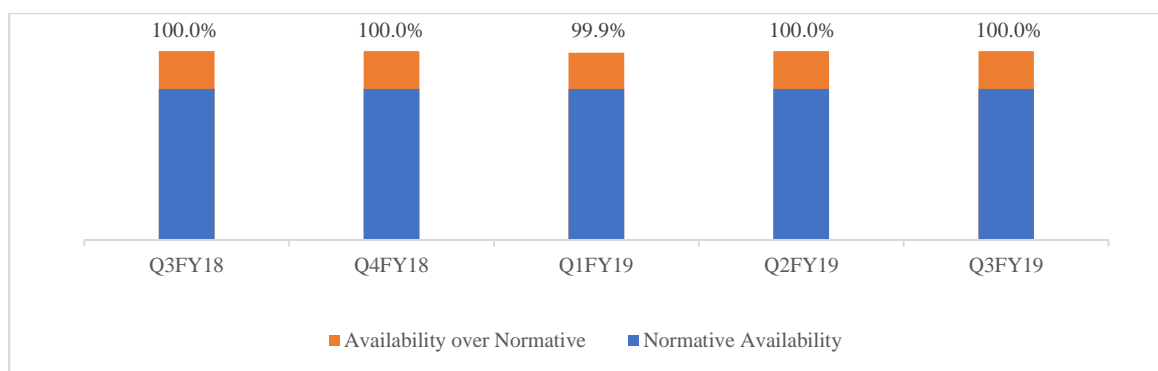
Odisha Generation Phase - II Transmission Limited

OGPTL was incorporated on April 17, 2015. OGPTL entered into a TSA (the “**OGPTL TSA**”) on November 20, 2015. The OGPTL project was awarded by the Ministry of Power on January 6, 2016 for a 35-year period from the scheduled commercial operation date of the OGPTL project, on a BOOM basis. The Jharsuguda-OPGC 400kV D/C transmission line was commissioned in August 2017 and Raipur- Jharsuguda line has received an energization certificate and is undergoing relevant inspection and trial operation process in line with the industry practice and the OGPTL TSA requirements. Details of OGPTL’s transmission lines are set forth as follows:

Transmission Line	Route Length (ckms)	Specifications	Commission Date	Expiry of TSA Term
Raipur – Jharsuguda	608	765kV D/C	April 6, 2019	April 2054
Jharsuguda – OPGC	103	400 kV D/C	August 30, 2017	July 2052

* Final CoD Certificate is under process

The average quarterly availability of OGPTL since commissioning is set forth in the table below:



Since OGPTL started partial commercial operation in August 2017, the following table sets forth the total revenue earned by OGPTL in fiscal 2019:

	Fiscal	
	2018	2019
(₹ in million)		
Tariff	27	96
Incentive.....	1	3
Late Payment Surcharge	-	-
Total revenue⁽¹⁾.....	28	99
(1) Gross revenue earned (i.e. without adjustment of rebate)		

We intend to acquire OGPTL with the proceeds of this Issue. See “Use of Proceeds” on page 199 for more details.

Gurgaon-Palwal Transmission Limited

GPTL was incorporated on October 26, 2015. GPTL entered into a TSA (the “GPTL TSA”) on March 4, 2016. The GPTL project was awarded by the Ministry of Power on March 17, 2016 for a 35-year period from the scheduled commercial operation date of the GPTL project, on a BOOM basis. The project is under development and is expected to be fully commissioned and operational by September 2019. Details of GPTL’s transmission lines, substations and line bays are set forth as follows:

Transmission Line / Substations	Route Length (ckms)	Specifications	Scheduled Commission Date	Expiry of TSA Term
Aligarh - Prithala	99	400 kV D/C HTLS line	May 14, 2019	July 2054
Prithala – Kadarapur	55	400 kV D/C HTLS line	May 14, 2019	July 2054
Kadarapur-Sohna Road	22	400 kV D/C HTLS line	September 14, 2019	July 2054
LILO of Gurgaon Manesar	2	400 kV D/C Quad line	September 14, 2019	July 2054
Neemrana – Dhonanda	93	400 kV D/C HTLS line	May 14, 2019	July 2054
Kadarapur substation	-	400/220 kV, 2 x 500 MVA	May 14, 2019	July 2054
Sohna substation	-	400/220 kV, 2 x 500 MVA	September 14, 2019	July 2054
Prithala substation	-	400/220 kV, 2 x 500 MVA	May 14, 2019	July 2054
Dhonanda substation	-	Two 400 kV line bays	May 14, 2019	July 2054

Khargone Transmission Limited

KTL was incorporated on November 28, 2015. KTL entered into a TSA (the “KTL TSA”) on March 14, 2016. The KTL project was awarded by the Ministry of Power on May 26, 2016 for a 35-year period from the scheduled commercial operation date of the KTL project, on a BOOM basis. The project is under development and is

expected to be fully commissioned and operational by July 2019. Details of KTL's transmission lines and line bays are set forth as follows:

Transmission Line	Route Length (ckms)	Specifications	Scheduled Commission Date	Expiry of TSA Term
LILO of Khandwa – Rajgarh line	14	400 kV D/C line	February 2018	July 2054
Khargone TPP Switchyard – Khandwa Pool	49	400 kV D/C line	July 2019	July 2054
Khandwa Pool - Indore	179	765 kV D/C line	July 2019	July 2054
Khandwa Pool - Dhule	378	765 kV D/C line	July 2019	July 2054
Khandwa pooling station	-	3,000 MVA transformation capacity	July 2019	July 2054
2 Nos. of 765 kV line bays and 7x80 MVAR Switchable line reactors (1 Unit as spare) along with 800 Ω NGR and its auxiliaries for Khandwa Pool – Dhule 765 kV D/C at Dhule 765/400 kV substation				

NER II Transmission Limited

NER was incorporated on April 21, 2015. NER entered into a TSA (the “NER TSA”) on December 27, 2016. The NER project was awarded by the Ministry of Power on February 22, 2017 for a 35-year period from the scheduled commercial operation date of the NER project, on a BOOM basis. The project is under development and is expected to be fully commissioned and operational by November 30, 2020. Details of NER's transmission lines, substations and line bays are set forth as follows:

Transmission line	Route length (ckms)	Specifications	Scheduled commission date	Expiry of TSA term
Biswanath Chariyalli – Itanagar Line	131.04	132kV/D/C	March, 2020	November 2055
2 bay lines at Itanagar for terminating the Biswanath Chariyalli– Itanagar line		132kV	March, 2020	November 2055
Lilo line between Biswanath Chariyalli.	16.46	132kV/D/C	March, 2020	November 2055
Silchar– Misa line	421.2	400kV D/C	November, 2020	November 2055
400/132 kV, 2*315 MVA Single phase sub-station at Surajmaninagar	-	400/132 kV	July, 2020	November 2055
400/132 kV, 2*315 MVA sub-station at P.K. Bari	-	400kV 132 D/C	July, 2020	November 2055
2 bay lines at Palatana switchyard for terminating the Palatana - Surajmaninagar line	-	400kV D/C	July, 2020	November 2055
AGTPP – P.K. Bari line	188.868	132kV/D/C	March, 2020	November 2055
2 bay lines at AGTPP for terminating the AGTPP - P.K. Bari line.	-	132kV D/C	March, 2020	November 2055
2 bay lines at PK Bari for terminating the AGTPP - P.K.Bari line	-	132kV D/C	March, 2020	November 2055
Surajmaninagar –P.K. Bari Line	208.258	400 Kv D/C	July 2020	November 2055

East North Interconnection Company Limited

ENICL was incorporated on February 1, 2007. ENICL entered into a TSA dated August 6, 2009 and a transmission services agreement dated January 28, 2013 with PGCIL (the “ENICL TSA”). The ENICL project was awarded by the Ministry of Power on January 7, 2010 for a 25-year period from the date of issue of the license by CERC, on a BOOM basis.

ENICL operates two EHV overhead transmission lines of approximately 909 ckms in the states of Assam, Bihar and West Bengal, comprising one 400 kV D/C line of approximately 443 ckms from Bongaigaon (Assam) to Siliguri (West Bengal) and one 400 kV D/C line of approximately 466 ckms from Purnia (Bihar) to Biharsharif (Bihar). The project was fully commissioned in November 2014 at a total cost of ₹11,760 million.

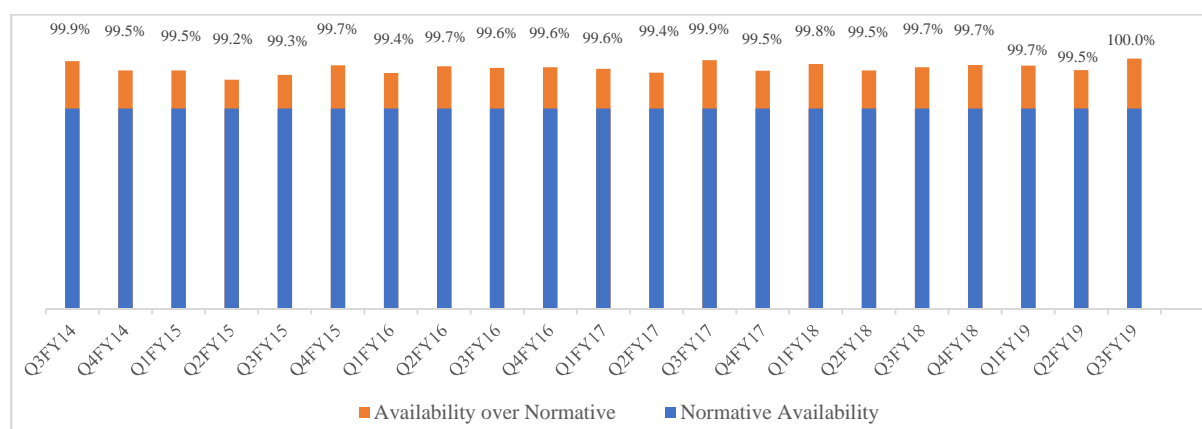
Details of ENICL’s transmission lines are set forth as follows:

Transmission Line	Route Length (ckms)	Specifications	Commission Date
Bongaigaon-Siliguri	443	400 kV D/C	November 12, 2014
Purnia-Biharsharif	466	400 kV D/C	September 16, 2013

ENICL’s transmission lines could not be commissioned on time due to force majeure events, including delay in receiving forest clearance, floods, strikes, riots and bandhs. The delay was acknowledged by CERC and the scheduled commercial operation date was revised accordingly. CERC, by its order dated August 24, 2016 held that ENICL was entitled to the payment of debt service for the period of force majeure in the form of an increase in non-escalable transmission charges in accordance with the ENICL TSA; however, such amount has not yet been fixed. Subsequently, ENICL filed a petition before the CERC praying for relief including approving the quantification of increase of 8.54% per annum in the non-escalable transmission charges and restoring ENICL to the same economic condition as prior to the occurrence of the change in law and force majeure events.

ENICL’s 400 kV D/C line from Purnia to Biharsharif has been inoperable since August, 2018, when flooding damaged a transmission tower due to erosion of the river bank. ENICL has obtained deemed availability certificates to receive tariffs for this line from August, 2018 to October, 2018. Our Sponsor does not expect the line to resume operations before the end of June, 2019. Our Sponsor is in the process of submitting an insurance claim for restoration and repair costs. A similar incident happened in the past, when the line was inoperable from August 2016 to July 2017, on account of damage to a transmission tower due to flooding. ENICL obtained deemed availability certificates from August 2016 to July 2017.

The average quarterly availability of ENICL since commissioning is set forth in the table below, which is higher than the target availability of 98% under the ENICL TSA. As a result, ENICL earned annual incentive fees of 51 million in fiscal 2019.



The total revenue earned by ENICL in fiscals 2017, 2018 and 2019 is set forth below:

ENICL (₹in million)	Fiscal		
	2017	2018	2019
Tariff.....	1,352	1,542	1,446
Incentive	41	71	51

Late Payment Surcharge	10	7	5
Total revenue⁽¹⁾	1,403	1,619	1,502
(1) Gross revenue earned (i.e. without adjustment of rebate)_____			

Summary of Key Agreements of the Portfolio Assets

The Portfolio Assets have entered into TSAs and revenue sharing agreements (“**RSAs**”) the key terms of which are provided below.

TSA

The Portfolio Assets entered into TSAs with long-term transmission customers to set up projects on a BOOM basis and to provide transmission services on a long-term basis to such customers on the terms and conditions contained in the TSAs. The term of each TSA is 35 years from the scheduled commercial date of operation of the applicable project, unless terminated earlier in accordance with the terms of the TSA. The TSAs provide for, among other things, details and procedures for project execution, development and construction, operation and maintenance.

Pursuant to the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 (“**Sharing Regulations**”), the Portfolio Assets also entered into TSAs with the CTU, to govern the provision of inter-state transmission services, specifically in relation to sharing of transmission charges and losses and disbursing the transmission charges collected by the CTU. The inter-state transmission service customers and inter-state transmission service licensees are required to abide by the detailed billing, collection and disbursement procedure of the CTU and with the terms of the TSA. The CTU raises bills and also collects and disburses in accordance with the detailed billing, collection and disbursement procedures of the CTU, as approved by CERC. Under the terms of the TSA, each inter-state transmission service customer has agreed to allow the CTU to enforce recovery of payment through a letter of credit on behalf of all the inter-state transmission service licensees in the event of default of payment. If payment by an inter-state transmission service customer against any invoice raised under the billing, collection and disbursement procedure, is outstanding beyond 30 days after the due date or in case the required letter of credit or any other agreed payment security mechanism is not maintained by the inter-state transmission service customer, the CTU is empowered to undertake regulation of power supply on behalf of all the inter-state transmission service licensees so as to recover charges under the provisions of the Central Electricity Regulatory Commission (Regulation of Power Supply) Regulations, 2010 (the “**Power Supply Regulations**”).

The TSA also provides for force majeure relief to the inter-state transmission service licensees and inter-state transmission service customers (the “**Affected Parties**”) affected by the occurrence of a force majeure event. The TSA defines a force majeure event as an event or circumstance, or a combination thereof, that wholly or partly prevents or unavoidably delays the Affected Party in the performance of its obligations under such TSAs, but only if and to the extent that such event or circumstance is not within the reasonable control, directly or indirectly of the Affected Party, and includes, among others, an act of God, act of war, radioactive contamination, industry-wide strikes and labour disturbances having a nationwide impact in India. To the extent not prevented by a force majeure event, the Affected Party must continue to perform its obligations under the TSA and must use its efforts to mitigate the effect of such event, as soon as practicable. The Affected Party will not be in breach of its obligations under the TSA, except to the extent that the performance of its obligations was prevented, hindered or delayed due to a force majeure event. Each inter-state transmission service customer or inter-state transmission service licensee is entitled to claim relief for a force majeure event affecting its performance in relation to its obligations under the TSA. Computation of availability under outage due to a force majeure event must be in accordance to the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 as amended from time to time and any subsequent enactment thereof.

The TSA entered into with the CTU also defines change in law as being, among other events, (i) the enactment, coming into effect, adoption, promulgation, amendment, modification or repeal (without re-enactment or consolidation) in India, of any law, including rules and regulations framed pursuant to such law, (ii) change in the interpretation or application of any law by the GoI having the legal power to interpret or apply such law, or any competent court of law, (iii) the imposition of a requirement for obtaining any consents, clearances and permits which were not required earlier or a change in the terms and conditions prescribed for obtaining such consents, clearances and permits or (iv) any change in tax or the introduction of any tax made applicable for transmission service by the inter-state transmission service licensees, as per the terms of the TSA. Any adjustment in the monthly transmission charges due to a change in law is to be determined and effective from such date, as decided

by the CERC, subject to rights of appeal provided under applicable law. Further in case of ISTS awarded through the competitive bidding process under Section 63 of the Electricity Act, the reference date for determining the implications of change in law is seven days prior to the relevant bid due date for submission of a tariff bid.

RSA

Pursuant to the Sharing Regulations, the Portfolio Assets entered into revenue sharing agreements with PGCIL (“RSAs”). The transmission charges billed in accordance with the billing, collection and disbursement procedures set out in the TSAs with CTUs are disbursed to the inter-state transmission system licensees by the CTU, pursuant to and in accordance with the RSAs. The PoC charges for use of inter-state transmission services by the inter-state transmission services customers, and are billed and collected by the CTU on behalf of all inter-state transmission services licensees. The CTU must disburse the collected transmission charges to the respective inter-state transmission services licensees and owners of deemed inter-state transmission services whose transmission charges have been considered for the purpose of calculation of the PoC charges in accordance with the billing, collection and disbursement procedure set out in the TSAs with the CTU. Delayed payment or partial payment by any inter-state transmission services customers results in a pro-rata reduction in the payouts to all the inter-state transmission services licensees and owners of deemed inter-state transmission services whose transmission charges have been considered for the purpose of calculation of PoC charges. The revenue sharing statements to be submitted to the CTU and the modality of disbursements by the CTU must be in accordance with the billing, collection and disbursement procedure. Each inter-state transmission licensee, under the applicable RSA, empowers the CTU to enforce recovery of payment from the inter-state transmission service customers through payment security mechanisms in the event of default or partial payment by the inter-state transmission service customer, in accordance with the billing, collection and disbursement procedure. Each inter-state transmission licensee has further agreed and empowered the CTU to invoke the provisions of the Power Supply Regulations in accordance with the detailed billing, collection and disbursement procedure.

Operation and Maintenance

The operation and maintenance of the Portfolio Assets is the responsibility of the Project Manager, pursuant to its obligations under the Project Implementation and Management Agreement. The Project Manager is also subject to the oversight of the Power System Operation Corporation Limited and CERC, which are responsible for system operation and control, including inter-state and intra-state power management, inter-state and inter-regional transfer of power, covering contingency analysis and operational planning on a real-time basis as well as the operation of regional and state-level unscheduled interchange pool accounts and regional and state-level reactive energy accounts. Consequently, our operations and maintenance strategy focuses on deploying prudent grid management practices to achieve the following objectives:

- to achieve the targeted system availability specified in the TSAs;
- to optimize the life cycle cost of transmission lines by preventive actions;
- to maximize excellence in quality, health, safety, security and environment; and
- to optimize operation and maintenance costs.

The Project Manager deploys highly-skilled employees and engages third party operation and maintenance agencies to provide operational and maintenance support to the Portfolio Assets. The Project Manager develops and controls the operation and maintenance philosophy and strategy for each Portfolio Asset by selecting the right outsourcing partners, implementing sound technical solutions, developing activity charts and conducting scheduled maintenance. The Project Manager supports the Portfolio Assets to outsource specific maintenance, repair, supervision and security tasks by choosing capable vendors as well as finalizing optimum work orders.

The Project Manager develops and tracks preventive maintenance plans and provides all personnel required to help ensure safe and reliable transmission systems. By performing preventative and corrective maintenance on our transmission assets, the Project Manager strives to minimize the need for reactive maintenance, which may adversely impact reliability and tends to be more costly than preventative maintenance. Preventive and corrective maintenance includes activities such as inspections, monitoring, servicing, vegetation management, fault restoration, repairs and patrols following failures, including by using advanced technologies. The transmission lines and substations of the Portfolio Assets have consistently achieved more than 98% of target availability.

The Project Manager also emphasizes on-line techniques in order to minimize shutdown time for periodic maintenance checks and breakdown maintenance. Furthermore, to prepare for certain force majeure situations that cannot be predicted, the Project Manager partners with third party vendors to implement alternative transmission systems, such as emergency restoration systems, who in turn provide the skilled labor necessary to install and operate these emergency restoration systems. The Project Manager has a specialist team of engineers for the operation and maintenance of substations.

The Project Manager also provides shared services that are required to run the operations of the Portfolio Assets. The services include, accounting, administrative support and legal support.

Insurance

Our Project Manager has obtained insurance policies covering all of the Portfolio Assets to cover risks including loss or damage from fire, flood, landslide, storm, terrorism, sabotage, machinery breakdown and any accidental and physical loss and destruction or damage to the insured property due to a cause, other than as excluded in the insurance policies. These insurance policies are subject to exclusions for certain circumstances including, among others, faulty or defective design materials or workmanship, wear and tear, larceny, acts of fraud or dishonesty, any wilful act or wilful negligence on the part of the insured or any person acting on its behalf, war, invasion, damage caused by nuclear weapons material or ionising radiation or contamination by radioactivity from any nuclear fuel or nuclear waste, loss or damage caused directly or indirectly from discharge of pollutants or contaminants, and certain properties, including, among others, money, cheques, bonds, credit cards, securities of any description and explosives. One of the policies covers all losses up to ₹2 billion without an aggregate cap and covers business interruption losses, including loss of revenue. This insurance policy is valid from September 30, 2018 to September 29, 2019 and renewable on a yearly basis. The insurer is The New India Assurance Company Limited and the Portfolio Assets are insured in line with industry practice.

Human Resources

The following table sets forth details of the employees of the Investment Manager by function for the period indicated:

Function	As at March 31,	
	2019	
	Number of employees	% of total
Chief executive officer and Chief Financial Officer office	1	6%
Mergers and Acquisitions.....	2	13%
Capital raise and Investor relations	4	25%
Asset management and regulatory	2	13%
Finance and compliance	7	44%
Total.....	16	100%

Competition

Competition in the transmission sector depends on the geographic region, nature and size of the project. Through the TBCB, competition is encouraged among players primarily in relation to determining transmission charges. The bidder quoting the lowest levelised tariff is awarded the project to develop on the BOOM basis. Our principal competitors in the power transmission sector are PGCIL as well as other private players including Adani Transmission Limited, Reliance Power Transmission Limited and Essel Infra Projects. See “*Industry Overview*” on page 129 for further details.

According to the CRISIL Report, competition in the private sector for power transmission projects is increasingly limited to a few major credible players with relevant experience and the average number of bidders for a power transmission project decreased from seven between fiscals 2011 and 2014 to four in fiscal 2018.

According to the CRISIL Report, our Project Manager is the leading player in the power transmission sector with a market share of 31% as of February 2019. We believe that by leveraging on the expertise and market standing of our Project Manager, we will have a competitive advantage over our competitors.

Health, Safety and Environment

We are subject to extensive health, safety and environmental laws, regulations and government-prescribed operating procedures and environmental technical guidelines which govern our services, processes and operations. In compliance with these requirements, we have adopted a number of policies to address, among others, the generation, handling, storage, transportation, treatment and disposal of toxic or hazardous bio-medical materials and waste and wastewater discharges. The Portfolio Assets are committed to ensuring the health and safety of their employees by providing and maintaining an accident-free and healthy workplace through implementation of Environment, Occupational Health and Safety (“EHS”) management systems in order to minimize health and safety hazards. Furthermore, the Portfolio Assets proactively monitor the EHS management systems, integrate EHS procedures and best practices into their operations, conduct EHS training activities for employees and undertake periodic reviews of standard operating procedures in order to mitigate health and safety risks.

We believe that the Portfolio Assets are each in compliance in all material respects with Indian legislation in relation to environment laws and regulations and employee health and safety.

Properties

Pursuant to Section 164 of the Electricity Act, the Portfolio Assets have been granted rights of way across land that our transmission lines pass through.

We have leasehold rights for the land on which our substations for BDTCL are situated from the relevant state authorities for the duration of our transmission licenses. Additionally, we own parcels of land for BDTCL, JTCL, PTCL and MTL.

Intellectual Property

IndiGrid has registered the “IndiGrid” logo as a trademark under Class 42. We have also made another application for the registration of the “IndiGrid” logo as a trademark in India, which is pending. We have not applied for registration of any other intellectual property. Our aforementioned application for the trademark “IndiGrid” has been opposed to, or objected to, by third parties. We cannot assure you that the trademark will be registered in our name or at all.

INFORMATION CONCERNING THE UNITS

Unitholding of IndiGrid as at March 31, 2019

Category	Category of Unitholder	Number of Units held	As a percentage of total outstanding Units (%)
(A)	Sponsor(s) / Investment Manager / Project Manager(s) and their associates/related parties		
(1)	Indian	0	0
(a)	Individuals / HUF	0	0
(b)	Central/State Govt.	0	0
(c)	Financial Institutions/Banks	0	0
(d)	Any Other (specify)	0	0
	STERLITE POWER GRID VENTURES LIMITED	60129607	21.1873772
	Sub- Total (A) (1)	60129607	21.1873772
(2)	Foreign		
(a)	Individuals (Non Resident Indians / Foreign Individuals)	0	0
(b)	Foreign government	0	0
(c)	Institutions	0	0
(d)	Foreign Portfolio Investors	0	0
(e)	Any Other (specify)	0	0
	Sub- Total (A) (2)	0	0
	Total unit holding of Sponsor & Sponsor Group (A) = (A)(1)+(A)(2)	60129607	21.1873772
(B)	Public Holding		
(1)	Institutions		
(a)	Mutual Funds	5807214	2.04624044
(b)	Financial Institutions/Banks	10700991	3.770620566
(c)	Central/State Govt.	0	0
(d)	Venture Capital Funds	0	0
(e)	Insurance Companies	33302178	11.73441574
(f)	Provident/pension funds	1852389	0.652711142
(g)	Foreign Portfolio Investors	64879542	22.8610729
(h)	Foreign Venture Capital investors	0	0
(i)	Any Other (specify)	0	0
	Sub- Total (B) (1)	116542314	41.06506079
(2)	Non-Institutions		
(a)	Central Government/State Governments(s)/President of India	0	0
(b)	Individuals	62261671	21.93863513
(c)	NBFCs registered with RBI	10206	0.003596205
(d)	Any Other (specify)		0
	TRUSTS	66339	0.02337533
	ALTERNATIVE INVESTMENT FUND	0	0
	NON RESIDENT INDIANS	2607633	0.918830286
	CLEARING MEMBERS	163296	0.057539274
	BODIES CORPORATES	42018134	14.80558578
	Sub- Total (B) (2)	107127279	37.74756201
	Total Public Unit holding (B) = (B)(1)+(B)(2)	223669593	78.8126228
	Total Units Outstanding (C) = (A) + (B)	283799200	100

Unitholders holding more than 5% of the Units of IndiGrid as at March 31, 2019

Sr. No.	Name of Unit Holders	Pre-Issue		Post-Issue	
		Number of Units	Percentage of holding (%)	Number of Units	Percentage of holding (%)
1.	SPGVL	60,129,607	21.19	[●]	[●]
2.	Insurance Companies	33,302,178	11.73	[●]	[●]
3.	Foreign Portfolio Investors	64,879,542	22.86	[●]	[●]
4.	Individuals	62,261,671	21.94	[●]	[●]
5.	Body Corporates	42,018,134	14.81	[●]	[●]

Unitholding of the Sponsor, Investment Manager, Project Manager and Trustee

For details of the Units held by the Sponsor, who is also the Project Manager, please see the sections entitled “–Unit holding of IndiGrid as at March 31, 2019” and “–Unitholders holding more than 5% of the Units of IndiGrid as at March 31, 2019” on page 195 and 196, respectively.

The Trustee and the Investment Manager do not hold any Units and shall not acquire any Units in this Issue.

Unitholding of the directors of the Investment Manager

As on the date of this Preliminary Placement Document, except as disclosed below, none of the directors of the Investment Manager hold any Units or propose to hold any Units in IndiGrid.

Sr. No.	Name of Director	Number of Units
1.	Pratik Agarwal	367,416
2.	Harsh Shah	10,206

Sponsor lock-in

In terms of the InvIT Regulations, as on the date of this Preliminary Placement Document, the Sponsor holds 21.19% of Units, being 60,129,607 Units, of which the following number of Units are locked-in for a period of three years from the respective dates of listing of such Units, in accordance with the InvIT Regulations:

- (i) 40,530,000 Units allotted at the time of the initial public offer; and
- (ii) 13,599,200 Units, allotted on October 26, 2017, against the order of the CERC dated May 8, 2017 passed in relation to the JTCL Petition.

MARKET PRICE INFORMATION

In this section, all market price information provided for Fiscal 2018 refers to such information for the period beginning June 6, 2017 (i.e. the date of listing of the Units on the BSE and NSE) until March 31, 2018.

As on the date of this Preliminary Placement Document, 283,799,200 Units are issued, subscribed and are fully paid up. The Units have been listed and are available for trading on BSE and NSE.

On April 25, 2019, the closing price of the Units on BSE was ₹ 84.35 and on April 26, 2019, the closing price of the Units on NSE was and ₹ 82.01 per Unit, respectively. Because the Units are actively traded on BSE and NSE, the market price and other information for each of BSE and NSE has been given separately.

- (i) The following tables set forth the reported high, low, average market prices and the trading volumes of the Units on the Stock Exchanges on the dates on which such high and low prices were recorded and the total trading volumes for Fiscals 2018 and 2019:

BSE

Fiscal Year	High (₹)	Date of high	Number of Units traded on the date of high	Total volume of Units traded on date of high (₹ million)	Low (₹)	Date of low	Number of Units traded on the date of low	Total volume of Units traded on date of low (₹ million)	Average price for the fiscal (₹)	Number of Units traded during the fiscal	Turnover during the fiscal (In ₹ million)
2018	100.00	June 6, 2017	5,026,455	493.17	90.51	July 6, 2017	933,849	85.55	94.91	23,713,641	2,264.31
2019	99.00	May 29, 2018	219,429	21.34	80.85	March 27, 2019	86,751	7.07	91.13	11,058,201	1,021.09

NSE

Fiscal Year	High (₹)	Date of high	Number of Units traded on the date of high	Total volume of Units traded on date of high (₹ million)	Low (₹)	Date of low	Number of Units traded on the date of low	Total volume of Units traded on date of low (₹ million)	Average price for the fiscal (₹)	Number of Units traded during the fiscal	Turnover during the fiscal (In ₹ million)
2018	99.70	June 6, 2017	22,677,732	2,212.92	90.55	July 6, 2017	1,612,548	147.81	94.91	90,236,349	8,639.77
2019	98.70	April 26, 2018	244,944	24.10	80.99	March 28, 2019	158,193	12.82	90.94	35,210,700	3,205.89

(Source: www.bseindia.com and www.nseindia.com)

Notes:

- High, low are based on the daily high and low prices respectively.
- Average prices are based on the daily closing prices.
- In case of two days with the same high or low prices, the date with the number of units has been considered.

- (ii) The following tables set forth the reported high, low and average market prices and the trading volumes of the Units on the Stock Exchanges on the dates on which such high and low prices were recorded during each of the last six months:

BSE											
Month, year	High (₹)	Date of high	Number of Units traded on date of high	Total volume of Units traded on date of high (in ₹ million)	Low (₹)	Date of low	Number of Units traded on date of low	Total volume of Units traded on date of low (₹)	Average price for the month (₹)	Number of Units traded during the month	Turnover during the month (in ₹ million)
March, 2019	84.25	March 1, 2019	45,927	3.86	80.85	March 27, 2019	86,751	7,072,502	82.85	745,038	61.98
February 2019	86.80	February 1, 2019	5,103	0.44	83.50	February 22, 2019	40,824	3,432,226	84.64	3,26,592	27.60

BSE											
Month, year	High (₹)	Date of high	Number of Units traded on date of high	Total volume of Units traded on date of high (in ₹ million)	Low (₹)	Date of low	Number of Units traded on date of low	Total volume of Units traded on date of low (₹)	Average price for the month (₹)	Number of Units traded during the month	Turnover during the month (in ₹ million)
January 2019	90.00	January 18, 2019	96,957	8.70	84.10	January 24, 2019	10,206	862,917	86.63	3,41,901	29.79
December 2018	89.22	December 3, 2018	10,206	0.90	85.00	December 31, 2018	127,575	10,976,093	87.47	2,082,024	182.25
November 2018	89.65	November 1, 2018	5,103	0.46	87.50	14-Nov-18	20,412	1,812,075	88.33	2,50,047	22.13
October 2018	90.99	October 29, 2018	10,206	0.92	85.70	09-Oct-18	15,309	1,325,759	88.60	3,92,931	34.90

NSE											
Month, year	High (₹)	Date of high	Number of Units traded on the date of high	Total volume of Units traded on date of high (in ₹ million)	Low (₹)	Date of low	Number of Units traded on the date of low	Total volume of Units traded on date of low (₹)	Average price for the month (₹)	Number of Units traded during the month	Total Volume of Units traded during the month (in ₹ million)
March 2019	84.24	March 6, 2019	239,841	20.15	80.99	March 28, 2019	1,58,193	12,821,339	82.88	5,266,296	438.64
February 2019	85.99	February 1, 2019	30,618	2.61	83.56	February 28, 2019	1,63,296	13,709,465	84.58	2,071,818	175.13
January 2019	89.44	January 18, 2019	147,987	13.18	84.75	January 23, 2019	91,854	7,830,707	86.72	1,964,655	171.03
December 2018	88.74	December 18, 2018	30,618	2.69	85.00	December 31, 2018	5,30,712	45,388,582	87.56	1,683,990	146.19
November 2018	90.00	November 1, 2018	66,339	5.94	87.45	November 14, 2018	81,648	7,204,313	88.59	1,689,093	149.49
October 2018	91.79	October 15, 2018	183,708	16.53	86.60	October 9, 2018	1,42,884	12,455,913	88.92	3,587,409	320.35

(Source: www.bseindia.com and www.nseindia.com)

Notes:

- High, low are based on the daily High and Low prices respectively.
- Average prices are based on the daily closing prices.
- In case of two days with the same high or low prices, the date with the number of units has been considered.

(iii) The following table provides the market price on the Stock Exchanges on May 2, 2019, the first working day following the approval of the Board of the Investment Manager for the Issue:

BSE					
Open	High	Low	Close	Number of Units traded	Volume (₹ million)
[●]	[●]	[●]	[●]	[●]	[●]

NSE					
Open	High	Low	Close	Number of Units traded	Volume (₹ million)
[●]	[●]	[●]	[●]	[●]	[●]

(Source: www.bseindia.com and www.nseindia.com)

Note: The Project Manager was allotted 13,599,200 Units on October 26, 2017.

USE OF PROCEEDS

The proceeds of this Issue are ₹ 25,600 million (“**Issue Proceeds**”) and the proceeds of this Issue net of the total expenses of this Issue (“**Net Proceeds**”) are ₹ 25,200 million.

Subject to compliance with applicable law, the Net Proceeds will be utilised, at the discretion of the Investment Manager and the Trustee, towards one or more of the following objects:

- (i) Acquisition of 100% of the issued, subscribed and paid-up equity share capital of SGL2 from the Sponsor, which, in turn, holds 100% of the issued, subscribed and paid-up equity share capital of NTL;
- (ii) Acquisition of 100% of the issued, subscribed and paid-up equity share capital of SGL3 from the Sponsor, which, in turn, holds 100% of the issued, subscribed and paid-up equity share capital of OGPTL;
- (iii) Providing loans to the Target Assets and creation of a debt service reserve account; and
- (iv) General purposes.

The acquisitions stated above will be made in compliance with the requirements specified in the InvIT Regulations, including in relation to valuation, and are subject to necessary approvals and consents, including from the Unitholders. IndiGrid will enter into necessary definitive agreements with the Sponsor, the Investment Manager and other relevant entities, on mutually agreed terms and conditions for such acquisitions. For details of the Valuation Report, see Annexure A on page 344. For details regarding NTL and OGPTL, please see section entitled “*Our Business*” on page 161.

The details of the Net Proceeds are set forth in the following table:

Particulars	Amount
Net Proceeds	25,200

(In ₹ million)

Requirements of Funds

The Net Proceeds are proposed to be used in accordance with the details provided in the following table:

Sr. No.	Particulars	Amount
1.	Acquisition of 100% of the issued, subscribed and paid-up equity share capital of SGL2 from the Sponsor and acquisition of 100% of the issued, subscribed and paid-up equity share capital of SGL3 from the Sponsor	11,500
2.	Providing loans to the Target Assets and creation of a debt service reserve account	13,450
3.	General purposes	250

(In ₹ million)

The Investment Manager believes that abovementioned use of proceeds is consistent with IndiGrid’s strategy of growth and expansion of its business and will also allow IndiGrid to meet its commitment towards distributions to Unitholders.

The fund requirements mentioned above and the proposed deployment of such funds are based on the estimates of the Investment Manager and have not been appraised by any bank, financial institution or any other external agency. The fund requirements may vary due to factors beyond the Investment Manager’s control, such as market conditions, competitive environment, interest rate and exchange rate fluctuations. Consequently, the fund requirements are subject to revisions in the future, at the discretion of the Investment Manager, subject to Unitholders approval, if required and the Investment Manager will have flexibility in deploying the Net Proceeds.

Issue expenses

The total expenses of this Issue are estimated to be approximately ₹ 400 million, which will be borne solely by IndiGrid. The Issue expenses include fees and commissions payable to the Lead Managers, legal counsels, Escrow Collection Banks and advisors to this Issue, printing and stationery expenses, and all other incidental and miscellaneous expenses in relation to this Issue and to list the Units on the Stock Exchanges.

FINANCIAL INDEBTEDNESS AND DEFERRED PAYMENTS

The details of indebtedness of IndiGrid, the Portfolio Assets and the Target Assets as at March 31, 2019, together with a brief description of certain material covenants of the relevant financing agreements, are provided below:

Category of borrowing	Pre-Issue Principal Amount outstanding as on March 31, 2019	Post-Issue Principal Amount outstanding
<i>(in ₹ million)</i>		
IndiGrid		
Nature		
Non-convertible debentures	6,850	6,850
Secured Loan	9,945	9,945
Total Secured Loan (A)	16,795	16,795
Unsecured Loan	0	0
Total Unsecured Loan	0	0
Total	16,795	16,795
Deferred Payments	157	157
BDTCL		
Nature		
Non-convertible debentures	6,870	6,870
Secured Loan	2,453	2,453
Total Secured Loan (B)	9,323	9,323
Unsecured Loan	8,660	8,660
Total Unsecured Loan	8,660	8,660
JTCL		
Nature		
Unsecured Loan	16,451	16,451
Total Unsecured Loan	16,451	16,451
MTL		
Nature		
Unsecured Loan	3,780	3,780
Total Unsecured Loan	3,780	3,780
RTCL		
Nature		
Unsecured Loan	2,348	2,348
Total Unsecured Loan	2,348	2,348
PKTCL		
Nature		
Unsecured Loan	3,988	3,988
Total Unsecured Loan	3,988	3,988
PTCL		
Nature		
Unsecured Loan	1,585	1,585
Total Unsecured Loan	1,585	1,585
SGL-1		
Nature		
Non-convertible debentures	5,339	5,339
Loan	253	253
Total Unsecured Loan	5,591	5,591
IndiGrid Consolidated⁽¹⁾		
Total Secured Loan	26,118	
Deferred Payments	157	

Category of borrowing	Pre-Issue Principal Amount outstanding as on March 31, 2019	Post-Issue Principal Amount outstanding
Total	26,275	
<i>NTL</i>		
Nature		
Secured Loan	29,920	29,920
Total Secured Loan (C)	29,920	29,920
Unsecured Loan	(2,760)	(2,760)
Total Unsecured Loan	(2,760)	(2,760)
<i>OGPTL</i>		
Nature		
Secured Loan	8,790	8,790
Total Secured Loan (D)	8,790	8,790
Unsecured Loan	2,150	2,150
Total Unsecured Loan	2,150	2,150

⁽¹⁾ Includes the total principal amount outstanding in SGLI, BDTCL, JTCL, PKTCL, RTCL and MTL.

Principal terms of the borrowings availed by us

The principal terms of the loan agreements entered into by us are as follows:

1. **Security:** Loans under the loan agreements are secured by, amongst others, (i) first ranking pari passu charge over all present and future immovable assets pertaining to the project; (ii) first ranking pari passu charge on all tangible movable assets, including movable plants and machinery, machinery spares, tools and accessories and all other movable assets and current assets, both present and future; and (iii) first charge, including by way of hypothecation, over all accounts, both present and future, that may be opened in accordance with the transaction documents; (v) assignment by way of security or charge by way of hypothecation, over all right, title, interest, claims, benefits and demands relating to, (a) the agreements in relation to the Project (the “**Project Agreements**”); (b) clearances obtained pertaining to the project; (c) any letter of credit, guarantee, including contractor guarantees, liquidated damages, consent agreements, side letters or performance bond provided by any party to the Project Agreements; and (d) insurance contracts and insurance proceeds pertaining to the Project; and (vi) pledge of 51% of the equity share capital of the project SPVs, in terms of the financing agreements.
2. **Pre-payment:** We may prepay the outstanding amount of its loans, in full or in part, any time on the terms and conditions agreed with the lender after paying the prepayment premium. All prepayments shall be made together with the interest, charges and other monies due and payable to the lenders up to the date of such prepayment.
3. **Restrictive Covenants:** Borrowing arrangements entered into by the Portfolio Assets contain standard restrictive covenants, including:
 - (i) amendment to the memorandum of association and articles of association only with the prior approval of the lenders under the financing agreements;
 - (ii) insurance for the assets and the properties, against fire and all other risks as may be required by the lenders and in consultation with them; and
 - (iii) further indebtedness to not be availed during the tenor of the facilities other than as permitted under the relevant borrowing arrangements.
4. **Events of Default:** The borrowing arrangements entered into by the Portfolio Assets contain standard events of default, including:
 - (i) default in payment of principal amount or interest along with additional interest if applicable or any other amount payable;

- (ii) abandonment of Portfolio Assets by IndiGrid and/or the projects by the Portfolio Assets;
 - (iii) failure to maintain insurance cover of their respective projects and assets;
 - (iv) revocation of material clearances;
 - (v) default in performance of material conditions and covenants;
 - (vi) business of the Portfolio Assets becomes unlawful;
 - (vii) invalidity of the financing agreements;
 - (viii) default in relation to any repayment or prepayment of any amounts due to other lenders or any default under other borrowing arrangements; and
 - (ix) breach of the obligations under any term of the relevant financing agreement or any other financing agreement entered into by the Portfolio Assets.
5. *Consequences of default:* In terms of the borrowing arrangements entered into by us, the following, amongst others, are the consequences of default:
- (i) cancellation or suspension of the lenders' obligation to lend;
 - (ii) acceleration of repayment obligations and declaration of amounts outstanding to be forthwith due and payable;
 - (iii) enforcement of security interests; and
 - (iv) exercise of other remedies as permitted or available under the borrowing arrangements.

This is an indicative list of the terms of the borrowings availed by us and there may be additional terms, conditions and requirements under the various borrowing arrangements entered into by us.

Given the nature of these borrowings and the terms of prepayment, the aggregate outstanding borrowing amounts may vary from time to time. In addition to the above, each of the Portfolio Assets may, from time to time, enter into re-financing arrangements and draw down funds thereunder, prior to the filing of this Preliminary Placement Document or the Placement Document. In the event any of the above borrowings are repaid, pre-paid or re-financed or further drawn-down post the date of the Preliminary Placement Document, the relevant details in relation to the same will be provided in terms of the Placement Document.

Principal terms of the non-convertible debentures issued by IndiGrid

IndiGrid has, on a private placement basis, issued 2500 secured, listed, rated, redeemable non-convertible debt securities of face value of ₹ 1 million with an initial coupon of 8.60% aggregating to ₹ 2,500 million (the “**8.60% NCDs**”) and 4,350 secured, listed, rated, redeemable non-convertible debt securities of face value ₹ 1 million with an initial coupon of 8.9922% aggregating to ₹ 4,350 million (the “**8.99% NCDs**”, together with 8.60% NCDs, the “**IndiGrid NCDs**”).

The principal terms of the transaction documents entered into by IndiGrid in relation to the IndiGrid NCDs are as follows:

1. *Security:* The IndiGrid NCDs are secured by (i) a first pari passu charge on entire current assets of IndiGrid, including loans and advances and any receivables accrued or realized from such loans and advances extended by IndiGrid to its Project Assets and shall include any future loans to its Project Assets; and (ii) a first pari passu charge on IndiGrid escrow account and all its sub-accounts including cash trap account/distribution account etc. The security as stipulated, shall be created within a period of 30 days from the deemed date of allotment and perfected within 30 days from the date of its creation.

Additionally, the IndiGrid NCDs are secured through pledge of part of the equity share capital of JTCL, RTCL, PKTCL, MTL PTCL, subject to, and in the manner stipulated in the transaction documents.

2. *Tenor and Repayment:* The IndiGrid NCDs have a tenor of 10 years from the deemed date of allotment, with a bullet repayment at the end of the tenor.
3. *Restrictive Covenants:* The transaction documents entered into by IndiGrid, provide that IndiGrid shall not affect any of the following, without the prior written permission of the debenture trustees:
 - (i) change the general nature of its business as per the applicable law;
 - (ii) change the Trust Deed or other constitutional documents in any material way which would prejudicially affect the interests of the debenture holders;
 - (iii) undertake or permit any consolidation, re-organization, corporate restructuring, capital reduction, or compromise with its creditors or unitholders, except in case of procurement/purchase of additional assets and subject to:
 - (a) the credit rating of IndiGrid/ NCD is AAA from all the rating agencies;
 - (b) as long as overall debt is as per prevailing guidelines; and
 - (c) prior written intimation of 60 days is provided to the debenture trustee;
 - (iv) any additional indebtedness exceeding 60% of the value of the assets without the approval of debenture holders;
 - (v) change in control of any of the Portfolio Assets;
 - (vi) wind-up, liquidate or dissolve its affairs or take any actions towards the same; and
 - (vii) such other customary covenants for transaction of similar nature.
4. *Events of Default:* The transaction documents entered into by IndiGrid provide certain events of default, including:
 - (i) non-payment of interest or principal amount or any other amount due and payable in relation to the IndiGrid NCDs in terms of the transaction documents on the due date;
 - (ii) misleading representations and warranties;
 - (iii) commencement of voluntary insolvency, bankruptcy, winding up or other similar proceedings, including under the InvIT Regulations, by IndiGrid, the Sponsor or the Unitholders; and
 - (iv) cessation of business;
 - (v) non-creation or perfection of the security within the timelines stipulated under the transaction documents or security becoming invalid, in jeopardy, invalid or not having the ranking under the transaction documents, as stipulated;
 - (vi) material adverse effect;
 - (vii) delisting of the Units or the IndiGrid NCDs; and
 - (viii) default under any term of the relevant financing agreement or any other financing agreement entered into by the Portfolio Assets leading to a material adverse effect.
5. *Consequences of Events of Default:* The transaction documents entered into by IndiGrid provide certain consequences of events of default, including:

- (i) applying all cash proceeds arising in the escrow account towards repayment of IndiGrid's obligations to the debenture holders;
- (ii) enforcement of security and any rights available under transaction documents;
- (iii) applying the amounts standing to the credit of the escrow account and the permitted investments towards payment of dues under the IndiGrid NCDs;
- (iv) exercise all or any rights or remedies of IndiGrid under one or more project documents against any parties to such project documents; and
- (v) exercise such other remedies as permitted or available under applicable law including any circulars issued by RBI or SEBI.

This is an indicative list of the terms of transaction documents in relation to the IndiGrid NCDs and there may be additional terms, conditions and requirements under such transaction documents.

Facility from IndiGrid

IndiGrid may utilise part of the Issue Proceeds to provide loans to SGL2 and NTL. For details, please see the section entitled "*Use of Proceeds*" on page 199.

Status of lender consents

IndiGrid has received all lender consents in relation to this Issue. As of the date of this Preliminary Placement Document, there are no lender consents required in relation to the Portfolio Assets.

DISTRIBUTION

Statements contained in this section entitled “Distribution” that are not historical facts are forward-looking statements. Such statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those that may be projected. Under no circumstances should the inclusion of such information herein be regarded as a representation, warranty, undertaking or prediction with respect to the accuracy of the underlying assumptions by IndiGrid, the Trustee, the Sponsor, the Investment Manager, the Lead Managers or any other person. Bidders are cautioned not to place undue reliance on these forward-looking statements that are stated only as at the date of this Preliminary Placement Document. For details in relation to forward-looking statements, please see the section entitled “Forward-Looking Statements” on page 20.

The net distributable cash flows of IndiGrid (the “**Distributable Income**”) are based on the cash flows generated from the underlying operations undertaken by the InvIT Assets, in this case being the Portfolio Assets. For details of the business and operations presently undertaken by the InvIT Assets, please see the section entitled “*Our Business*” on page 161. Presently, cash flows receivable by IndiGrid may be in the form of dividend, interest income or principal repayment received from the InvIT Assets in relation to debt sanctioned by IndiGrid, or a combination of both.

In terms of the InvIT Regulations, not less than 90% of the net distributable cash flows of each of the InvIT Assets, namely PTCL and BDTCL, JTCL, RTCL, PKTCL and MTL shall be distributed to IndiGrid or SGL1, as applicable, subject to applicable provisions in the Companies Act, 2013 and not less than 90% of the net distributable cash flows of IndiGrid shall be distributed to the Unitholders. Further, with respect to the cash flows received by SGL1 from the InvIT Assets, 100% of such cash flows shall be distributed to IndiGrid unless required for debt servicing in any other loans of any of the InvIT Assets, in each case that are subsidiaries of SGL1 or repair work in any of the InvIT Assets. Further, with respect to cash flows generated by SGL1 on its own, not less than 90% of such net distributable cash flows shall be distributed by SGL1 to IndiGrid.

Pursuant to the InvIT Regulations and the Distribution Policy, IndiGrid shall declare and distribute at least 90% of the Distributable Income to the Unitholders, at least once in every quarter in every Fiscal. However, if any infrastructure asset is sold by IndiGrid or SGL1 or any of the InvIT Assets, or if the equity shares or interest in SGL1 or any of the InvIT Assets are sold by IndiGrid, and proposes to re-invest the sale proceeds into another infrastructure asset within one year, it shall not be required to distribute such sale proceeds to IndiGrid or to the Unitholders. Further, if IndiGrid proposes not to invest such sale proceeds into any other infrastructure asset within one year, it shall be required to distribute the same in the manner specified above. In accordance with the InvIT Regulations, distributions by IndiGrid shall be made no later than 15 days from the date of such declarations. The distribution, when made, shall be made in Indian Rupees. For details on the risks relating to distribution, please see the section entitled “*Risk Factors*” on page 58.

Distribution Policy

Method of calculation of Distributable Income

The Distributable Income of IndiGrid shall be calculated in accordance with the InvIT Regulations and any circular, notification or guidance issued thereunder. Presently, IndiGrid proposes to calculate distributable income in the manner provided below:

I. Calculation of net distributable cash flows at each InvIT Asset level:

Description
Profit after tax as per profit and loss account (standalone) (A)
Add: Depreciation, impairment and amortisation as per profit and loss account. In case of impairment reversal, same needs to be deducted from profit and loss.
Add/Less: Decrease/(increase) in working capital as per IndAS 7
Add: Interest accrued on loan/non-convertible debentures issued to IndiGrid or SGL1
Add/less: Loss/gain on sale of infrastructure assets
Add: Proceeds from sale of infrastructure assets adjusted for the following: <ul style="list-style-type: none"> • related debts settled or due to be settled from sale proceeds; • directly attributable transaction costs;

Description
<ul style="list-style-type: none"> directly attributable transaction costs proceeds reinvested or planned to be reinvested as per Regulation 18(7)(a) of the InvIT Regulations
Add: Proceeds from sale of infrastructure assets not distributed pursuant to an earlier plan to re-invest, if such proceeds are not intended to be invested subsequently, net of any profit / (loss) recognised in profit and loss account
Less: Capital expenditure, if any
Add/less: Any other item of non-cash expense / non cash income (net of actual cash flows for these items), including but not limited to <ul style="list-style-type: none"> any decrease/increase in carrying amount of an asset or a liability recognised in profit and loss account on measurement of the asset or the liability at fair value; interest cost as per effective interest rate method (difference between accrued and actual paid); deferred tax; unwinding of Interest cost on interest free loan or other debentures; portion reserve for major maintenance which has not been accounted for in profit and loss statement; reserve for debenture/ loan redemption (Excluding any reserve required by any law or as per lender's agreement)
Less: Repayment of external debt (principal) / redeemable preference shares / debentures, etc. (Excluding refinancing) / net cash set aside to comply with DSRA requirement under loan agreements
Total Adjustments (B)
Net Distributable Cash Flows (C)=(A+B)

II. Calculation of net distributable cash flows at the consolidated IndiGrid level:

Description
Cash flows received from the Portfolio Assets in the form of interest
Cash flows received from the Portfolio Assets in the form of dividend
Any other income accruing at IndiGrid level and not captured above, including but not limited to interest/return on surplus cash invested by IndiGrid
Cash flows received from the Portfolio Assets towards the repayment of the debt issued to the Portfolio Assets by IndiGrid
Proceeds from the Portfolio Assets for a capital reduction by way of a buy back or any other means as permitted, subject to applicable law
Proceeds from sale of assets of the Portfolio Asset not distributed pursuant to an earlier plan to re-invest, or if such proceeds are not intended to be invested subsequently
Total cash inflow at the IndiGrid level (A)
Less: Any payment of fees, interest and expense incurred at IndiGrid level, including but not limited to the fees of the Investment Manager and Trustee
Less: Costs/retention associated with sale of assets of the Portfolio Assets: <ul style="list-style-type: none"> relate debts settled or due to be settled from sale proceeds of Portfolio Assets; transaction costs paid on sale of the assets of the Portfolio Assets; capital gains taxes on sale of assets/ shares in Portfolio Assets/ other investments.
Less: Proceeds reinvested or planned to be reinvested in accordance with Regulation 18 (7) (a) of the InvIT Regulations
Less: Repayment of external debt at the IndiGrid level and at the level of any of the underlying portfolio assets/special purpose vehicles (Excluding refinancing)
Less: Income tax (if applicable) at the standalone IndiGrid level
Less: Amount invested in any of the Portfolio Assets for service of debt or interest
Less: Repair work in relation to the projects undertaken by any of the Portfolio Assets
Total cash outflows / retention at IndiGrid level (B)
Net Distributable Cash Flows (C) = (A+B)

In terms of the InvIT Regulations, if the distribution is not made within 15 days from the date of declaration, the Investment Manager shall be liable to pay interest to the Unitholders at the rate of 15% per annum or such other rate as may be specified, until the distribution is made. Such interest shall not be recovered by the Investment Manager in the form of fee or any other form payable to the Investment Manager by IndiGrid.

Distribution by IndiGrid

The details of distribution declared by IndiGrid are provided below.

Sr. No.	Record Date⁽¹⁾	Number of Units (in million)	Distribution per Unit (in ₹)	Amount of Distribution paid on Units including tax on distribution (in ₹ million)
1.	April 30, 2019	283.80	3.00	851.40
2.	January 22, 2019	283.80	3.00	851.40
3.	October 26, 2018	283.80	3.00	851.40
4.	August 2, 2018	283.80	3.00	851.40
5.	May 2, 2018	283.80	3.00	851.40
6.	January 23, 2018	283.80	2.89	820.74
7.	November 7, 2017	283.80	2.75	781.58
8.	August 4, 2017	270.20	0.92	248.58

(1) Please note that the acquisition of BDTCL and JTCL was completed in June, 2017 and accordingly, IndiGrid paid such distribution in the period beginning from May 30, 2017 until March 31, 2018.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FACTORS BY THE DIRECTORS OF THE INVESTMENT MANAGER AFFECTING THE FINANCIAL CONDITION, RESULTS OF OPERATIONS AND CASH FLOWS

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the sections entitled "Summary Special Purpose Combined Financial Information" and "Special Purpose Combined Financial Statements" on pages 35 and page 288, respectively. This discussion contains forward-looking statements and involves numerous risks and uncertainties, including, but not limited to, those described in the section entitled "Risk Factors" on page 58. Actual results could differ materially from those contained in any forward-looking statements and for further details regarding forward-looking statements, kindly refer to the section entitled "Forward-Looking Statements" on page 20.

The Special Purpose Combined Financial Statements are prepared in accordance with IndAS and the Guidance Note on Combined and Carve-out financial statements issued by ICAI, which differs in certain respects from Indian GAAP, IFRS and U.S. GAAP. The Special Purpose Combined Financial Statements for the financial years ended March 31, 2017, 2018 and 2019, combine the financial statements of all the six Portfolio Assets that we acquired at various stages in the previous financial years and the two Target Assets and have been shown as if they were part of a single group for all the three years presented. See "Risk Factor – The Special Purpose Combined Financial Statements presented in this Preliminary Placement Document may not be indicative of our future financial condition, results of operations and cash flows" on page 77 for risks associated with the Special purpose Combined Financial Statements.

The Special purpose Combined Financial Statements included in this Preliminary Placement Document and discussed in this section may not be comparable to our consolidated financial statements going forward. See "Risk Factors – Special purpose Combined Financial Statements presented in the Preliminary Placement Document may not be indicative of our future financial conditions, results of operations and cash flows" on page 77.

For the sole purposes of this section, unless the context requires otherwise, references to "we", "us" and "our" is to the Portfolio Assets that are owned by IndiGrid and the two Target Assets in respect of which Special Purpose Combined Financial Statements have been prepared, or to IndiGrid and may be used interchangeably.

Overview

We are an InvIT established to own inter-state power transmission assets in India. IndiGrid was established on October 21, 2016 by our Sponsor, Sterlite Power Grid Ventures Limited and is registered with SEBI pursuant to the InvIT Regulations. Sterlite Power Grid Ventures Limited also serves as the Project Manager with the responsibility of operating and managing our power transmission assets and is one of the leading independent power transmission companies operating in the private sector, with extensive experience in bidding, designing, financing, constructing and maintaining power transmission projects across India.

We are focused on providing stable and sustainable distributions to our Unitholders. We believe that we are well positioned to take advantage of the growth potential of India's power transmission industry given the quality of our power transmission assets and our financial position, support from our Sponsor and the robust regulatory framework for power transmission in India.

We believe the infrastructure necessary to transmit and deliver electricity is vital to India's continued economic advancement given the inter-regional power deficit in India resulting from a mismatch between power generation and load centers and the demand-supply deficit which is expected to result from India's projected GDP growth. For further details, see "Industry Overview" on page 129.

We own six fully commissioned projects, BDTCL, JTCL, PKTCL, RAPP and MTL that we acquired from our Sponsor in fiscal 2018, and PTCL that we acquired for a third party in fiscal 2019 (together the "Portfolio Assets"). These assets have a total network of 13 power transmission lines of approximately 3,362 ckms across nine states and three substations having 7,000 MVA of transformation capacity across three states in India.

Our Sponsor is one of the leading independent power transmission companies operating in the private sector in India. Our Sponsor has developed 12 inter-state power transmission projects with a total network of 38 power transmission lines of approximately 8,001 ckms and 10 substations having 14,995 MVA of transformation capacity in India. Some of these projects have started commercial operations and were transferred to us in fiscal 2018, while others are at different stages of development. Recently, our Sponsor has won bids for ten transmission

projects in Brazil with a total network of approximately 4,424 ckms having 7,890 MVA of transformation capacity, in auctions conducted by the Brazilian electricity regulatory authority, Agência Nacional de Energia Elétrica. Presently, under the InvIT Regulations, we are not permitted to acquire transmission projects outside of India, including the Sponsor's projects in Brazil. Our Sponsor generated consolidated total income of ₹8,864.67 million in fiscal 2018 and had total consolidated assets of ₹69,749.54 million as of March 31, 2018.

Pursuant to the Framework Agreement among the Sponsor, the Trustee and the Investment Manager, IndiGrid has agreed to acquire three additional projects, GPTL, KTL and NER from our Sponsor (the "**Framework Assets**"), and pursuant to the ROFO Deed, as amended, we have a 'right of first offer' to acquire one project, ENICL from our Sponsor (**ROFO Asset**). IndiGrid has agreed to acquire, two projects, NTL and OGPTL, which were part of the ROFO Deed (the "**Target Assets**") from our Sponsor, with the proceeds of this Issue, for which we have executed definitive share purchase agreements with our Sponsor on April 30, 2019. For further details, see "*Use of Proceeds*" on page 199. For further details on the Framework Agreement, the ROFO Deed and the share purchase agreements, see "*Related Party Transactions*" on page 228.

The Portfolio Assets, other than PTCL, were originally awarded to our Sponsor under the "tariff based competitive bidding" mechanism ("**TBCB**") on a "build-own-operate-maintain" ("**BOOM**") basis. The power transmission projects earn revenue pursuant to long-term transmission services agreements ("**TSAs**") and tariff orders passed by CERC in accordance with the Electricity Act, 2003 ("**Tariff Orders**"). These projects receive availability-based tariffs under the TSAs irrespective of the quantum of power transmitted through the line. The tariff for inter-state power transmission projects in India, including the Portfolio Assets, is contracted for the period of the TSA, which is up to 35 years from the scheduled commission date of the asset, which may be renewed in accordance with the TSA and the Electricity Act, 2003. With periodic maintenance, transmission assets enjoy a longer asset life of approximately 50 years compared to other infrastructure projects, according to CRISIL. For further details on the TBCB and the Indian electricity transmission industry, see "*Industry Overview*" on page 129.

Tariffs under these TSAs are billed and collected pursuant to the "point of connection" ("**PoC**") mechanism, a regulatory payment pooling system offered to Inter State Transmission Systems ("**ISTS**") such as the systems operated by the Portfolio Assets. Under the PoC mechanism, payments are made to a central payment pool and the proceeds are distributed proportionately to all transmission services providers, such as the Portfolio Assets. The availability-based tariffs and PoC payment mechanism enable a stable and certain cash flow stream. For further details, see "*Industry Overview*" on page 129.

While infrastructure investment trusts are required to distribute at least 90% of their net distributable cash flows to unitholders once at least every six months in every financial year, according to the InvIT Regulations, we have adopted a quarterly distribution policy. For further details on our distribution policy, see "*Distribution*" on page 205. We believe our power transmission assets, financial position and business model will enable us to offer stable distributions to our Unitholders.

We have been given a corporate credit rating of AAA/Stable by CRISIL, "IND AAA"/Stable by India Ratings and "ICRA AAA" (pronounced as ICRA triple A) with stable outlook by ICRA. Following the utilization of the Issue Proceeds, our aggregate consolidated borrowings and deferred payments (net of cash and cash equivalents) will not exceed 49% of the total value of our assets. We may increase our aggregate consolidated borrowings and deferred payments (net of cash and cash equivalents) from the current level up to the maximum permitted limit under the InvIT Regulations of 70% of the total value of our assets. The industry standard debt to equity ratio for inter-state power transmission projects is 70% debt, according to CRISIL.

Our total income on a combined basis was ₹9,909.54 million in fiscal 2019. Our EBITDA on a combined basis was ₹9,168.00 million for fiscal 2019.

On the basis of our strengths and through the implementation of our strategies, we believe that we are well-positioned to capitalize on the growth potential of India's power transmission industry.

Recent Developments

Prior to this Issue, the Trustee, our Sponsor and our Investment Manager have entered into definitive agreements with affiliates of KKR, which, if fully completed, will result in a change of control of the Investment Manager and a transfer of a significant Unitholding in IndiGrid from our Sponsor to an affiliate of KKR following receipt of approvals for its designation as a sponsor of IndiGrid (collectively, the "**KKR Transaction**"). Pursuant to these agreements, Electron, an affiliate of KKR has agreed to acquire up to 74% of the share capital of the Investment Manager in a series of transactions. Upon the purchase of 19.99% of such shares at the initial closing expected to

occur on the Closing Date, Electron will have the right to appoint a director on the board of directors of the Investment Manager and obtain certain affirmative voting rights with respect to certain matters such as amendments to charter documents of the Investment Manager, transfer of assets and declaration of dividends, and, upon the change of control, Electron will have the right to appoint three out of ten directors to the board of directors of the Investment Manager and the right to recommend candidates for the appointment of three other directors. In addition, we have received a commitment letter from Esoteric, another affiliate of KKR, indicating an interest in purchasing up to an aggregate of approximately ₹ 10,800 million of the Units to be allotted in this Issue, representing approximately 42.2% of the Units offered and to be allotted in this Issue. If Esoteric determines to subscribe to, and our Trustee and the Investment Manager determine to so allot, all of these Units, Esoteric will hold, after the completion of this Issue, approximately 21.86% of our issued and outstanding Units. In addition, Esoteric has also agreed to acquire up to 15% of our issued and outstanding Units on a post-Issue basis and to be designated as a “Sponsor” of IndiGrid together with our Sponsor, subject to unitholders approval. If these transactions are completed, KKR, through its affiliate, will hold approximately 36.87% of the issued and outstanding Units of IndiGrid on a post-Issue basis.

The completion of these transactions is subject to a number of conditions precedent, including, among others, the approval by Unitholders and the receipt of approval from SEBI, in accordance with the InvIT Regulations. The Investment Manager has scheduled an extraordinary general meeting of our Unitholders to be held on May 24, 2019 to evaluate the proposed KKR Transaction. However, there is no assurance that the Unitholders of IndiGrid and SEBI will approve the proposed KKR Transaction.

For more details on the transaction, see “*Key Developments related to IndiGrid and the Issue*” on page 224, “*Risk Factors— A significant portion of the Units offered and sold in this Issue may be allotted to a few investors who have indicated an interest in purchasing Units*” on page 58, “*Risk Factors—We have entered into definitive agreements which, if fully completed, will result in a change of control of the Investment Manager and a transfer of a significant Unitholding in IndiGrid from our Sponsor to an affiliate of KKR*” on page 59 and “*Risk Factors— The completion of the KKR Transaction is subject to the receipt of approval from Unitholders and SEBI, which may impose conditions that could have an adverse effect on us, if not obtained, and could prevent completion of the KKR Transaction*” on page 59.

Factors Affecting Our Results of Operation

Tariff structure and system availability

Electricity transmission tariffs comprise all of our revenue from operations. Each of the Portfolio Assets, other than PTCL, and each Use of Proceeds Asset, were originally awarded to our Sponsor, including its subsidiaries or associate companies under the TBCB mechanism. Under the TBCB mechanism, technically qualified developers bid for an inter-state power transmission project on a build-own-operate-and-maintain, or BOOM, basis, which is awarded to the developer quoting the lowest levelised tariff. Subsidiaries of our Sponsor and TEECL and TPGCL, as applicable, successfully bid, for and were awarded, the Portfolio Assets and Target Assets at agreed transmission tariff rates.

The electricity transmission tariff is collected and paid to us in the form of transmission charges by the CTU. The tariff revenues are comprised of a fixed ‘non-escalable’ charge, a variable ‘escalable charge’, incentives for actual availability beyond the target availability of 98.0% and surcharge (for late payment) for the Portfolio Assets and Target Assets.

- *Non-escalable charges and escalable charges:* Non-escalable charges are fixed charges, detailed in the TSA and Tariff Order and paid to us as part of the transmission charges. These charges are billed on monthly basis by the CTU. Escalable charges are variable charges which are only fixed in the TSA and Tariff Order for first year of scheduled operations and vary in subsequent years according to CERC’s escalation index, which is determined by CERC semi-annually from a formula linked to the inflation rate in India. Any change in the inflation rate in India will directly impact the escalable charges paid to us and our revenue from operations.
- *Availability determined incentive payments and penalties:* We operate our power transmission projects under an availability-based tariff regime, which incentivizes transmission system operators like us to provide the highest possible system reliability. System reliability is measured as “availability”, which is defined as the time in hours during a given period for which the transmission system is capable of transmitting electricity at its rated voltage, expressed as a percentage of total hours in the period. The CERC Tariff Regulations

provide specific guidance on the calculation of availability, and take into account the elements in the transmission system (including transmission lines, transformers and substations) as well as the reason for any outages, with force majeure outages being excluded from the calculation. We are required to maintain system availability of 98% for our systems in order to receive 100% of the transmission charge (comprised of both escalable and non-escalable charges). We receive incentive payments under the TSAs of the Portfolio Assets if our availability exceeds 98%. If our annual average availability rate for a power transmission project falls below 95%, we may be subject to penalties under the TSA, subject to force majeure. In the event we fail to maintain our target availability of 98% for six consecutive months, the LTTC's may exercise their right of termination under the TSA.

Historically, we have maintained annual average system availability above 98%, and, accordingly, we have earned incentives for the Portfolio Assets and have never been subject to penalties. In fiscal 2017, 2018 and fiscal 2019, we recognized revenue on incentive payments of ₹207 million, ₹238.90 million and ₹293.70 million, respectively, representing 3.33%, 3.19% and 2.96% of revenues from contracts with customers, respectively. Our availability is affected by our ability to maintain our power transmission projects and restore them in the event they are rendered inoperable. Our ability to maintain target availability under the TSA directly impacts our revenues.

- **Surcharge:** In accordance with the Sharing of Charges and Losses Regulations, a transmission licensee such as us is entitled to recover its tariff from ISTS charges collected by CTU. If there is any failure or delay on the part of long term transmission customers (“LTTCs”) to make the requisite payments to the CTU, which affects the capability of the CTU to make corresponding payments to us as a transmission licensee, we are entitled to a delayed payment charge from the LTTCs at a rate of 15% per year under CERC Regulations. We recognized income of ₹71.04 million from late payment surcharges in fiscal 2019.

Commissioning and acquiring power transmission projects

Under the terms of the TSAs, our electricity transmission tariff commences upon commissioning of the project or element of the project. Commissioning dates have been a major factor affecting the results of operations of the Portfolio Assets and Target Assets. Most of our Portfolio Assets and Target Assets incrementally achieved commissioning for different elements during fiscal 2017 and fiscal 2018. The revenue is recognized from the date of commissioning of each element. The commissioning of elements during fiscal 2018 has resulted in an increase in revenue in fiscal 2019 from fiscal 2017. Once all the elements are commissioned for a power transmission project, transmission revenue is only increased from the escalable component on a semi-annual basis and incentives, considering non escalable charges are fixed.

The acquisition of additional commissioned transmission projects directly results in higher revenues and impacts other results of operations and cash flows. Key factors which affect our ability to acquire additional commissioned transmission projects, including the ROFO Assets, include the limited availability of inter-state transmission projects, our ability to finance such acquisitions within the 49% or 70% debt to equity ratio prescribed by the InvIT Regulations and our ability to compete with third parties for such acquisitions. Any future transmission project acquisitions, including the ROFO Assets, will directly affect our revenue.

Borrowing costs related to financing the construction and development of power transmission projects, as well employee benefit expenses and other administrative costs in relation to the asset are capitalized during the pre-operational phase of development and construction. Once a power transmission project (including its elements) becomes operational, we recognize the related finance costs, employee expenses and other administrative overheads, to profit and loss. We depreciate these capitalized costs as depreciation expenses in our statement of profit and loss based on their useful life. The useful life considered for depreciation is generally the lower of the actual useful lives of the asset or the concession period. The Portfolio Assets and Target Assets are operational.

Our Critical Accounting Policies

Certain of our accounting policies require the application of judgment by our management in selecting appropriate assumptions for calculating financial estimates, which inherently contain some degree of uncertainty. Our management bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the reported carrying values of assets and liabilities and the reported amounts of revenues and expenses that may not be readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

The following are what management believes to be the critical accounting policies and related judgments and estimates used in the preparation of the *Special purpose Combined Financial Statements*. For more information on each of these policies and for other significant accounting policies and judgments, estimates and assumptions, see Note 2 and Note 39 of the section entitled “*Special purpose Combined Financial Statements*” on page 288.

Classification of transmission assets in the Portfolio Assets and Target Assets as Tangible assets

Management is of the view that the transmission assets in the Portfolio Assets and Target Assets should be classified as tangible assets as per Ind AS 16. Portfolio Assets and Target Assets are transmission licensees under the Electricity Act 2003 holding a valid license for 25 years from the date of issue and have entered into TSAs with 35 year terms. As the grantor of the transmission licenses, CERC is the ‘grantor’ as defined under Appendix C - Service Concession Arrangements of Ind AS 115 - Revenue from Contracts with Customers and requires transmission licensees to obtain various approvals under the regulatory framework to conduct its operations both during the period of the license as well as at the end of the license period. However, in the view of management, CERC’s involvement and approvals are to protect public interest and are not intended to control through ownership, beneficial entitlement or otherwise, any significant residual interest in the transmission infrastructure at the end of the term of the license. Accordingly, management is of the view that Appendix C of Ind AS 115 is not applicable to Portfolio Assets and Target Assets. The classification of the transmission asset as tangible asset rather than a financial asset and/or intangible asset under Appendix C of Ind AS 115 has a significant impact on the revenues, depreciation and tax recognized by each of the Portfolio Assets and Target Assets.

Revenue from contracts with customers

Revenue from contracts with customers is recognised when control of the goods or services is transferred to the customer at an amount that reflects the consideration we are entitled to. The SPV Group has concluded that it is the principal in its revenue arrangements because it typically controls the services before transferring them to the customer.

Revenue from contracts with customers comprises of revenue from power transmission services rendered in India to Long Term Transmission Customers (“LTTCS”) pursuant to the respective TSAs executed by the Portfolio Assets or the Target Assets with LTTCS for periods of 35 years. The Portfolio Assets or the Target Assets are required to ensure that the transmission assets meet the minimum availability criteria under the respective TSAs. Our performance obligation under the TSAs is to provide power transmission services. The performance obligation is satisfied over time as the customers receive and consume the benefits provided by our performance. Accordingly, the revenue from power transmission services is recognised over time based on the transmission asset availabilities and the tariff charges approved under the respective CERC tariff orders and includes unbilled revenues accrued up to the end of the accounting period. The payment is generally due within 60 days upon receipt of monthly invoice by the customer.

Under IndAS, revenue from contracts with customers has been shown after netting of rebate with tariff revenue.

Borrowing cost

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other costs that the Portfolio Assets and Target Assets incur in connection with the borrowing of funds. Borrowing cost also includes exchange differences to the extent regarded as an adjustment to the borrowing costs.

Depreciation

Depreciation on property, plant and equipment is calculated on a straight-line (except for PTCL for which depreciation is calculated on written down value basis. However, for the purpose of these Special Purpose Combined Financial Statements, such depreciation has been considered on straight line basis post acquisition by IndiGrid.) basis using the rates arrived at based on the useful lives estimated by management which are as follows:

Asset Category	Useful Life considered	Useful life (Schedule II#)
Lease land	Period of lease	N/A
Building-Substation	25	30

Asset Category	Useful Life considered	Useful life (Schedule II#)
Plant and equipment		
- Substation (including components)	5-35	40
- Power transmission lines (including components)	25-35	40
- General plant and equipment	2-5	15
Data Processing Equipment's (Computers)	3-5	3-6
Furniture & Fittings	7.5	10
Office Equipment	4	3
Vehicles	5	8

As per schedule II of Companies Act, 2013.

The residual values, useful lives and methods of depreciation of property, plant and equipment are reviewed at each financial year end and adjusted prospectively, if appropriate.

Our Income

We generate substantially all of our income under the transmission contracts with customers pursuant to electricity transmission tariffs, which we account for as a sale of power transmission services.

Our Expenses

As the Portfolio Assets and the Target Assets are fully operational, all expenses pertaining to each Portfolio Asset and Use of Proceeds Asset, and its elements are charged to profit and loss, as other expenses which primarily includes, transmission infrastructure maintenance changes, travelling and conveyance expenses, insurance expenses and management fees.

Our primary expenses are set forth below:

- ***Transmission infrastructure maintenance charges***

Our transmission infrastructure maintenance charges primarily comprise of payments under operation and maintenance contracts with third parties for the maintenance of the lines and substations. It also consists of repair and maintenance (replacement of construction materials) if any done on the lines and substation.

- ***Insurance***

We have obtained insurance policies covering all Portfolio Assets and our Sponsor has obtained insurance policies covering the Target Assets to cover risks including loss or damage from fire, flood, landslide, storm, terrorism, sabotage, machinery breakdown and any accidental and physical loss and destruction or damage to the insured property due to a cause, other than as excluded in the insurance policies. These insurance policies are subject to exclusions for certain circumstances including, amongst others, faulty or defective design materials or workmanship, wear and tear, larceny, acts of fraud or dishonesty, any willful act or willful negligence on the part of insured or any person acting on its behalf, war, invasion, damage caused by nuclear weapons material or ionising radiation or contamination by radioactivity from any nuclear fuel or nuclear waste, loss or damage caused directly or indirectly from discharge of pollutants or contaminants, and certain properties, including, amongst others, money, cheques, bonds, credit cards, securities of any description and explosives. One of the policies is an industrial all risks policy that covers up to ₹2 billion without an aggregate cap and covers business interruption losses, including loss of revenue. We also have a terrorism and commercial general liability cover of ₹4 billion and ₹500 million, respectively. This insurance policy is valid from September 30, 2018 to September 29, 2019 and renewable on a yearly basis. The insurer is The New India Assurance Company Limited and these assets are insured in line with industry practice.

- ***Management Fees***

As an InvIT, IndiGrid does not have any employees or employee benefits expenses as services provided to us by the employees of the Project Manager and Investment Manager are included in their respective management fees. Under the terms of the Investment Management Agreement, the Investment Manager is entitled to a fee aggregating to 1.75% of the difference between revenue from operations and operating expenses (other than the fee of the Investment Manager) of each Portfolio Asset, per annum; and the Project Manager is entitled to a fee

amounting to 10% of the gross expenditure incurred by each Portfolio Asset in relation to operation and maintenance costs, per annum.

- *Tax expenses*

Our tax expenses primarily comprise of deferred tax, MAT and current taxes. Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax assets are recognised for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses, can be utilized. Deferred tax liabilities are recognised for all taxable temporary differences.

Results of Operations

Overview

Particulars	(in ₹ million)		
	Fiscal 2017	Fiscal 2018	Fiscal 2019
Income			
Revenue from contracts with customers	6,209.48	7,487.27	9,905.19
Other income	10.03	69.43	4.35
Total Income	6,219.51	7,556.70	9,909.54
Expenses			
Employee benefits expense	37.76	0.22	-
Other expenses	323.55	500.63	741.54
Total expenses	361.31	500.85	741.54
Earnings before interest, tax, depreciation and amortization (EBITDA)	5,858.20	7,055.85	9,168.00
Depreciation and amortisation expense	1,619.11	1,798.07	2,364.62
Impairment of property, plant and equipment	2,474.06	287.81	991.57
Finance costs	3,477.88	5,321.42	7,978.58
Finance income	(32.19)	(64.12)	(94.96)
Loss before tax	(1,680.66)	(287.33)	(2,071.81)
Tax expense			
Current tax	163.47	155.03	154.23
Less: MAT credit entitlement	(52.63)	(216.54)	(154.23)
Net current tax expense	110.84	(61.51)	-
Deferred tax charge/(credit)	289.75	253.46	297.45
Income tax for earlier years	-	(48.75)	0.12
Total tax expenses	400.59	143.20	297.57
Loss for the year	(2,081.25)	(430.53)	(2,369.38)

Fiscal 2019 compared to Fiscal 2018

Income

We had a total income of ₹9,909.54 million in fiscal 2019, an increase of 31.14% from our total income of ₹7,556.70 million in fiscal 2018. This increase in total income was primarily due to:

- *Revenue from contracts with customers:* Our revenue from contracts with customers in fiscal 2019 increased by 32.29% from ₹7,487.27 million in fiscal 2018 to ₹9,905.19 million in fiscal 2019. This increase in revenue from contracts with customers is primarily attributable (i) to the commissioning of all elements of NTL in fiscal 2019 which resulted in an increase of 171.43% in the revenue from contracts with customers from NTL in fiscal 2019 from fiscal 2018 and (ii) MTL being fully operational for the entirety of the fiscal year in fiscal 2019 as it was fully commissioned in December 2017 and fully operational for three months in fiscal 2018. Our revenue also increased in fiscal 2019 due to an increase in revenue earned from RAPP, PKTCL and PTCL as there was an upward movement in the pre-contracted tariff curve, resulting in an increase in the transmission charges paid to us. Our revenue from

JTCL increased primarily because of the revenue recognized as a result of the JTCL CERC Order related to the JTCL Petition. See “*Overview of IndiGrid – JTCL Petition*” on page 25 for more details.

- *Other income:* Our other income decreased by 93.74% from ₹69.43 million in fiscal 2018 to ₹4.35 million in fiscal 2019, which is primarily attributable to a decrease in liabilities no longer required written back in fiscal 2019. In fiscal 2018, we reversed the provision made for prepayment charges payable on long-term borrowings by BDTCL and JTCL, which we accounted as other income in our statement of profit and loss in fiscal 2018.

Expenses

Our total expenses totalled ₹741.54 million in fiscal 2019, a 48.06% increase over our total expenses of ₹500.85 million in fiscal 2018, which is primarily attributable to an increase in insurance expenses, transmission infrastructure maintenance charges, rates and taxes, investment management fees and management fees paid. Our insurance expenses and transmission infrastructure maintenance expenses increased due to NTL becoming fully operational in fiscal 2019 and MTL being fully operational for the entire fiscal year in fiscal 2019 as it was commissioned in December 2017 and was fully operational for three months in fiscal 2018.

Further our rates and taxes increased by 500.41% from ₹19.70 million in fiscal 2018 to ₹118.28 million in fiscal 2019 primarily due to excess dividend distribution tax paid by NTL, on a conservative basis, and is pending claim for refund.

Our investment management fees, management fees and project management fees paid to our Investment Manager and Project Manager for shared employee services increased by 49.11%, 391.21% and 49.37%, respectively in fiscal 2019 from fiscal 2018, which is primarily attributable to an increase in our EBITDA and operations and maintenance expenses in fiscal 2019, as the number of operational assets increased.

EBITDA

Our EBITDA increased by 29.93% from ₹7,055.85 million in fiscal 2018 to ₹9,168.00 million in fiscal 2019. As a percentage of total income, our EBITDA decreased from 93.37% in fiscal 2018 to 92.52% in fiscal 2019 on account of increase in rates and taxes. As a percentage of total income our EBITDA was 92.52% in fiscal 2019 compared to 93.37% in fiscal 2018.

Finance cost

Our finance costs increased by 49.93% from ₹5,321.42 million in fiscal 2018 to ₹7,978.58 million in fiscal 2019. This is primarily attributable to an increase in interest costs. After the acquisition of RAPP, PKTCL and MTL, in Fiscal 2018, some of their existing loans were refinanced. As part of the refinancing, they availed an unsecured facility from IndiGrid at a higher rate of interest of 15%, which resulted in an increase in our interest costs. Additionally, finance costs related to power transmission projects were fully charged to profit and loss account in fiscal 2019 while it was partly capitalized in fiscal 2018 as elements of NTL and MTL were under construction for part of fiscal 2018.

Finance income

Our finance income increased by 48.10% from ₹64.12 million in fiscal 2018 to ₹94.96 million in fiscal 2019. This is primarily attributable to an increase in dividend income from our current investments.

Depreciation, amortisation and impairment expense

Depreciation and amortisation expense totalled ₹2,364.62 million in fiscal 2019, a 31.51% increase over depreciation and amortisation expense of ₹1,798.07 million in fiscal 2018, which was primarily attributable to NTL becoming fully operational in fiscal 2019 and MTL being fully operational for the entire fiscal year in fiscal 2019 as it was commissioned in December 2017 and was fully operational for three months in fiscal 2018. Additionally, with the acquisition of PTCL in fiscal 2019, the asset life of the transmission project was reduced to the term of the TSA, which resulted in an additional depreciation charge.

Our expenses on account of impairment of property, plant and equipment increased by 244.52% in fiscal 2019 compared to fiscal 2018, primarily because of impairment charge recognised on OGPTL, JTCL, BDTCL and MTL in fiscal 2019 compared to the impairment charge recognised only on OGPTL in fiscal 2018.

Loss before tax

As a result of the factors outlined above, our loss before tax was ₹2,071.81 million in fiscal 2019 compared to a loss before tax of ₹287.33 million in fiscal 2018.

Tax expense

Deferred tax charge / (credit) recognized in statement of profit and loss increased by 17.36% from ₹253.46 million in fiscal 2018 to ₹297.45 million in fiscal 2019, mainly due to increase in deferred tax liability.

Loss for the year

As a result of the factors outlined above, our loss for the year was ₹2,369.38 million in fiscal 2019 compared to the loss for the year of ₹430.53 million in fiscal 2018.

Fiscal 2018 compared to Fiscal 2017

Income

We had a total income of ₹7,556.70 million in fiscal 2018, an increase of 21.50% from our total income of ₹6,219.51 million in fiscal 2017. This increase in total income was primarily due to:

- *Revenue from contracts with customers.* Our revenue from contracts with customers in fiscal 2018 increased from ₹6,209.48 million in fiscal 2017 to ₹7,487.27 million in fiscal 2018, a 20.58% increase. This increase in revenue from contracts with customers is primarily attributable to (i) PKTCL being fully operational for the entirety of a fiscal year in fiscal 2018 as it was partly operational in Fiscal 2017 and was fully commissioned only in January 2017; (ii) commissioning of MTL in fiscal 2018; and (iii) partial commissioning of OGPTL. Our revenue from JTCL increased primarily because of the revenue recognized as a result of the JTCL CERC Order related to the JTCL Petition. See “*Overview of IndiGrid – JTCL Petition*” on page 25 for more details.
- *Other income.* Our other income increased by 592.22% from ₹10.03 million in fiscal 2017 to ₹69.43 million in fiscal 2018, which is primarily attributable to liabilities no longer required written back relating to prepayment of long term loans for BDTCL and JTCL, written back in fiscal 2018.

Expenses

Our total expenses totalled ₹500.85 million in fiscal 2018, a 38.62% increase over our total expenses of ₹361.31 million in fiscal 2017, which is primarily attributable to increase in expenses for investment management fees, Project Management Fees, insurance expenses and transmission infrastructure maintenance charges.

Transmission infrastructure maintenance and insurance expenses have increased primarily due to (i) PKTCL becoming fully operational in fiscal 2018 while it was partly operational during fiscal 2017 as one of its element was commissioned during fiscal 2017; (ii) commissioning of MTL in fiscal 2018; and (ii) partial commissioning of OGPTL in fiscal 2018.

We incurred expenses related to project management fees of ₹26.47 million, investment management fees of ₹87.54 million and management fees of ₹3.64 million for the first time in fiscal 2018 for manpower related services due to which our employee benefit expense decreased by 99.42% in fiscal 2018 from fiscal 2017. In fiscal 2018, we decided to pay management fees and investment management fees to the Project Manager and Investment Manager rather than paying systematically allocated manpower costs.

EBITDA

Our EBITDA increased by 20.44% from ₹5,858.20 million in fiscal 2017 to ₹7,055.85 million in fiscal 2018. As a percentage of total income our EBITDA was 93.37% in fiscal 2018 compared to 94.19% in fiscal 2017.

Finance cost

Our finance costs increased by 53.01% from ₹3,477.88 million in fiscal 2017 to ₹5,321.42 million in fiscal 2018, primarily due to increase in interest costs. After the acquisition of RAPP, PKTCL and MTL, in fiscal 2018, some of their existing loans were refinanced. As part of the refinancing, they availed an unsecured facility from IndiGrid at a higher rate of interest of 15%, which resulted in an increase in our interest costs. Our interest costs also increased for the other Portfolio Assets as well, as the interest rate for the unsecured loan from IndiGrid increased from 13% to 15% after September 30, 2017. Additionally, our finance costs also increased with the commissioning of MTL and the partial commissioning of OGPTL in fiscal 2018.

Finance income

Our finance income increased by 99.19% from ₹32.19 million in fiscal 2017 to ₹64.12 million in fiscal 2018. This is primarily attributable to an increase in dividend income due to higher short-term investment balance as compared to fiscal 2017.

Depreciation and amortisation expense

Depreciation and amortisation expense totalled ₹1,798.07 million in fiscal 2018, a 11.05% increase over depreciation and amortisation expense of ₹1,619.11 million in fiscal 2017, which was primarily attributable to MTL becoming fully operational in fiscal 2018 and OGPTL being partially operational in fiscal 2018.

Our expenses on account of impairment of property, plant and equipment decreased by 88.37% in fiscal 2018 compared to fiscal 2017, primarily because the impairment of property, plant and equipment at JTCL was ₹2,474.06 million in fiscal 2017, compared to the impairment of property, plant and equipment of ₹287.81 million at OGPTL in fiscal 2018.

Loss before tax

As a result of the factors outlined above, our loss before tax was ₹287.33 million in fiscal 2018 compared to a loss before tax of ₹1,680.66 million in fiscal 2017.

Tax expense

Deferred tax charge / (credit) recognized in statement of profit and loss decreased by 12.52% from ₹289.75 million in fiscal 2017 to ₹253.46 million in fiscal 2018, mainly due to decrease in deferred tax liability.

Loss for the year

As a result of the factors outlined above, our loss for the year was ₹430.53 million in fiscal 2018 compared to a loss for the year of ₹2,081.25 million in fiscal 2017.

Liquidity and Capital Resources

Overview

Our principal capital requirements are for interest costs and the repayment of long-term borrowings.

Over the past three years, we have been able to finance our capital requirements through cash generated from our operations and long and short term bank loans and loan from our Sponsor and its affiliates. We have been able to finance the construction and development of our electricity transmission projects requirements of our Portfolio Assets and Use of Proceeds Assets through long term secured term loans and unsecured facilities and loan from our Sponsor and its affiliates. As at March 31, 2019 we had ₹367.83 million of cash and cash equivalents,

₹1,983.43 million in trade receivables, ₹1,383.63 million in current investments and ₹2,731.30 million other current financial assets.

We believe that, after taking into account repayment of debt from the proceeds of the Issue and the expected cash to be generated from our operations, we will have sufficient liquidity for our present requirements and anticipated requirements for interest costs and the repayment of long-term borrowings for at least 12 months following the date of this Preliminary Placement Document.

The following table sets forth information on our current investments and cash and cash equivalents as at the dates indicated:

	(in ₹ million)		
	As at		
	March 31, 2017	March 31, 2018	March 31, 2019
Current Investments	812.01	210.03	1,383.63
Cash and cash equivalents	630.33	750.49	367.83
Total	1,442.34	960.51	1,751.46

The following table sets forth certain information concerning our cash flows for the periods indicated:

	(in ₹ million)		
	Fiscal 2017	Fiscal 2018	Fiscal 2019
Net cash flow from operating activities	4,961.28	6,611.74	6,648.85
Net cash flow used in investing activities	(15,284.20)	(17,484.88)	(7,632.70)
Net cash flow from financing activities	10,724.36	10,993.3-0	601.19

Net Cash generated by / (used in) operating activities

Net cash flow from operating activities increased to ₹6,648.85 million in fiscal 2019 from ₹6,611.74 million in fiscal 2018, primarily due to an increase in operating profit before working capital changes of ₹2,190.30 million and a decrease of ₹2,113.83 million due to change in working capital in fiscal 2019 compared to fiscal 2018. The changes in working capital primarily included an increase in other current financial asset of ₹2,133.01 million, an increase in trade receivables of ₹ 759.34 million in fiscal 2019, which was partially offset by an increase in other current liabilities of ₹496.76 million in fiscal 2019.

Net cash flow from operating activities increased to ₹6,611.74 million in fiscal 2018 from ₹4,961.28 million in fiscal 2017, primarily due to an increase in operating profit before working capital changes of ₹1,129.88 million and increase of ₹515.31 million due to change in working capital. The changes in working capital primarily included a decrease in other current financial liabilities and increase in trade payables of ₹219.34 million, which was partly offset by an increase in trade receivables of ₹164.40 million and a decrease in other current asset of ₹89.46 million.

Net Cash generated by / (used in) Investing Activities

Net cash flow used in investing activities decreased by ₹9,852.18 million to ₹7,632.70 million in fiscal 2019 from net cash used in investing activities of ₹17,484.88 million in fiscal 2018, primarily due to a decrease in capital expenditure incurred for the Portfolio Assets and the Target Assets in fiscal 2019 and loan repayment to sponsor and its affiliates in NTL project.

Net cash flow used in investing activities increased by ₹2,200.68 million, or 14.40%, to ₹17,484.88 million for fiscal 2018 from net cash flow used in investing activities of ₹15,284.20 million in fiscal 2017, primarily due to an increase in purchase of property, plant and equipment, including capital work in progress and capital advances

by ₹3,591.07 million in fiscal 2018. This increase was partially offset by investment in mutual funds and proceeds from mutual funds of ₹1,391.80 million in fiscal 2018.

Net Cash generated by /(used in) Financing Activities

Net cash flow from financing activities decreased by ₹10,392.11 million, or 94.53%, to ₹ 601.19 million for fiscal 2019 from ₹10,993.30 million in fiscal 2018 primarily due decrease in loans taken from India Grid Trust by ₹25,291.66 million compared to fiscal 2018, which was partly offset by an increase proceeds of borrowings from bank and financial institutions of ₹14,379.42 million as compared to fiscal 2018, and interim dividend paid (including DDT) of ₹1207.73 million by NTL to affiliates of the Sponsor.

Net cash flow from financing activities increased by ₹268.95 million, or 2.51%, to ₹10,993.30 million for fiscal 2018 from net cash flow from financing activities of ₹10,724.36 million in fiscal 2017 primarily due to the proceeds from issue of non-convertible debentures of ₹7,350.00 million, unsecured loans (net) taken from India Grid Trust of ₹31,047.99 million, which was partially offset by repayment of borrowings (net) from banks and financial institutions of ₹13,485.39 million and repayment loan to the Sponsor and its affiliates of ₹6,425.45 million.

Financial Resources

As of March 31, 2019, we had aggregate cash and cash equivalents of ₹367.83 million, a decrease of ₹382.66 million from ₹750.49 million as of March 31, 2018 due to use of funds for short-term investments into liquid funds and capital expenditure. Our investments increased from ₹210.03 million as of March 31, 2018 to ₹1,383.63 million as of March 31, 2019, due to increased surplus funds invested in mutual funds and deposits. Our current trade receivables increased from ₹1,235.34 million as of March 31, 2018 to ₹1,983.43 million as of March 31, 2019 due to commissioning of remaining elements of NTL and pending collection in OGPTL. Our other current financial assets increased from ₹597.11 million as of March 31, 2018 to ₹2,731.30 million as of March 31, 2019, primarily due to advances given to Sponsor of ₹1,766.60 million and an increase in unbilled revenue of ₹ 367.41 million.

As of March 31, 2018, we had aggregate cash and cash equivalents of ₹750.49 million, an increase of ₹120.15 million from ₹630.33 million as of March 31, 2017, primarily due to redemption of a short-term investment. Our investments decreased from ₹812.01 million as of March 31, 2017 to ₹210.03 million as of March 31, 2018, due to decrease in investments of surplus funds in mutual funds and deposits, and as a result of quarterly distribution of interest and principal amount under the InvIT Regulations. Our trade receivables increased from ₹1,070.93 million as of March 31, 2017 to ₹1,235.34 million as of March 31, 2018, due to commissioning of projects MTL and partial commissioning of NTL.

Contractual Liabilities

The table below sets forth, as of March 31, 2019, our contractual obligations with definitive payment terms. These obligations primarily relate to indebtedness incurred for the construction of the Portfolio Assets and Target Assets.

Particulars	Payable on demand	Less than 3 months	3 months to 12 months	1 year to 5 years	More than 5 years	Total
<i>(₹ million)</i>						
As at March 31, 2019						
Borrowings	1,811.42	338.02	593.30	12,734.18	71,303.73	86,780.65
Trade payables	-	189.91	-	-	-	189.91
Other financial liabilities	-	50.19	2,855.28	-	-	2,905.47
Derivatives#		209.82	126.53	831.70	1,454.84	2,622.89
Total	1,811.42	787.94	3,575.11	13,565.88	72,758.57	92,498.92

Based on gross undiscounted cash flows. The mark-to market as on 31 March, 2019 is ₹169.70 million

Contingent Liabilities

As of March 31, 2019, we had a contingent liability of ₹514.19 million for certain disputes related to entry tax and value added tax.

Borrowings

Our borrowings consist of long-term and short borrowings, including secured and unsecured term loans from banks, financial institution and an unsecured loan from our Sponsor, its affiliates and IndiGrid.

As of March 31, 2019 we had long term borrowings (including current maturities and interest accrued) of ₹85,641.46 million, which increased by 28.80% from ₹66,489.51 million as of March 31, 2018, primarily due to issuance of non-convertible debentures by NTL. We had short term borrowings as of March 31, 2019 of ₹1,811.42 million, a decrease of 81.80% from ₹9,951.69 million as of March 31, 2018 due to repayment of loans to related parties and banking institutions.

As of March 31, 2018 we had long term borrowings (including current maturities and interest accrued) of ₹66,489.51 million, which increased by 44.43% from ₹46,036.16 million as of March 31, 2017, primarily due to unsecured loans availed by the Portfolio Assets from India Grid Trust which have been used for partly repayment of term loans and repayment of loans to our Sponsor and its affiliates. We had short term borrowings as of March 31, 2018 of ₹9,951.69 million, a decrease of 16.10% from ₹11,861.08 million as of March 31, 2017 due to repayment of loans to our Sponsor and its affiliates.

Borrowings	(₹ million)		
	Fiscal 2017	Fiscal 2018	Fiscal 2019
Description			
Secured Non-Current Long-term Borrowing	43,778.52	33,838.30	47,226.65
Secured Current Long-term Borrowing	2,257.64	1,604.86	1,603.56
Unsecured Non-Current Long-term Borrowing	-	31,046.35	36,811.24
Secured Short-term Borrowing	-	4,230.00	-
Unsecured Short-term Borrowing	11,861.08	5,721.69	1,811.42
Total borrowings	57,897.24	76,441.20	87,452.87

See “*Financial Indebtedness and Deferred Payments*” on page 200 for further details of our borrowings.

Historical and planned capital expenditure

We do not anticipate any further capital expenditures for the Portfolio Assets and Target Assets. Our total capital work in progress was ₹11,227.41 million as of March 31, 2019 which belongs to the construction expenses of the OGPTL. As of March 31, 2018, our total capital work in progress was ₹28,945.71 million, which increased by 52.63% from ₹18,964.65 million in fiscal 2017 primary for the construction of NTL and OGPTL.

Off-Balance Sheet Transactions

We do not have any off-balance sheet transactions.

Related party transactions

We have in past engaged, and in the future may engage, in related party transactions. For a description of our related party transactions, see the section entitled “*Related Party Transactions*” on page 228.

Market Risks

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises two types of risk: interest rate risk and foreign currency risk. Financial instruments affected by market risk include borrowings, bank deposits, investments in short-term mutual funds, and derivative financial instruments.

Interest rate risk

Our exposure to the risk of changes in market interest rate primarily relates to our long term debt obligations with floating interest rates.

The development and construction of the Portfolio Assets and the Target Assets were funded to large extent by debt and increase in interest expenses could have adverse effect on our cash flows, results of operations and

financial condition. Although from time to time we may engage in interest rate hedging transactions or exercise any rights available to us under these financing arrangements to terminate the existing debt financing arrangement and enter into new financing arrangements, there can be no assurance that we will be able to do so on commercially reasonable terms, that our counterparties will perform their obligations, or that these agreements, if entered into, will protect us adequately against interest rate risks.

Foreign currency risk

Foreign currency borrowing creates an exchange rate risk as we do not have any revenues in foreign currency. This foreign currency risk is hedged by using foreign currency forward contracts and Cross currency swaps. As at 31 March 2017, 31 March 2018 and 31 March 2019, we hedged our foreign currency loan from financial institution aggregating to; ₹2,604.14 million, ₹2,440.62 million and ₹2,453.19 million, respectively.

Liquidity risk

Liquidity risk is the risk that we may encounter when we face difficulties in meeting financial obligations that are required to be settled by delivering cash or another financial asset. We primarily requires funds for short term operational needs as well as for long term investment programs mainly to finance projects. We manage this risk by closely monitoring our liquidity position and by deploying a cash management system, and we aim to minimise these risks by generating sufficient cash flows from our operations.

Credit Risk

Under the PoC mechanism, all the charges collected by the CTU are disbursed pro-rata to all transmission service providers, or TSPs, including us, from the pool in proportion of respective billed amount. Due to this, the TSPs are shielded against any potential default by a particular DIC. If a particular DIC delays or defaults, the delay or shortfall is prorated amongst all the licensees. Although a systemic risk, any delay in payments of monthly transmission charges to CTU by long term transmission customers (“LTTCs”) may adversely affect our cash flows and results of operations.

Inflation

Inflation may have a material impact on our business, results of operations and cash flows. Only a relatively small proportion of our tariff fee is comprised of an escalable component which varies with inflation, most of the tariff is on a fixed non-escalable rate. Our major expenses, including insurance costs and third party contractors for operations and maintenance, are subject to inflation.

Seasonality

Our financial results are not affected by seasonality.

Unusual or Infrequent Events or Transactions

Except as described in this Preliminary Placement Document, there have been no events or transactions to our knowledge which may be described as “unusual” or “infrequent”.

Known Trends or Uncertainties

Other than as described in the sections “*Risk Factors*” and this “*Management’s Discussion and Analysis of Factors by the Directors of the Investment Manager affecting the Financial Condition, Results of Operations and Cash Flows*” on pages 58 and 208, respectively, to our knowledge there are no known trends or uncertainties that have or had or are expected to have a material adverse impact on our revenues or income from continuing operations.

Future Relationships between Expenditure and Income

Other than as described in the sections “*Risk Factors*” on page 58 and “*Management’s Discussion and Analysis of Factors by the Directors of the Investment Manager affecting the Financial Condition, Results of Operations and Cash Flows*” on page 208, to our knowledge there are no known factors which will have a material adverse impact on our operations or finances.

New Services or Business

Other than as described in the section “*Our Business*” on page 161, there are no new services or business in which we operate.

Competitive Conditions

We expect competitive conditions in our industry to intensify further as new entrants emerge and as existing competitors seek to emulate our InvIT business model and offer similar services and investment opportunities. For further details, please refer to the sections “*Risk Factors*” and “*Our Business*” beginning on pages 58 and 161, respectively.

Significant Developments after March 31, 2019

To our knowledge, except as otherwise disclosed in this Preliminary Placement Document, and specifically in relation to the KKR Transactions, there has been no subsequent development after the date of the Special Purpose Combined Financial Statements which materially and adversely affects, or is likely to affect, our operations or profitability, or the value of our assets, or our ability to pay our material liabilities within the next 12 months. For more details on the transaction, see “*Key Developments related to IndiGrid and the Issue*” on page 224, “*Risk Factors—Risks related to the Change of Control Transactions*” starting on page 58.

KEY DEVELOPMENTS RELATED TO INDIGRID AND THE ISSUE

IndiGrid, the Trustee and the Investment Manager received a letter dated April 29, 2019 (the “**Investment EOI**”) from Esoteric II Pte. Ltd. (“**Esoteric**”), informing the addressees that subject to the terms and conditions set out in the Investment EOI, Esoteric wants to invest in the Units for an amount of up to ₹ 10,840 million (the “**Investment**”). The Investment EOI further stated that subject to the Investment being successful and the receipt of Unitholders’ approval and any regulatory, statutory, corporate or governmental approvals, Esoteric was also interested in being designated as a “sponsor” of IndiGrid along with the Sponsor (i.e. SPGVL).

Further, the Trustee and the Investment Manager received a letter dated April 29, 2019 (the “**SIML Investment EOI**”, and together with the Investment EOI, the “**EOI Letters**”) from Electron IM Pte. Ltd. (“**Electron**”), informing the addressees that Electron, either directly or indirectly or through its affiliates or associates, wishes to acquire up to 74% of the issued, subscribed and paid-up equity share capital of the Investment Manager (the “**SIML Investment**”), subject to the terms and conditions of such letter and of the definitive agreements executed in this regard, including receipt of Unitholders’ approval and the requisite corporate, regulatory, statutory or governmental approvals.

Both Esoteric and Electron are affiliates of KKR.

The board of directors of the Investment Manager considered the EOI Letters at its meeting held on April 30, 2019 and approved, amongst other things, the opening of the Issue, designation of Esoteric as a “sponsor” of IndiGrid (along with the Sponsor, i.e. SPGVL) and the SIML Investment and the consequent change in control of the Investment Manager, subject to receipt of the requisite corporate, legal, regulatory and statutory approvals, including from SEBI and the Unitholders. The board of directors of the Investment Manager approved and authorized issuance of notice for conducting an EGM to seek the Unitholders’ approval for such matters. The EGM is scheduled to be held on May 24, 2019. Further, the board of directors of the Investment Manager authorized the execution of the following agreements in relation to the said transaction:

- (a). An inter-se sponsor agreement dated April 30, 2019, entered into by the Sponsor and Esoteric (the “**Inter-se Sponsor Agreement**”);
- (b). a share subscription and purchase agreement dated April 30, 2019, entered into by SPTL, the Investment Manager and Electron (the “**SIML SPA**”); and
- (c). a shareholders’ agreement dated April 30, 2019, entered into by SPTL, the Investment Manager and Electron (the “**SIML SHA**”).

A description of the Inter-se Sponsor Agreement, the SIML SPA and the SIML SHA is provided below:

Inter-se Sponsor Agreement

Pursuant to the Inter-se Sponsor Agreement, Esoteric, through its affiliates, is desirous of investing in IndiGrid and being designated as a “sponsor” to IndiGrid subject to SEBI and Unitholders’ approval. The Inter-se Sponsor Agreement records the designation of Esoteric as a “sponsor” of IndiGrid (along with the Sponsor, i.e. SPGVL) and the *inter se* rights and obligations between the Sponsor and the Esoteric as sponsors of IndiGrid.

Pursuant to the Inter-se Sponsor Agreement, an application will be made to SEBI in accordance with the InvIT Regulations for the designation of Esoteric as a “sponsor” of IndiGrid. Further, the Sponsor has agreed to sell all Units held by it less 100,000 Units to Esoteric (the “**Sale Units**”) for a consideration calculated by multiplying the total number of Sale Units with the price per Unit payable by Esoteric to the Sponsor, being ₹ 83.89 (subject to adjustments on the basis set out in the Inter-se Sponsor Agreement). Therefore, within three days of the receipt of an approval, intimation or other confirmation from SEBI designating Esoteric as a “sponsor” of IndiGrid and subject to the terms of the definitive agreements executed in this regard, Esoteric will circulate a notice to the Sponsor regarding the transfer of the Sale Units to Esoteric subsequent to which, the Sale Units will be transferred to Esoteric (on a date no later than ten days from the date of such notice).

Additionally, the Sponsor and Esoteric have agreed that, subject to the terms and conditions of the Framework Agreement and the relevant share purchase agreements, if any resolution approving (i) the acquisition of GPTL, KTL and NER; or (ii) the agreements in relation to such acquisitions, is placed before a meeting of Unitholders in line with the Framework Agreement and subject to the Investment Manager making a favourable

recommendation to the Unitholders for approval of such resolution, both the Sponsor and Esoteric shall vote in favour of such a resolution. For details, please see the section entitled “*Related Party Transactions – Framework Agreement*” on page 231.

The Sponsor shall not, and shall ensure that its affiliates holding Units shall not vote on any resolution that involves any transaction between itself and IndiGrid. Further, the affiliates of the Sponsor shall not, directly or indirectly, transfer any Units or any legal or beneficial interest therein during the term of the Inter-se Sponsor Agreement, except as permitted thereunder.

The Inter-se Sponsor Agreement may be terminated, *inter alia* (a) if the earlier of the date on which Esoteric owns any Units and the date on which Esoteric is designated as a sponsor of IndiGrid (“**Inter-Se Agreement Effective Date**”) does not occur by September 30, 2019; (b) following the Inter-Se Agreement Effective Date, automatically, upon the later of Esoteric and its affiliates (i) ceasing to hold any Units; or (ii) not being permitted by SEBI or ceasing to be a sponsor of IndiGrid in accordance with applicable law; and (c) automatically, upon the Sponsor ceasing to be a sponsor of IndiGrid under applicable law.

SIML SPA

As on the date of the Preliminary Placement Document, SPTL holds 100% of the issued, subscribed and paid-up share capital of the Investment Manager. Pursuant to the terms of the SIML SPA, Electron has agreed to invest in the Investment Manager in the following manner:

- (a). subscription of 1,249,000 equity shares of the Investment Manager (representing 19.99% of the share capital of the Investment Manager) (“**Subscription of Initial Tranche Shares**”) on such date after Electron intimates SPTL and the Investment Manager in accordance with the SIML SPA (“**Initial Closing Date**”);
- (b). subsequently, the purchase of 2,499,875 equity shares of the Investment Manager (representing 40.01% of the share capital of the Investment Manager as on the date of the SIML SPA) from SPTL (“**Purchase of Second Tranche Shares**”), on such date after Electron intimates SPTL and the Investment Manager in accordance with the SIML SPA, subject to receipt of SEBI, Unitholder and other required approvals; and
- (c). subsequently, the purchase of 874,735 equity shares of the Investment Manager (representing 14% of the share capital of the Investment Manager as on the Initial Closing Date) from SPTL (“**Purchase of Subsequent Tranche Shares**”), on such date after Electron intimates SPTL and the Investment Manager in accordance with the SIML SPA.

As on the date of the final closing of the entire transaction contemplated under the SIML SPA, SPTL and Electron shall hold 26% and 74%, respectively, of the issued, subscribed and paid-up equity share capital of the Investment Manager.

SPTL and Electron have agreed that, during the period between the execution of the SIML SPA and the Initial Closing Date, SPTL and the Investment Manager may not conduct certain activities, such as the transfer or issuance of any securities of the Investment Manager and the approval of transfer of Units by the Sponsor. Additionally, the Investment Manager may not undertake certain actions in relation to its group companies, without the prior written consent of Electron, such as, the incurrence of any indebtedness (apart from in the ordinary course of business), the creation, allotment and issuance of any securities and the declaration or payment of any dividend or distribution.

SIML SHA

Pursuant to the SIML SHA:

- (a). from the Initial Closing Date and until the closing of the Purchase of Second Tranche Shares (“**Second Closing Date**”), the board of directors of the Investment Manager will comprise six directors, out of which three shall be independent directors. Each of SPTL and the Electron has the right to appoint one non-independent director. The chief executive officer of the Investment Manager will be the third non-independent director;

- (b). from the Second Closing Date and until the closing of the Purchase of Subsequent Tranche Shares (“**Subsequent Closing Date**”), the board of directors of the Investment Manager will comprise eight directors, out of which four shall be independent directors. SPTL has the right to appoint one non-independent director while Electron has the right to appoint two non-independent directors. The chief executive officer of the Investment Manager will be the fourth non-independent director. Further, Electron and SPTL have the right to recommend candidates for the appointment of two independent directors;
- (c). with effect from the Subsequent Closing Date, the board of directors of the Investment Manager will comprise ten directors, out of which five shall be independent directors. SPTL has the right to appoint one non-independent director while Electron has the right to appoint three non-independent directors. The chief executive of the Investment Manager will be the fourth non-independent director. Further, each of Electron and SPTL has the right to recommend candidates for the appointment of three and two independent directors, respectively;
- (d). the Investment Manager does not have the right to take actions in relation to certain matters (such as, amendments to the charter documents, transfer of assets to SPTL and declaration of dividends or other distributions) between the effective date of the SIML SHA and the Second Closing Date without the prior approval of Electron. Further, any decision taken by the board/committee/shareholders of the Investment Manager, in relation to the appointment or removal of any key personnel or any change in their appointment shall be taken after consultation with Electron, in good faith;
- (e). the Investment Manager does not have the right to take actions in relation to certain matters (such as, alterations to authorized and issued share capital of the Investment Manager, transfer of assets to Electron and declaration of dividends or other distributions) post the Second Closing Date without prior approval of SPTL;
- (f). each of Electron and SPTL is subject to a lock-in of two years (the “**Lock-in Period**”) in relation to the transfer of equity shares of the Investment Manager held by each of them, except transfers to their respective affiliates. Following the Lock-in Period, neither of Electron and SPTL shall transfer its equity shares to a competitor of the other shareholder, without the prior consent of such other shareholder;
- (g). for a period of two years from the Lock-In Period, SPTL has the right (but not the obligation) to require Electron to purchase all shares held by it (subject to a maximum of 26% of the shareholding of the Investment Manager) from SPTL and its affiliates; and
- (h). each of Electron and SPTL is subject to certain other transfer restrictions in relation to the equity shares held by them in the Investment Manager, such as the provision of a right to first offer to each other before any contemplated third party sale of securities. The SIML SHA provides for the details of methodology, process and timelines in relation to the aforesaid transfer restrictions.

The SIML SHA shall be terminated (a) automatically (i) in case of termination of the SIML SPA; (ii) with respect to Electron and its affiliates, upon Electron ceasing to hold any securities of the Investment Manager; (iii) with respect to SPTL and its affiliates, upon SPTL ceasing to hold at least 10% shares of the Investment Manager on a fully diluted basis.

Esoteric has indicated an interest in purchasing up to an aggregate of approximately ₹ 10,800 million of the Units to be allotted in this Issue, representing approximately 42.2% of the Units offered and to be allotted in this Issue. If Esoteric determines to subscribe to, and our Trustee and the Investment Manager determine to so allot, all of these Units, Esoteric will hold, after the completion of this Issue, approximately 21.86% of our issued and outstanding Units. In addition to the commitment to subscribe to up to 42.2% of the Units sold in this Issue as described above, Esoteric, an affiliate of KKR, has also agreed to acquire up to 15% stake that Sponsor will own on a post issue basis pursuant to this Issue and to be designated as a “Sponsor” of IndiGrid together with our Sponsor subject to unitholders approval. If these transactions are completed, KKR, through its affiliate, will hold approximately 36.87% of the issued and outstanding Units of IndiGrid on a post-Issue basis.

Further, IndiGrid, the Trustee and the Investment Manager also received a letter dated April 29, 2019 (“**GIC Investment EOI**”) from GIC Infra Holdings Pte. Ltd. (“**GIC Infra**”), informing them that GIC Infra wants to invest in the Units for an amount of up to ₹ 9,800 million (“**GIC Investment**”). The GIC Investment EOI states

that such GIC Investment is subject to certain conditions, such as: (i) investment in the Issue by Esoteric simultaneously with the GIC Investment; and (ii) at least ₹ 24,600 million being raised by IndiGrid from the proposed Issue.

RELATED PARTY TRANSACTIONS

In terms of Regulation 2(1)(zv) of the InvIT Regulations, related party shall be as defined as under the Companies Act, 2013 or under the applicable accounting standards and shall also include: (i) Parties to IndiGrid; and (ii) promoters, directors, and partners of the Parties to IndiGrid. Further, related parties also include such persons and entities as defined in terms of the applicable accounting standards, being IndAS 24 on “*Related Party Disclosures*” (“**Related Parties**”). The Parties to IndiGrid, may, from time to time, enter into related party transactions, in accordance with applicable law.

Present and On-going Related Party Transactions

A number of present and on-going transactions with certain Related Parties have been entered into by IndiGrid.

A. Acquisition of the Target Assets by IndiGrid

The Trustee, on behalf of IndiGrid, has entered into two share purchase agreements for the purpose of acquiring 100% of the issued, subscribed and paid-up equity share capital of: (i) SGL2, which, in turn, holds 100% of the issued, subscribed and paid-up equity share capital of NTL and 26% of the issued, subscribed and paid-up equity share capital of RTCL, and (ii) SGL3, which, in turn, holds 100% of the issued, subscribed and paid-up equity share capital of OGPTL and 51% of the issued, subscribed and paid-up equity share capital of MTL.

1. Share Purchase Agreement for acquisition of NTL

The Trustee (on behalf of IndiGrid) has entered into a share purchase agreement dated April 30, 2019 with the Sponsor, the Investment Manager, SGL2 and NTL (“**NTL Share Purchase Agreement**”) to acquire the entire equity share capital of SGL2, which holds the entire equity share capital of the NTL and 26% of the issued, subscribed and paid up equity share capital of RTCL. IndiGrid has agreed to pay a consideration amounting to the equity value of SGL2, calculated based on the audited consolidated financial statements of SGL2 for the financial year ended on March 31, 2019 (“**Closing Equity Value**”), as adjusted by the difference between such Closing Equity Value and the final equity value as certified by the management of SGL2 upon satisfaction or waiver of all the conditions precedent to the transaction. Pursuant to the NTL Share Purchase Agreement, the Closing Equity Value will be the sum of an amount agreed in writing by the parties (the “**Enterprise Value**”) minus certain identified liabilities.

Pursuant to the NTL Share Purchase Agreement, SGL2, RTCL and NTL will stand transferred to IndiGrid (“**Proposed Transaction**”) subject to the satisfaction of certain conditions precedent such as:

- (a). each of the Sponsor and SGL2 having obtained necessary corporate approvals necessary for the Proposed Transaction;
- (b). each of the Sponsor and SGL2 having obtained regulatory approvals and no-objection certificates that are required, if any;
- (c). delivery of evidence of shareholding of the shares in SGL2 by the Sponsor to IndiGrid;
- (d). execution of a tripartite agreement for the assignment of obligations of SGL2 under the 2018 RTCL Share Purchase Agreement in favour of the Sponsor;
- (e). the execution of agreements such as an investment management agreement between NTL and the Investment Manager and a project management and implementation agreement between NTL and the Sponsor; and
- (f). each of the Sponsor and SGL2 having performed and complied with agreements, obligations and conditions as set out in the NTL Share Purchase Agreement.

Further, in accordance with the NTL Share Purchase Agreement, the Sponsor has provided certain customary representations and warranties to the Trustee (acting in its capacity as the Trustee of IndiGrid) and the Investment Manager in relation to itself and SGL2, which include:

- (a). each of the Sponsor and SGL2 are duly incorporated;

- (b). due authorization and validity of the shares being sold;
- (c). due accounting and finance conditions;
- (d). representations in relation to taxation, litigation, corporate records and material contracts; and
- (e). validity of approvals, licenses, permits and authorizations.

Pursuant to the NTL Share Purchase Agreement, the Sponsor has agreed to indemnify the Trustee, SGL2 and NTL, for identified losses resulting from events such as breach of representations and warranties and claims in relation to certain litigations and approvals.

2. *Share Purchase Agreement for acquisition of OGPTL*

The Trustee (on behalf of IndiGrid) has entered into a share purchase agreement dated April 30, 2019 with the Sponsor, the Trustee, the Investment Manager, SGL3 and OGPTL (“**OGPTL Share Purchase Agreement**”) to acquire the entire equity share capital of SGL3, which holds the entire share capital of the OGPTL and 51% of the issued, subscribed and paid up equity share capital of MTL. IndiGrid has agreed to pay a consideration amounting to the equity value of SGL3, calculated based on the audited consolidated financial statements of SGL3 for the financial year ended on March 31, 2019 (“**Closing Equity Value**”), as adjusted by the difference between such Closing Equity Value and the final equity value as certified by the management of SGL3 upon satisfaction or waiver of all the conditions precedent to the transaction. Pursuant to the OGPTL Share Purchase Agreement, the Closing Equity Value will be the sum of an amount agreed in writing by the parties (the “**Enterprise Value**”) and all cash, cash equivalents and other realizable assets (with necessary deductions) minus all liabilities and ₹ 404 million.

Pursuant to the OGPTL Share Purchase Agreement, SGL3, MTL and OGPTL will stand transferred to IndiGrid (“**Proposed Transaction**”) subject to the satisfaction of certain conditions precedent such as:

- (a). each of the Sponsor and SGL3 having obtained necessary corporate approvals necessary for the Proposed Transaction;
- (b). each of the Sponsor and SGL3 having obtained certain regulatory approvals and no-objection certificates;
- (c). delivery of evidence of shareholding of the shares in SGL3 by the Sponsor to IndiGrid;
- (d). execution of a tripartite agreement for the assignment of obligations of SGL3 under the 2018 MTL Share Purchase Agreement in favour of the Sponsor;
- (e). the execution of agreements such as an investment management agreement between OGPTL and the Investment Manager and a project management and implementation agreement between OGPTL and the Sponsor; and
- (f). each of the Sponsor and SGL3 having performed and complied with agreements, obligations and conditions as set out in the OGPTL Share Purchase Agreement.

Further, in accordance with the OGPTL Share Purchase Agreement, the Sponsor has provided certain customary representations and warranties to the Trustee (acting in its capacity as the Trustee of IndiGrid) and the Investment Manager in relation to itself and SGL3, such as:

- (a). each of the Sponsor and SGL3 are duly incorporated;
- (b). due authorization and validity of the shares being sold;
- (c). due accounting and finance conditions;
- (d). representations in relation to taxation, litigation, corporate records and material contracts; and
- (e). validity of approvals, licenses, permits and authorizations.

Pursuant to the OGPTL Share Purchase Agreement, the Sponsor has agreed to indemnify the Trustee, SGL3 and OGPTL, for losses resulting from events such as breach of representations and warranties and claims in relation to certain litigations.

3. Second Amendment Agreement in relation to the 2018 RTCL Share Purchase Agreement

SGL2, SGL1, the Trustee (on behalf of IndiGrid), the Investment Manager, the Sponsor and RTCL have entered into an agreement dated April 30, 2019 (“**RTCL Second Amendment Agreement**”) in order to amend and modify certain provisions of the 2018 RTCL Share Purchase Agreement including clauses in relation to indemnity. Further, the RTCL Second Amendment Agreement, provides for the unconditional and irrevocable assignment of all the subsisting indemnity obligations and corresponding rights of SGL2 in favour of the Sponsor in light of the NTL Share Purchase Agreement (pursuant to which 100% of the issued, subscribed and paid-up share capital of SGL2 is being transferred to IndiGrid).

Pursuant to the RTCL Second Amendment Agreement, each of the parties to the agreement has provided certain customary representations and warranties, such as:

- (a). each of the parties is duly incorporated;
- (b). due authority to execute, deliver and perform the agreement; and
- (c). legality, validity and binding nature of the obligations under the RTCL Second Amendment Agreement.

4. Amendment Agreement in relation to the 2018 MTL Share Purchase Agreement

SGL3, SGL1, the Trustee (on behalf of IndiGrid), the Investment Manager, the Sponsor and MTL have entered into an agreement dated April 30, 2019 (“**MTL Amendment Agreement**”) in order to amend and modify some terms of the 2018 MTL Share Purchase Agreement such as clauses in relation to indemnity of SGL3 under the 2018 MTL Share Purchase Agreement. Further, the MTL Amendment Agreement, provides for the unconditional and irrevocable transfer of all the subsisting indemnity obligations and corresponding rights of SGL3 in favour of the Sponsor in light of the OGPTL Share Purchase Agreement (pursuant to which 100% of the issued and paid-up share capital of SGL3 is being transferred to IndiGrid).

Pursuant to the MTL Amendment Agreement, each of the parties to the agreement has provided certain customary representations and warranties, such as:

- (a). each of the parties is duly incorporated;
- (b). due authority to execute, deliver and perform the agreement; and
- (c). legality, validity and binding nature of the obligations under the MTL Amendment Agreement.

5. Amendment Agreement in relation to the 2018 PKTCL Share Purchase Agreement

SGL2, SGL1, the Trustee (on behalf of IndiGrid), the Investment Manager, the Sponsor and PKTCL have entered into an agreement dated April 30, 2019 (“**PKTCL Amendment Agreement**”) in order to amend and modify some terms of the 2018 PKTCL Share Purchase Agreement such as clauses in relation to indemnity of SGL2 under the 2018 PKTCL Share Purchase Agreement. Further, the PKTCL Amendment Agreement, provides for the unconditional and irrevocable transfer of all the subsisting indemnity obligations and corresponding rights of SGL2 in favour of the Sponsor in light of the NTL Share Purchase Agreement (pursuant to which 100% of the issued and paid-up share capital of SGL2 is being transferred to IndiGrid).

Pursuant to the PKTCL Amendment Agreement, each of the parties to the agreement has provided certain customary representations and warranties, such as:

- (a). each of the parties is duly incorporated;
- (b). due authority to execute, deliver and perform the agreement; and
- (c). legality, validity and binding nature of the obligations under the PKTCL Amendment Agreement.

B. Framework Agreement

The Sponsor, the Trustee (on behalf of IndiGrid) and the Investment Manager (the “**Parties**”) have entered into a framework agreement dated April 30, 2019 (the “**Framework Agreement**”) which records the detailed processes, terms and conditions for the sale of GPTL, KTL and NER (the “**Framework Assets**”) by the Sponsor to IndiGrid. The Parties have agreed that the acquisition of two of the Framework Assets (GPTL and KTL) will be completed before 13 months from the date of their respective COD or December 30, 2020, whichever is earlier, while the acquisition of NER will be completed before 13 months from the date of its COD or December 30, 2021, whichever is earlier, or any later date as may be agreed upon in writing by the Parties (“**Acquisition Date**”).

Pursuant to the Framework Agreement, IndiGrid has agreed to purchase 100% of the issued and paid-up capital of the Framework Assets, either directly or through acquisition of the holding company of the Framework Assets by executing share purchase agreements with the Sponsor and the Investment Manager in a form substantially similar to the share purchase agreements entered into between the Sponsor and the Trustee in respect of acquisition of SGL2 and NTL. The consideration payable by IndiGrid for the acquisition of the issued and paid-up capital of the Framework Assets will be mutually agreed upon in the respective share purchase agreements on the basis of the enterprise value of each Framework Asset set out in the Framework Agreement (being ₹ 10,250 million for GPTL, ₹ 13,750 million for KTL and ₹ 41,000 million for NER). Such enterprise value is subject to certain adjustments such as adjustments based on the findings in the due diligence of such assets, its operations conducted by the Investment Manager and/or its advisors on behalf of the Trust and prevailing interest rate at the time of the share purchase agreement.

Further, the Parties have agreed that from the date of the Framework Agreement until the Acquisition Date, the Sponsor, (including its officers, shareholders, directors, employees, or Affiliates) may not, without IndiGrid’s prior written consent, conduct certain activities, such as:

- (a). purchase of the shares of the Framework Assets and/ or their holding companies;
- (b). sale or disposal of a substantial portion of the business and/ or assets of the Framework Assets and/ or their holding companies;
- (c). issuance of any securities of the Framework Assets and/ or their holding companies;
- (d). merger, amalgamation, consolidation or any rearrangement of the Framework Assets and/ or their holding companies; and/or
- (e). creation of any encumbrance on the shares of the Framework Assets and/ or their holding companies.

However, in the event an Framework SPV has achieved COD and IndiGrid has indicated that such Framework SPV is a non-revenue generating SPV, then the Sponsor shall be entitled to sell more than 50% of the issued and paid up share capital of such Framework Assets to a third party subject to certain conditions.

Pursuant to the Framework Agreement, the Parties have provided certain representations and warranties to each other, including, amongst others:

- (a). each of the Parties are duly incorporated;
- (b). due authorization to execute, deliver and perform the Framework Agreement; and
- (c). enforceability and validity of the Framework Agreement.

Further, the Sponsor has represented that it is the legal and beneficial owner of the shares of the Framework Assets and their holding companies. Additionally, the Sponsor has indemnified the Parties for any losses resulting from the breach of any representations, warranties and covenants.

Borrowings from Related Parties

Borrowings in the form of inter-corporate deposits, and other short term and subordinated loans were provided by the Sponsor and certain of its associates to the Portfolio Assets, in addition to subscription to non-convertible debentures by the Sponsor. For details, please see the section entitled “*Financial Indebtedness and Deferred Payments*” on page 200.

The Investment Manager’s Internal Controls System

The Investment Manager has implemented an internal controls system to ensure that all future or any subsequent modifications of transactions of IndiGrid with related parties will be:

- (a). on an arm’s length basis in accordance with the relevant accounting standards;
- (b). in the best interest of the Unitholders; and
- (c). consistent with the strategy and investment objectives of IndiGrid.

For a description of the various measures implemented by the Investment Manager in this regard, please see the section entitled “*Corporate Governance*” on page 123.

Potential Conflicts of Interest

The Investment Manager has established certain procedures to deal with conflict of interest issues. For details and description of such procedures, please see the section entitled “*Corporate Governance*” on page 123.

Further, in order to manage any potential competition and conflicts of interest that may arise between the Sponsor and IndiGrid in relation to any interests in transmission business, the Sponsor has entered into a ROFO Deed with the Trustee (acting in its capacity as the trustee of IndiGrid) on May 5, 2017 as well as a Framework Agreement on April 30, 2019. For further details on management of potential conflicts of interest (including procedure for dealing with related party transactions), please see the section entitled “*Corporate Governance – Policies of the Board of Directors of the Investment Manager in relation to IndiGrid*” on page 128.

Disclosure of Related Party Transactions

For details of the related party transactions entered into by IndiGrid, please refer to disclosures made to the Stock Exchanges in this regard available at <https://www.bseindia.com/> and https://nseindia/index_nse.htm. Further, please see disclosures made on <https://www.indigrid.co.in/download-investor.html>.

REGULATORY APPROVALS

IndiGrid, the Portfolio Assets and the Target Assets are required to obtain consents, licenses, registrations, permissions and approvals for carrying out their present business activities which include, approvals for registration as an infrastructure investment trust and for carrying out its present business, as applicable. Such approvals include transmission licenses, consents, licenses, registrations, permissions and approvals under the Electricity Act, 2003 and regulations made thereunder, approvals from the telegraph authority, energisation approvals from the Central Electricity Authority, aviation clearances from the Airport Authority of India, no objection certificates from the Ministry of Defence, certain environmental approvals and clearances and tax related approvals. There are certain other consents, licenses, registrations, permissions and approvals that the Portfolio Assets obtain for our business, which include, labour related approvals, approvals under the shops and establishments acts of various states, power line crossing approvals, railway line crossing approvals and other approvals. The requirement for such approvals for a particular project undertaken by us may vary based on factors such as the legal requirement in the state in which the project is being undertaken, the size of the projects undertaken and the type of project. Further, as the obligation to obtain such approvals arises at various stages of construction or completion of our projects and related assets, applications are filed and the necessary approvals are obtained at the appropriate stage.

Other than as stated in this section, IndiGrid, the Portfolio Assets and the Target Assets have obtained necessary consents, licenses, permissions, registrations and approvals from various governmental, statutory and regulatory authorities, required for the registration as an infrastructure investment trust and for carrying out its present business, as applicable. Certain material consents, licenses, registrations, permissions and approvals that are required to be obtained by IndiGrid, the Portfolio Assets and the Target Assets for undertaking their business may elapse from time to time in their normal course and they make applications to the relevant Central or State government authorities for renewal of such consents, licenses, registrations, permissions and approvals or may have made such applications (wherever expedient and prudent) for renewal of such consents, licenses, registrations, permissions and approvals. In view of the approvals listed below, IndiGrid can undertake the Issue as well as its current business, as applicable, and no further major approvals from any governmental or regulatory authority under the Electricity Act, 2003, or the rules made thereunder or any other entity are required to undertake the Issue or to continue its business, as applicable. Unless otherwise stated, these approvals are all valid as on date of this Preliminary Placement Document.

I. Approvals in relation to the Issue

1. In-principle approval from the BSE dated April 30, 2019.
2. In-principle approval from the NSE dated April 30, 2019.

II. Approvals for IndiGrid

1. Certificate of registration bearing number IN/InvIT/16-17/0005 dated November 28, 2016 with SEBI as an infrastructure investment trust.

III. Approvals received by BDTCL

1. Transmission license dated October 12, 2011 issued by the CERC for building, maintaining and operating transmission lines for six interstate transmission systems, being, (i) Jabalpur to Bhopal; (ii) Bhopal to Indore; (iii) Bhopal to Bhopal; (iv) Aurangabad to Dhule; (v) Dhule to Vadodara; and (vi) Dhule to Dhule.
2. Tariff order dated October 28, 2011 issued by the CERC under Section 63 of the Electricity Act for adoption of transmission charges in respect of the transmission system developed by BDTCL.
3. Approval dated November 25, 2010 issued by the Ministry of Power, Government of India under Section 68 of the Electricity Act for the transmission project set up by BDTCL.
4. Approval dated January 29, 2013 issued by the Ministry of Power, Government of India, under Section 164 of the Electricity Act for six interstate transmission systems, being, (i) Jabalpur to Bhopal; (ii) Bhopal to Indore; (iii) Bhopal to Bhopal; (iv) Aurangabad to Dhule; (v) Dhule to Vadodara; and (vi) Dhule to Dhule.

5. Approvals issued by the CEA, for energisation of (i) the electrical apparatus at Dhule associated with the Dhule-Vadodara line, the Dhule-Aurangabad line, the bus reactor main bay, HVDC lines and the Dhule-Dhule lines and other associated apparatus, (ii) Agaria Bhopal sub-station, (iii) 400 kV D/C Bhopal-Bhopal transmission line; (iv) 765 kV S/C Bhopal-Indore transmission line; (v) 765 kV S/C Dhule-Aurangabad transmission line; (vi) 765 kV S/C Dhule-Vadodara transmission line; (vi) 765 kV S/C Jabalpur-Bhopal transmission line; and (vii) 400 kV D/C Dhule-Dhule transmission line.

IV. Approvals received by JTCL

1. Transmission license dated October 12, 2011 issued by the CERC to establish a transmission project to strengthen the western and northern region and building, owning, maintaining and operating transmission lines from (i) Dharamjaygarh to Jabalpur; and (ii) Jabalpur to Bina.
2. Tariff order dated October 28, 2011 issued by the CERC under Section 63 of the Electricity Act for adoption of transmission charges in respect of the transmission system developed by JTCL.
3. Approval dated November 25, 2010 issued by the Ministry of Power, Government of India under Section 68 of the Electricity Act for the transmission project set up by JTCL.
4. Approval dated July 12, 2013 issued by the Ministry of Power, Government of India under Section 164 of the Electricity Act for (i) 765 kV D/C Dharamjaygarh to Jabalpur transmission line; and (ii) 765 kV S/C Jabalpur to Bina transmission line.
5. Approvals issued by the CEA, for energisation of (i) the 765 kV S/C Jabalpur to Bina transmission line from the 765/400 kV substation at Jabalpur to the 765/400 kV substation at Bina; and (ii) the 765 kV D/C Dharamjaygarh to Jabalpur transmission line from the 765/400 kV substation at Jabalpur to the 765/400 kV substation at Dharamjaygarh.

V. Approvals received by MTL

1. Transmission license dated November 23, 2015 issued by the CERC for building, owning, operating and maintaining transmission lines from (i) Maheshwaram to Mehboobnagar; and (ii) Nizamabad to Yeddumailaram (Shankarpalli).
2. Tariff order dated November 24, 2015 issued by the CERC under Section 63 of the Electricity Act for adoption of transmission charges in respect of the transmission system developed by MTL and corrigendum to such tariff order dated June 12, 2017.
3. Approval dated July 27, 2015 issued by the Ministry of Power, Government of India under Section 68 of the Electricity Act for the transmission project set up by MTL.
4. Approval dated September 20, 2016 issued by the Ministry of Power, Government of India under Section 164 of the Electricity Act for (i) 400 kV D/C Maheshwaram to Mehboobnagar transmission line; and (ii) 400 kV D/C Nizamabad to Yeddumailaram (Shankarpalli) transmission line.
5. Approvals issued by the CEA, for energization of (i) 400 kV line bays extension for 400 kV D/C Nizamabad to Yeddumailaram (Shankarpalli) transmission line; (ii) 400 kV D/C Nizamabad to Yeddumailaram (Shankarpalli) transmission line; (iii) 400 kV D/C Maheshwaram to Mehboobnagar transmission line; and (iv) 400 kV line bays extension at Veltoor (Mehboobnagar) station.

VI. Approvals received by PKTCL

1. Transmission license dated May 30, 2014 issued by the CERC to establish a transmission project to strengthen the eastern system and building, owning, operating and maintaining transmission lines from (i) Kharagpur to Chaibasa; and (ii) Purulia to Ranchi.
2. Tariff order dated August 20, 2014 issued by the CERC under Section 63 of the Electricity Act for adoption of transmission charges in respect of the transmission system developed by PKTCL.

3. Approval dated May 29, 2013 issued by the Ministry of Power, Government of India under Section 68 of the Electricity Act for the transmission project set up by PKTCL.
4. Approval dated May 7, 2015 issued by the Ministry of Power, Government of India under Section 164 of the Electricity Act for (i) 400 kV D/C Kharagpur to Chaibasa transmission line; and (ii) 400 kV Purulia to Ranchi transmission line.
5. Approvals issued by the CEA, for energisation of (i) 400 kV Puralia to Ranchi D/C transmission line; and (ii) 400 kV Kharagpur to Chaibasa D/C transmission line.

VII. Approvals received by RTCL

1. Transmission license dated July 31, 2014 issued by the CERC for building, owning, operating and maintaining the transmission system comprising the RTCL Kota to Shujalpur transmission line.
2. Tariff order dated July 23, 2014 issued by the CERC under Section 63 of the Electricity Act for adoption of transmission charges in respect of the transmission system to be developed by RTCL.
3. Approval dated May 16, 2013 issued by the Ministry of Power, Government of India under Section 68 of the Electricity Act for the transmission project set up by RTCL.
4. Approval dated January 7, 2015 issued by the Ministry of Power, Government of India under Section 164 of the Electricity Act for the 400 kV D/C RTCL Kota to Shujalpur transmission line.
5. Approvals issued by the CEA, for energisation of the 400 kV D/C (Twin Moose) RTCL Kota to Shujalpur transmission line.

VIII. Approvals received by PTCL

1. Transmission license dated July 14, 2014 issued by the CERC for establishing the transmission system comprising 2x500 MVA, 400/220 kV substation and LILO of both circuits of Patiala - Kaithal 400 kV ("**PTCL Project**").
2. Tariff order dated August 5, 2014 and corrigendum to the order dated May 19, 2017 issued by the CERC under Section 63 of the Electricity Act for adoption of transmission charges in respect of the transmission system developed by PTCL.
3. Approval dated May 16, 2013 issued by the Ministry of Power, Government of India under Section 68 of the Electricity Act for the transmission system set up by PTCL.
4. Approval dated March 21, 2016 issued by the Ministry of Power, Government of India under Section 164 of the Electricity Act for the PTCL Project.
5. Approvals issued by the CEA, for energisation of the LILO of 400 kV D/C Patiala-Kaithal line at 400/220 kV GIS Patran substation of PTCL and 400 kV GIS module, 220 kV GIS module at 400/220 kV GIS substation of PTCL.

IX. Approvals received by NTL

1. Transmission license dated November 14, 2014 issued by the CERC for establishing the transmission system comprising comprising (i) Jalandhar – Samba 400 kV D/C; (ii) LILO of both circuits of Uri-Wagoora 400 kV D/C line at Amargarh (on multi – circuit towers); (iii) Samba – Amargarh 400 kV D/C routed through Akhnoor/Rajouri; and (iv) Establishment of 7x 105 MVA (1ph units), with 400/220 kV GIS sub- station at Amargarh ("**NTL Project**").
2. Tariff order dated December 10, 2014 and corrigendum to the order dated June 12, 2017, issued by the CERC under Section 63 of the Electricity Act for adoption of transmission charges in respect of the transmission system developed by NTL.

3. Approval dated September 19, 2013 issued by the Ministry of Power, Government of India under Section 68 of the Electricity Act for the transmission system set up by NTL.
4. Approval dated September 17, 2015 issued by the Ministry of Power, Government of India under Section 164 of the Electricity Act for the NTL Project.
5. Approvals issued by the CEA, for energisation of (i) 400 kV D/C (Twin Moose) Jalandhar-Samba line; (ii) the 400 kV D/C (Twin Moose) Samba - Amargarh line; (iii) the LILLO of both circuits of Uri- Wagoora 400 kV D/C line (line length = 6.82 km) at 400/220 kV GIS sub-station at Amargarh, Srinagar; and (iv) the 400/220 kV GIS sub-station at Amargarh of NTL.

X. Approvals received by OGPTL

1. Transmission license dated June 30, 2016 issued by the CERC for establishing the transmission system comprising (i) Jharsuguda (Sundargarh) Rajpur Pool 765 kV D/C line (Hexa Zebra Conductor); and (ii) OPGC-Jharsuguda (Sundargarh) 400 kV D/C (Triple Snowbird Conductor) (“**OGPTL Project**”).
2. Tariff order dated May 31, 2016 issued by the CERC under Section 63 of the Electricity Act for adoption of transmission charges in respect of the transmission system developed by OGPTL.
3. Approval dated June 3, 2015 issued by the Ministry of Power, Government of India under Section 68 of the Electricity Act for the transmission system set up by OGPTL.
4. Approval dated March 6, 2017 issued by the Ministry of Power, Government of India under Section 164 of the Electricity Act for the OGPTL Project.
5. Approval issued by the CEA, for energisation of the 400 kV D/C OPGC-Jharsuguda line and 765 kV D/C Sundergarh-Raipur line.

XI. Approvals applied for, but not yet received

Except as disclosed below, there are no approvals required by IndiGrid, the Portfolio Assets and the Target Assets, for which applications have been made, but approvals have not been received as on the date of this Preliminary Placement Document:

1. **MTL**
 - (a). Final approval from the Ministry of Road Transport & Highway, Hyderabad for the installation of 400 kV Twin transmission lines from Nizamabad to Shankarpalli overhead crossing in between Km 495 to Km 496.
2. **RTCL**
 - (a). Stage II Forest approvals obtained from Ministry of Environment and Forest for diversion of 27.37 hectare of forest land for putting up the 400 kV D/C transmission line from RTCL to Sujalpur and for cutting 217 trees and loping 231 trees.
3. **PKTCL**
 - (a). No objection certificate from Director of OPS (ATS) for construction of 400 kV D/C Purulia-Ranchi Transmission Line in relation to the application made on October 15, 2016.
 - (b). No objection certificate from Senior Air Traffic Controller, Airforce Station for installation of Kharagpur-Chaibasa Transmission Line in relation to the application made on February 9, 2016.
 - (c). No objection certificate from Senior Air Traffic Controller, Airforce Station for construction of 400 kV Kharagpur-Chaibasa Transmission Line in relation to the application made on November 3, 2015.

- (d). Final approval from Ministry of Environment, Forest and Climate Change for diversion of 2.696 ha of forest land under Rairangpur Forest Division for setting up the 400 kV D/C Kharagpur-Chaibasa transmission line.
 - (e). Final approval from Ministry of Environment, Forest and Climate Change for diversion of 59.501 ha forest land in Ranchi and Khunti district of Jharkhand for setting up the 400 kV D/C Purulia-Ranchi transmission line.
4. **PTCL**
- (a). Approvals for the building plans of PTCL from competent authorities in relation to the construction of an electric sub-station in an area measuring 16.1435 acres at village Banwala and Darauli, District Patiala.
5. **NTL**
- (a). No objection certificate from the Air Head Quarters for the construction of the Uri – Wagoora transmission line in relation to the application made by NTL dated January 08, 2018.
 - (b). The final approval from the Air Headquarters for the construction of the 10 towers at s.no 667,673,675,676, 680, 681,682,686,687 and 688 in relation to the 400 kV D/C Jalandhar to Samba and Samba to Amargarh transmission line.
 - (c). Prior permission of the Division Railway Manager as required for energization of the transmission line between telegraph posts 76/8 and 76/9 between Gurdaspur and Dinanagar railway station.
 - (d). Prior permission of the Division Railway Manager as required for energization of the transmission line between telegraph posts 58/9 and 58/0 between Ghagwal and Samba.
 - (e). Renewed registration of office of NTL under the Shops and Establishments Act, 1954.
 - (f). No objection certificate from the Air Headquarters, New Delhi, for the construction of the 400 kV D/C Samba - Amargarh transmission line.
6. **OGPTL**
- (a). Trial completion certificate from Power System Operation Corporation Limited for Jharsuguda (Sundargarh) – Raipur line.
 - (b). Final approvals from the Ministry of Environment and Forests for forest clearance for the diversion of forest land for the construction of the Jharsuguda (Sundargarh) – Raipur and OGPC – Jharsuguda transmission lines.
 - (c). Final approval from the Ministry of Environment and Forests for diversion of 71.761 hectares of forest land for the construction of the Jharsuguda (Sundargarh) Rajpur 765 kV D/C transmission line.
 - (d). Final approval from the Ministry of Environment and Forests for diversion of 30.134 hectares of forest land for setting up of the OPGC-Jharsuguda 400 kV D/C transmission line.
 - (e). Final approval from the Ministry of Environment and Forests for diversion of 94.656 hectares of forest land for setting Jharsuguda (Sundargarh) Rajpur 765 kV D/C transmission line.
 - (f). Approval from Ind Bharat Energy Utkal Limited (“**IBEUL**”) pursuant to the application dated October 6, 2016 for approval for railway line crossing of the 400 kV OPGC-Jharsuguda transmission line with the non – electrified U/C railway line of IBEUL in village Negipali.

- (g). Final approval from South Eastern Central Railway for the erection of the OPGC-Jharsuguda transmission line over the railway line crossing in between Jharsuguda & IB at KM 522/7-522/10
- (h). Final approval from South Eastern Central Railway for erection of Jharsuguda (Sundargarh) – Raipur transmission line at Pole No. 622/17-622/19 & in between Kharsia & Jharidhi at AP 96 – AP 97
- (i). Final approval from South Eastern Central Railway for erection of Jharsuguda (Sundargarh) – Raipur transmission line electrical track crossing at AP102 and AP103 in between Dharamjaygarh & Kharsia Railway station
- (j). Final approval from South Eastern Central for erection of the Jharsuguda (Sundargarh) – Raipur transmission line electrical track crossing at chainage 24/200 & 24/250 in between Lara & Talaipalli coal mine at AP-118 – AP 119.
- (k). Registration of the office of OGPTL under the Shops and Establishments Act, 1954.

XII. Approvals for which applications are yet to be made

As on the date of this Preliminary Placement Document, there are no approvals required by IndiGrid and the Portfolio Assets for which applications are yet to be made.

LITIGATION

Except as stated in this section, there are no material litigation and actions by regulatory authorities, in each case against IndiGrid, the Sponsor, the Investment Manager, the Project Manager, or any of their Associates and the Trustee, as on the date of this Preliminary Placement Document, that are currently pending.

For the purpose of this section, details of all regulatory actions and criminal matters that are currently pending have been disclosed. Further, any matter that is currently pending involving an amount equivalent to, or more than, the amount as disclosed below, in respect of IndiGrid, the Sponsor, the Investment Manager and each of their Associates has been disclosed.

For the Sponsor or Project Manager and its Associates (some of which are also Associates of the Investment Manager), the total consolidated income for Fiscal 2018 was ₹ 8,864.47 million and the consolidated net worth (i.e. the total of share capital and consolidated reserves and surplus) was ₹ 7,840.28 million. Accordingly, all outstanding cases which involve an amount exceeding ₹ 443.23 million (being 5% of the total consolidated income) have been considered material. The Investment Manager does not have any outstanding litigation.

For the Trustee, the consolidated revenue for Fiscal 2018 was ₹ 383.88 million, the consolidated profit after tax was ₹ 201.95 million and the net worth was ₹ 602.29 million. Accordingly, all outstanding cases which involve an amount exceeding 5% of the profit after tax have been considered material.

In relation to the Portfolio Assets, all outstanding matters have been considered material for the purposes of disclosure in this section.

I. Litigation involving India Grid Trust

A. Sterlite Grid 1 Limited

Other than the matters disclosed in the section entitled “*Litigation – Tax Proceedings*” on page 246, there is no litigation involving SGL1.

B. JTCL

Civil matters

- (i) Jagmohan Patel (the “**Applicant**”) filed an application against the Union of India, JTCL and others, before the District Magistrate, Sagar, Madhya Pradesh, under the Telegraph Act, 1885, alleging that he suffered damage due to the construction of high voltage transmission lines by JTCL. He claimed compensation of ₹ 9.28 million. The District Judge, District Court, Sagar also issued a show cause notice dated August 25, 2016, requiring the Applicant to appear before it at the designated time. JTCL has filed its reply. The Applicant has filed another petition before the District Magistrate, Sagar, Madhya Pradesh against the Union of India and others for payment of compensation amount of ₹ 0.69 million for loss caused to the Applicant due to construction of high voltage transmission line by JTCL. JTCL has filed its reply in relation to this petition. The matter is currently pending.
- (ii) Sanjay Jain and others (the “**Petitioners**”) filed a writ petition before the High Court of Madhya Pradesh, Jabalpur Bench (the “**High Court**”) against the State of Madhya Pradesh and others (the “**Respondents**”) alleging that the land is being utilized for construction of transmission line towers without acquisition of the land in accordance with law. The High Court, by its order dated December 31, 2012 (the “**Stay Order**”), ordered that *status quo* with respect to the property in question should be maintained until the land is not acquired by the Respondents for the construction of towers and ordered that compensation be paid to the Petitioners. The High Court, by an order dated July 8, 2014, disposed of the said matter, granting liberty to the Petitioners to make representations before the relevant competent authority. The Stay Order was subsequently vacated. Subsequently, the Petitioners filed a claim before the District Collector, Damoh (the “**DC Damoh**”). The DC Damoh dismissed their claim through an order dated August 28, 2014 (the “**Impugned Order**”). The Petitioners have filed a writ petition before the High Court challenging the Impugned Order. The matter is currently pending.
- (iii) Bhujbal Patel and others (the “**Petitioners**”) filed a civil application against the Union of India before the District Magistrate, Sagar, Madhya Pradesh (the “**District Magistrate**”), under the Telegraph Act, 1885,

alleging that they suffered damage due to the construction of the high voltage transmission line by JTCL. The Petitioners claimed compensation of ₹ 14.35 million. They filed a writ petition before the High Court of Madhya Pradesh, Jabalpur Bench (the “**High Court**”), alleging that JTCL was using their land without consent and thereby depriving them of their rights. The High Court issued an order dated June 23, 2014, in favour of JTCL (the “**Order**”) and directed the Petitioners to seek recourse under Section 16 of the Telegraph Act, 1885. Thereafter, the Petitioners approached the Sub - Divisional Magistrate, Sagar. The High Court stated the Petitioners suppressed material facts and dismissed the writ petition. Aggrieved, the Petitioners filed a civil application against the Union of India before the District Magistrate, under the Telegraph Act, 1885, alleging that they suffered damage due to the construction of the high voltage transmission line by JTCL and claimed compensation of ₹ 14.35 million. JTCL has filed its reply. The Petitioners have filed another petition before the District Magistrate against the Union of India and others for payment of compensation amount of ₹ 6.75 million for loss caused to the Petitioners due to construction of high voltage transmission line by JTCL. JTCL has filed its reply in relation to this petition. The matter is currently pending.

- (iv) Lalchand Agrawal filed a writ petition against the Union of India before the High Court of Madhya Pradesh, (the “**High Court**”) challenging the erection of a tower on his land by JTCL, alleging that his village was not mentioned in the notification dated July 12, 2013 under which JTCL was authorized to erect towers, and further alleging that no notice was provided and no compensation was paid. The High Court rejected the claim of Lalchand Agrawal. Aggrieved, Lalchand Agrawal has filed a civil appeal before the Supreme Court of India. JTCL has filed its reply. The matter is currently pending.
- (v) The District Collector, Mandala has initiated a *suo moto* inquiry in a case filed by Imrat Singh and others against JTCL, and has passed an order (the “**Order**”) directing JTCL to pay a compensation amount of ₹ 5.95 million to 95 land owners. JTCL has filed a writ petition before the High Court of Madhya Pradesh at Jabalpur to challenge the Order. The matter is currently pending.

C. BDTCL

Regulatory matters

- (i) PGCIL filed a tariff petition before the CERC for determination of tariff due to it for the period where BDTCL’s assets were not operational (the “**Interim Period**”). Through an order dated September 20, 2017 (“**First CERC Order**”), CERC directed BDTCL to pay the transmission charges to PGCIL for the Interim Period. BDTCL subsequently filed a review petition before CERC against the First CERC Order, which was dismissed by the CERC through an order dated July 23, 2018 (“**Second CERC Order**”). BDTCL has filed an appeal before APTEL against the First CERC Order and Second CERC Order. The matter is currently pending.

Civil matters

- (i) Bhagawan Devman Bhilla filed a civil suit against the State of Maharashtra and BDTCL before the Joint Civil Judge (Senior Division), Dhule (the “**Judge**”) for declaration, compensation and interim injunction in relation to a plot of land. BDTCL has filed a counter-claim and application for interim injunction. The Judge passed an order on February 23, 2016 (the “**Order**”), allowing the application for interim injunction of Bhagawan Devman Bhilla and partially allowing the application for interim injunction of BDTCL. BDTCL was restrained from evicting Bhagawan Devman Bhilla and Bhagawan Devman Bhilla was restrained from causing obstruction to BDTCL. Aggrieved by this Order, BDTCL filed an appeal in the court of the District Court, Dhule against the Order. The matter is currently pending.
- (ii) Shikha Neekhra (the “**Petitioner**”) filed a writ petition against the State of Madhya Pradesh, BDTCL and Simplex Infrastructure Limited before the High Court of Madhya Pradesh, Jabalpur (the “**High Court**”), alleging that BDTCL and Simplex Infrastructure Limited had constructed a tower which destroyed a mango tree and tube well on her land. The High Court by an order dated May 8, 2014 directed the District Collector, Raisen (the “**Collector**”) to look in to the matter. The Collector decided a compensation of ₹ 0.05 million on November 11, 2014. Aggrieved by the decision of the Collector, and alleging that insufficient compensation had been granted, the Petitioner filed another writ petition seeking compensation of ₹ 0.92 million, before the High Court. The High Court, by an order dated July 21, 2015 (“**Order**”) disposed of the said writ petition with the direction that any grievance of the Petitioner may be filed or raised before the District Judge, Raisen, in accordance with the provisions of Section 16 (3) of the

Telegraph Act, 1885 within four weeks from the date of the Order. Accordingly, she has filed an application before the District Judge, Raisen under Section 16(3) of the Telegraph Act, 1885, demanding compensation of ₹ 0.92 million towards the loss caused to her along with interest at 9% on such amount from the date of such damage. BDTCL has filed its reply. The matter is currently pending.

- (iii) Manish Neekhra filed a writ petition against the State of Madhya Pradesh, BDTCL and Simplex Infrastructure Limited before the High Court of Madhya Pradesh, Jabalpur (the “**High Court**”), alleging that BDTCL and Simplex Infrastructure Limited had constructed a tower and destroyed the boundary of a pond, whereby water entered in his field and destroyed his crops. The High Court by an order dated May 12, 2014 directed the Collector to decide the quantum of compensation. The District Collector, Raisen (the “**Collector**”) by its order dated November 11, 2014, decided a compensation of ₹ 0.50 million. Aggrieved by the decision of the Collector, he filed a writ petition seeking compensation of ₹ 2.63 million. The High Court, by an order dated July 21, 2015 (the “**Order**”), directed Manish Neekhra to file a complaint before the District Judge, Raisen under the Telegraph Act, 1885. Aggrieved, he filed an application before the District Magistrate, Narsinghpur under Section 16(3) of the Telegraph Act, 1885 praying that compensation of ₹ 2.63 million be awarded for the loss caused to him along with interest at 9% p.a. from the date of loss. BDTCL filed its reply before the District Magistrate praying that the matter be dismissed. BDTCL has filed its reply. The matter is currently pending.
- (iv) Shailendra Champaksinh Gohil and others filed three special civil applications against, amongst others, BDTCL before the High Court of Gujarat, Ahmedabad challenging the notification issued under Section 164 of the Electricity Act issued by the Director, Ministry of Power, Government of India (the “**Director**”) dated January 24, 2013 (the “**Notification**”), claiming that the Notification was without jurisdiction and beyond the scope of the Director for the laying of overhead transmission lines of BDTCL. The matter is currently pending.
- (v) Pravinsinh Jaswantsinh Gohil and Janaksinh Jaswantsinh Gohil have separately filed two special civil applications against, amongst others, BDTCL before the High Court of Gujarat, Ahmedabad (the “**High Court**”) alleging that the name of their village ‘Moriana’ was not mentioned in the notification dated January 24, 2013 (the “**Notification**”). The High Court passed an interim order dated November 25, 2014 (the “**Interim Order**”), directing that BDTCL cannot be permitted to walk in the field of the petitioners. BDTCL appealed against the Interim Order before the High Court. The High Court passed an order on December 8, 2014, allowing the appeal and directing BDTCL to pay compensation of ₹ 0.14 million to each of the petitioners. BDTCL’s appeal was accordingly disposed of. The special civil applications are currently pending.
- (vi) Bhikhan Govinda Sasundre and others (the “**Petitioners**”) filed a writ petition before the Bombay High Court, Aurangabad bench (the “**High Court**”) against the State of Maharashtra, BDTCL and the District Collector, Aurangabad claiming compensation for the alleged damage caused to their field by laying high tension power transmission line. Further, the Petitioners sought directions against the District Collector and BDTCL for non-compliance with the order dated September 3, 2013. The High Court directed BDTCL to deposit ₹ 0.64 million within four weeks from February 18, 2016, which was subsequently deposited. The matter is currently pending.
- (vii) Dnyaneshwar Mangate (the “**Petitioner**”) filed a writ petition against the State of Maharashtra, BDTCL, the District Collector, Aurangabad before the Bombay High Court, Aurangabad Bench (the “**High Court**”) on October 19, 2013 for the payment of compensation in accordance with the order of the District Court, Aurangabad dated September 3, 2013 (the “**Order**”). BDTCL filed an appeal against the Order, subsequent to which the High Court instructed BDTCL to deposit ₹ 0.64 million within four weeks from February 18, 2016. The said amount was deposited. The matter is currently pending.
- (viii) Kusumben Jayantibhai Patel and others (“**Petitioners**”) filed a special civil application against BDTCL and others before the High Court of Gujarat, Ahmedabad (the “**High Court**”) for restraining BDTCL from entering their lands. The High Court passed an order dated August 7, 2013 directing BDTCL to approach District Collector, Vadodara to obtain permission under the Telegraph Act, 1885 to erect the transmission towers in the Petitioners’ land. The District Collector issued an order in October, 2013 (“**Order**”) in the favour of BDTCL. Aggrieved by the Order, Kusumben Jayantibhai Patel has challenged the Order in the High Court. The matter is currently pending.
- (ix) Kusum Arjun Mali and others (through their power of attorney) have filed a civil application against

BDTCL before the Sub-Divisional Magistrate, Dhule disputing the compensation paid for their land. The matter is currently pending.

- (x) The Sub Divisional Magistrate, Dhule passed an order dated November 1, 2010 (the “**Order**”), determining the quantum of compensation payable under the provisions of Electricity Act, 2003 and Works of Licensee Rules by BDTCL to Pradip Rameshchandra Mundada and others (the “**Petitioners**”). Aggrieved by the Order, the Petitioners have filed a civil suit before the District Judge, Dhule, claiming that opportunity of hearing was not given to the Petitioners while determining compensation payable to them. The matter is currently pending.
- (xi) Various persons have filed complaints against BDTCL before the Sub Divisional Magistrate, Kannad and the Office of the Sub Divisional Officer and Sub Divisional Magistrate, Aurangabad (Land Acquisition Department), in relation to re-consideration of the assessment of land compensation made by the Government of Maharashtra. These matters are currently pending.
- (xii) Sharp Corporation Limited (the “**Petitioner**”) filed a writ petition dated March 24, 2014 (the “**Petition**”) before the High Court of Madhya Pradesh, Indore Bench (the “**High Court**”) against, amongst others, BDTCL (the “**Respondents**”) to restrain the Respondents from starting or continuing the construction over the Petitioner’s land. The matter is currently pending.
- (xiii) The District Collector at Aurangabad (the “**Authority**”) passed an order dated September 3, 2013 (the “**First Order**”), directing that BDTCL make payments of compensation amounts in respect of damage sustained by Bikhan Susundare and others (the “**Petitioners**”), in accordance with the provisions of section 67 of the Electricity Act, 2003 read with rule 13 of the Maharashtra Electricity Works of Licensee Rules, 2012 and the Works of Licensees Rules, 2006. Aggrieved by the First Order, BDTCL filed a review petition before the Authority. Through an order dated March 15, 2014 (the “**Second Order**”), the review petition was dismissed by the Authority. Aggrieved by the First Order and the Second Order, BDTCL has filed a writ petition before the Bombay High Court, Aurangabad Bench. The matter is currently pending.

D. PKTCL

Nil

E. RTCL

Regulatory matters

- (i) RTCL filed a petition dated March 11, 2016 under Section 79(1)(f) read with Section 79(1)(c) of the Electricity Act, 2003 before the CERC seeking payment of monthly transmission charges for the period starting from December 26, 2015 under the RTCL TSAs and the revenue sharing agreement and the order dated July 15, 2015 issued by the Ministry of Power, Government of India entitled “Policy for Incentivizing Early Commissioning of Transmission Projects” under which RTCL has prayed that it is entitled to the payment of monthly transmission charges from the actual date of commercial operation, December 26, 2015, which is in advance of the scheduled commercial operation date of February 2016. CERC, by its order dated September 21, 2016 (the “**Impugned Order**”), required Nuclear Power Corporation of India Limited (“**NPCIL**”) to pay the transmission charges from March 1, 2016 till the bays are commissioned. NPCIL filed an interim application before APTEL dated November 4, 2016 (the “**Interim Application**”) praying that the Impugned Order be stayed, since it is in violation of the principles of natural justice. Through an order passed on January 18, 2019 (the “**Order**”), APTEL has dismissed the Interim Application. APTEL has also given liberty to RTCL to regulate the power supply of NPCIL if NPCIL fails to make the payment within 30 days of the Order. RTCL has accordingly sent letters to NPCIL for the disbursement of the withheld amounts along with applicable charges. NPCIL has filed an appeal before the Supreme Court of India against the Order. The matter is currently pending.

F. MTL

Civil matters

- (i) Samala Raju and others (“**Petitioners**”) filed a writ petition before the High Court of Telangana and Andhra Pradesh (“**High Court**”) against the District Collector, Kamareddy District (the “**District**”

Collector”), MTL and others (“**Respondents**”) under Article 226 of the Constitution of India. The Petitioners sought a declaration that the action of the Respondents of not paying compensation for erecting high tension transmission lines in the land of the Petitioners was illegal, arbitrary and in violation of Articles 14, 21 and 300-A of the Constitution of India and the principles of natural justice. Consequently, the Respondents were directed to pay to the Petitioners appropriate compensation. The Petitioners also prayed that the District Collector maybe directed by the High Court to consider the representation of the Petitioners with respect to fixing of compensation towards damages being caused to their land due to the erection of transmission lines. The High Court, by an order dated February 1, 2017, directed MTL to consider the representation made by the Respondents and dispose of the same in accordance with law. The Revenue Divisional Officer, Kamareddy issued directions to MTL to pay compensation amount of approximately ₹ 0.47 million per case to the Respondents. MTL has submitted a letter dated July 5, 2017 along with proof of compensation paid before the Revenue Division Officer, Kamareddy. The matter is currently pending.

G. PTCL

Regulatory matters

- (i) Pursuant to CERC’s order dated January 4, 2017 (the “**CERC Order**”), Punjab State Power Corporation Limited (“**PSPCL**”) had been held liable to pay transmission charges of the PTCL Project from scheduled commercial operation date, November 11, 2016 until commissioning of downstream system by PSPCL. PSPCL completed commissioning of downstream system on May 18, 2015 after substantial delay. PSPCL failed to pay liquidated dues of ₹ 113.67 million. Further, PSPCL has defaulted in making payment of ₹ 102.51 million as per notification no L-1/42/2010 passed by CERC dated 28 September, 2010. Accordingly, PTCL issued a “notice for regulation of power supply” dated July 6, 2017 to PSPCL for regulation of power supply unless dues are cleared by PSPCL by July 13, 2017. PSPCL filed an appeal before the Appellate Tribunal for Electricity (“**Tribunal**”) challenging the CERC Order. The Tribunal dismissed the appeal through its order dated March 27, 2018 (the “**APTEL Order**”). PSPCL has subsequently filed an appeal before the Supreme Court of India against the APTEL Order. The matter is currently pending.

II. Litigation involving the Associates of IndiGrid

A. ENICL

Other matters

- (i) Sujit Debnath filed a petition for partition and for separate possession before the Civil Judge, Senior Division, Sadar Cooch Behar, demanding partition of ancestral property. ENICL and Sterlite Grid 1 Limited have been named as defendants. The matter is currently pending.
- (ii) Santosh Tarafdar (the “**Petitioner**”) filed a money suit against ENICL demanding compensation of ₹ 0.98 million before the Civil Judge, Kokrajhar (“**Judge**”) for the damage caused to his land due to the construction of transmission towers. An ex parte order was passed against ENICL on May 16, 2015 (the “**First Order**”). ENICL filed an application against the First Order, which was dismissed by the Judge through an order dated November 13, 2015 (the “**Order**”). ENICL filed an appeal before the Gauhati High Court (the “**High Court**”) against the Order. The High Court has quashed the Order and directed the lower court to decide the matter afresh. The matter will be disposed of based on the order of the lower court. The matter is currently pending.
- (iii) Shiv Kumar Sharma and Ram Rani Devi (the “**Applicants**”) filed an application for compensation against, amongst others, ENICL before the District Magistrate, Madhepura (“**District Magistrate**”) in compliance with the order dated January 21, 2013 (the “**Order**”) of the Patna High Court (the “**High Court**”). The High Court, by its order, directed the Applicants to approach the appropriate authority for claiming compensation. The Applicant has prayed for compensation of ₹ 13.20 million for damage caused while constructing the transmission line. The District Magistrate dismissed the matter by an order dated March 17, 2015. The Applicants filed an appeal before the District Judge, Madhepura against the order of the District Magistrate. ENICL is challenging the same on the grounds of limitation. The matter is currently pending.

- (iv) Various persons (“**Petitioners**”) have filed civil applications under Section 10 read with Section 16 of the Indian Telegraph Act, 1885 against ENICL (“**Respondent**”) before the District Judge, Jalpaiguri (the “**District Judge**”) praying that District Judge to award a compensation of ₹ 96.19 million for the damage caused due to construction of high tension transmission lines over the land of the Petitioners. The matter is currently pending.

B. NTL

Civil matters

- (i) Various persons (the “**Petitioners**”) have filed ten petitions against NTL, amongst others, before various courts, including the Jammu and Kashmir High Court, Sub Judge, Pattan, Sub Judge, Rajouri and the Chief Judicial Magistrate, Budgam, claiming that NTL had not adopted the due course of law while commencing construction and installation work on their lands and the process required under the Land Acquisition Act was not initiated, or that adequate compensation was not paid to them in relation to acquisition of their lands. The aggregate amount involved in these matters is ₹ 4.49 million. These matters are currently pending.
- (ii) Pradeep Kumar (the “**Petitioner**”) has filed a writ petition before the Jammu and Kashmir High Court against, amongst others, NTL, to restrain NTL from installation of electric towers and conductors and passing of conductors (the “**Transmission Assets**”) from Amargarh-Samba to Akhnoor-Rajouri over lands belonging to the Petitioner located in village Kalas, Tehsil R.S. Pura, Jammu, and directions that the electric tower erected on the Petitioner’s land be removed and no further constructions in relation to installation of tower or laying of transmission lines should be carried out on the Petitioner’s land. The matter is currently pending.
- (iii) Ashwani Kumar (the “**Petitioner**”) has filed a writ petition before the Jammu and Kashmir High Court against, amongst others, NTL, to restrain NTL from installation of electric towers and conductors and passing of conductors (the “**Transmission Assets**”) from Amargarh-Samba to Akhnoor-Rajouri over lands belonging to the Petitioner located in village Gazipur, Tehsil R.S. Pura, Jammu, and that the Transmission Assets be installed in villages Khour, Kirpind, Kharian and Rakh Chatha, Tehsil R.S. Pura, instead. The matter is currently pending.
- (iv) Raja Banoo (the “**Petitioner**”) has filed a civil suit before the District Judge, Shopian against the chief executive officer of NTL, praying for permanent injunction to be issued against NTL and others (the “**Respondents**”) and restraining the Respondents from making the 400 kV D/C Samba-Amargarh-Jalandhar transmission line (the “**Transmission Line**”) functional and removing the Transmission Line from the Petitioner’s land. The Court of Munsiff/Additional Special Mobile Magistrate, Shopian, has, vide order dated August 3, 2018, directed the Respondents to maintain status quo with respect to the functioning of Transmission Line. The Court of Additional Special Mobile Magistrate, Shopian vide its clarification order dated August 25, 2018 has clarified that parties were directed to maintain status quo over the operation of the Transmission Line but Respondents are at liberty to proceed with the project. The matter is currently pending.
- (v) Raja Muzaffar Bhat (the “**Petitioner**”) has filed an application before the Jammu and Kashmir State Human Rights Commission, Srinagar, against, amongst others, NTL alleging that high voltage power lines emit high levels of electromagnetic radiation, due to which various health hazards have arisen. The Petitioner has sought, amongst others, that status reports be obtained from different departments, including the Forest Department, and those individuals who live near transmission lines must be immediately shifted, resettled and rehabilitated. The matter is currently pending.

C. OGPTL

- (i) Narayan Prasad Dash and others (“**Petitioners**”) have filed an application before the Orissa High Court against OGPTL and others (“**Respondents**”), claiming that the Respondents installed electric transmission conductor on the Petitioners’ land without issuing prior notice. The matter is currently pending.
- (ii) Bikash Lakra and others (the “**Petitioners**”) have filed a writ petition before the Orissa High Court against, amongst others, OGPTL, claiming, amongst others, that the installation of high tension electricity towers and transmission lines in Banjichahar forest by OGPTL were illegal since the consent of the Gram Sabha,

Banjikachhar was not sought. Accordingly, the Petitioners have sought the removal of the installations by OGPTL. The matter is pending.

- (iii) Raju Singh (the “**Petitioner**”) has filed a writ petition before the Chhattisgarh High Court (the “**High Court**”) against, amongst others, OGPTL, claiming that OGPTL has started the installation of an electricity tower without acquiring the Petitioner’s land, issuing any notice to him or granting him an opportunity to be heard. Further, the Petitioner has claimed that in the notification issued by the District Magistrate, Jangjir – Champa, in relation to the list of villages where such towers were to be installed, the Petitioner’s village was not mentioned. Accordingly, the Petitioner has sought a direction from the High Court for the installation of the electricity tower be stopped. The matter is pending.
- (iv) Jeetan Singh (the “**Petitioner**”) has filed a petition against OGPTL before the Civil Judge (Class-2), Malkharodra, in relation to the power lines passing over the Petitioner’s land. The Petitioner has sought an injunction restraining OGPTL from laying the transmission wire and tower. OGPTL has filed its written statement and offered to pay compensation to the Petitioner. The matter is pending.

D. SPTL

*Pursuant to the Scheme of Arrangement between STL, SPTL and their respective shareholders and creditors (“**Scheme**”) effective from May 23, 2016 subsequent to which the power products and transmission grid business of STL were demerged, the case by or against STL have been transferred to SPTL.*

Regulatory matters

- (i) SPTL issued a legal notice dated May 23, 2013 (the “**Notice**”) in favour of Aster Private Limited (“**Aster**”) for illegal termination of contract which was entered between Aster and SPTL for purchase of aluminum with respect to the PHCN Nigeria project (the “**Termination**”). SPTL through the Notice, filed for claims amounting to a total of ₹ 42.80 million which was the total loss borne by SPTL owing to the Termination. Pursuant to the Notice, an arbitration application was filed by SPTL before the High Court of Andhra Pradesh. The matter is currently pending.

III. Litigation involving the Sponsor and Project Manager

Other than the matters disclosed in the section entitled “*Litigation – Tax Proceedings*” on page 246, there is no litigation involving the Sponsor and Project Manager.

IV. Litigation involving the Associates of the Sponsor and Project Manager

Please see the section entitled “*Litigation - Litigation involving the Associates of IndiGrid*” above.

V. Litigation involving the Investment Manager

Nil

VI. Litigation involving the Associates of the Investment Manager

Please see the section entitled “*Litigation - Litigation involving the Associates of IndiGrid*” above.

VII. Litigation involving the Trustee

Nil

VIII. Tax Proceedings

Details of all direct tax and indirect tax matters against IndiGrid, Associates of IndiGrid, Parties to IndiGrid and their Associates as of the date of this Preliminary Placement Document, are as follows:

Sr. No.	Nature of Case	Number of cases	Amount involved (in ₹ million)
IndiGrid			
<i>Sterlite Grid 1 Limited</i>			
1.	Direct Tax	Nil	Nil
2.	Indirect Tax	1	24.65
<i>JTCL</i>			
1.	Direct Tax	1	Nil
2.	Indirect Tax	7	230.70
<i>BDTCL</i>			
1.	Direct Tax	2	27.94
2.	Indirect Tax	5	176.77
<i>Sterlite Grid 2 Limited</i>			
1.	Direct Tax	Nil	Nil
2.	Indirect Tax	Nil	Nil
<i>RTCL</i>			
1.	Direct Tax	Nil	Nil
2.	Indirect Tax	2	13.30
<i>PKTCL</i>			
1.	Direct Tax	1	0.02
2.	Indirect Tax	1	104.30
Sponsor or Project Manager			
1.	Direct Tax	Nil	0.06
2.	Indirect Tax	4	51.70
Investment Manager			
1.	Direct Tax	1	0.07
2.	Indirect Tax	Nil	Nil
Associates of IndiGrid			
<i>ENICL</i>			
1.	Direct Tax	1	0.48
2.	Indirect Tax	Nil	Nil
<i>NTL</i>			
1.	Direct Tax	1	0.66
2.	Indirect Tax	Nil	Nil
<i>SPTL</i>			
1.	Direct Tax	Nil	104.70
2.	Indirect Tax	20	748.00

SECURITIES MARKET OF INDIA

The information in this section has been extracted from documents available on the website of SEBI and the Stock Exchanges and has not been prepared or independently verified by the Parties to the InvIT or the Lead Managers or any of their respective affiliates or advisors.

The Indian Securities Market

India has a long history of organized securities trading. In 1875, the first stock exchange was established in Mumbai. The BSE and the NSE, together, hold a dominant position among the stock exchanges in terms of the number of listed companies, market capitalisation and trading activity.

Stock Exchange Regulation

Indian stock exchanges are regulated primarily by SEBI, as well as by the Government acting through the Ministry of Finance, Capital Markets Division, under the SCRA and the SCRR. SEBI, in exercise of its powers under the SCRA and the SEBI Act, notified the Securities Contracts (Regulation) (Stock Exchanges and clearing Corporations) Regulations, 2018 (the “**SCR (SECC) Regulations**”), which regulate *inter alia* the recognition, ownership and governance of stock exchanges and clearing corporations in India together with providing for minimum capitalisation requirements for stock exchanges. The SCRA, the SCRR and the SCR (SECC) Regulations along with various rules, bye-laws and regulations of the respective stock exchanges, regulate the recognition of stock exchanges, the qualifications for membership thereof and the manner, in which contracts are entered into, settled and enforced between members of the stock exchanges.

The SEBI Act empowers SEBI to regulate the Indian securities markets, including stock exchanges and intermediaries in the capital markets, promote and monitor self-regulatory organisations and prohibit fraudulent and unfair trade practices. Regulations concerning minimum disclosure requirements by public companies, rules and regulations concerning investor protection, insider trading, substantial acquisitions of shares and takeover of companies, buy-backs of securities, employee stock option schemes, stockbrokers, merchant bankers, underwriters, mutual funds, foreign institutional investors, credit rating agencies and other capital market participants have been notified by the relevant regulatory authority.

Listing and Delisting of Units

The InvIT Regulations provide for listing and delisting of units of infrastructure investment trusts on the Stock Exchanges.

BSE

Established in 1875, it is the oldest stock exchange in India. In 1956, it became the first stock exchange in India to obtain permanent recognition from the Government under the SCRA. It has evolved over the years into its present status as one of the premier stock exchanges of India.

NSE

NSE was established by financial institutions and banks to provide nationwide online, satellite-linked, screen-based trading facilities with market-makers and electronic clearing and settlement for securities including government securities, debentures, public sector bonds and units. It has evolved over the years into its present status as one of the premier stock exchanges of India. NSE was recognised as a stock exchange under the SCRA in April 1993 and commenced operations in the wholesale debt market segment in June 1994. The capital market (equities) segment commenced operations in November 1994 and operations in the derivatives segment commenced in June 2000.

Internet-based Securities Trading and Services

Internet trading takes place through order routing systems, which route client orders to exchange trading systems for execution. Stockbrokers interested in providing this service are required to apply for permission to the relevant stock exchange and also have to comply with certain minimum conditions stipulated by SEBI. The NSE became the first exchange to grant approval to its members for providing internet-based trading services. Internet trading is possible on both the “equities” as well as the “derivatives” segments of the NSE.

Trading Hours

Trading on both the NSE and the BSE occurs from Monday to Friday, between 9:15 a.m. and 3:30 p.m. 1ST (excluding the 15 minutes pre-open session from 9:00 a.m. to 9:15 a.m. that has been introduced recently). The BSE and the NSE are closed on public holidays. The recognised stock exchanges have been permitted to set their own trading hours (in the cash and derivatives segments) subject to the condition that (i) the trading hours are between 9.00 a.m. and 5.00 p.m.; and (ii) the stock exchange has in place a risk management system and infrastructure commensurate to the trading hours.

Trading Procedure

In order to facilitate smooth transactions, the BSE replaced its open outcry system with BSE On-line Trading facility in 1995. This totally automated screen based trading in securities was put into practice nationwide. This has enhanced transparency in dealings and has assisted considerably in smoothening settlement cycles and improving efficiency in back-office work.

NSE has introduced a fully automated trading system called NEAT, which operates on strict time/price priority besides enabling efficient trade. NEAT has provided depth in the market by enabling large number of members all over India to trade simultaneously, narrowing the spreads.

Depositories

The Depositories Act provides a legal framework for the establishment of depositories to record ownership details and effect transfer in book-entry form. Further, SEBI framed regulations in relation to the registration of such depositories, the registration of participants as well as the rights and obligations of the depositories, participants, companies and beneficial owners. The depository system has significantly improved the operation of the Indian securities markets.

RIGHTS OF UNITHOLDERS

The rights and interests of Unitholders are included in this Preliminary Placement Document and the InvIT Regulations. Under the Trust Deed and the Investment Management Agreement, these rights and interests are safeguarded by the Trustee and the Investment Manager, respectively. Any rights and interests of Unitholders as specified in this Preliminary Placement Document would be deemed to be amended to the extent of any amendment to the InvIT Regulations.

Beneficial Interest

Each Unit represents an undivided beneficial interest in IndiGrid. A Unitholder has no equitable or proprietary interest in the InvIT Assets and is not entitled to any share in the transfer of the InvIT Assets (or any part thereof) or any interest in the InvIT Assets (or any part thereof) of IndiGrid. A Unitholder's right is limited to the right to require due administration of IndiGrid in accordance with the provisions of the Trust Deed and the Investment Management Agreement.

Ranking

No Unitholder of IndiGrid shall enjoy superior voting or any other rights over another Unitholder. Further, the Units of IndiGrid shall not have multiple classes, except any subordinate Units that may be issued to the Sponsor in the future in accordance with Regulation 4(2)(h) of the InvIT Regulations.

Redressal of grievances

The Trustee shall periodically review the status of Unitholders' complaints and their redressal undertaken by the Investment Manager. The Stakeholders' Relationship Committee of the Investment Manager shall monitor the status of complaints and their redressal.

Distribution

The Unitholders shall have the right to receive distribution in accordance with the InvIT Regulations and in the manner set forth in this Preliminary Placement Document. For details, please see the section entitled "*Distribution*" on page 205.

Meeting of Unitholders

Meetings of Unitholders will be conducted in accordance with the InvIT Regulations.

Passing of resolutions

1. With respect to any matter requiring approval of the Unitholders:
 - (i) a resolution shall be considered as passed when the votes cast by Unitholders, so entitled and voting, in favour of the resolution exceed a certain percentage as specified in the InvIT Regulations, of votes cast against;
 - (ii) the voting may be done by postal ballot or electronic mode;
 - (iii) a notice of not less than 21 days shall be provided to the Unitholders;
 - (iv) voting by any Unitholder (including, the Sponsor in its capacity as a Unitholder), who is a related party in such transaction, as well as associates of such Unitholder(s) shall not be considered on the specific issue;
 - (v) the Investment Manager shall be responsible for all the activities pertaining to conducting of meeting of the Unitholder, subject to overseeing by the Trustee.

However, for issues pertaining to the Investment Manager, including a change in Investment Manager, removal of Investment Manager or change in control of Investment Manager; the Trustee shall convene and handle all activities pertaining to conduct of the meetings. Additionally, for issues pertaining to the Trustee, including change in Trustee, the Trustee shall not be involved in any manner in the conduct of the meeting.

2. With respect to IndiGrid:

- (i) an annual meeting of all Unitholders shall be held not less than once a year within 120 days from the end of each financial year and the time between two meetings shall not exceed 15 months;
 - (ii) with respect to the annual meeting of Unitholders,
 - (a) any information that is required to be disclosed to the Unitholders and any issue that, in the ordinary course of business, may require approval of the Unitholders may be taken up in the meeting including:
 - latest annual accounts and performance of IndiGrid;
 - approval of auditor and fee of such auditor, as may be required;
 - latest valuation reports;
 - appointment of valuer, as may be required; and
 - any other issue;
 - (b) for any issue taken up in such meetings which require approval from the Unitholders other than as specified in Regulation 22(6) of the InvIT Regulations, votes cast in favour of the resolution shall be more than the votes cast against the resolution.
3. In case of the following, approval from the Unitholders shall be required where the votes cast in favour of the resolution shall be more than the votes cast against the resolution:
- (i) any approval from the Unitholders required in terms of Regulation 18 (*Investment conditions and dividend policy*), Regulation 19 (*Related party transactions*) and Regulation 21 (*Valuation of assets*) of the InvIT Regulations;
 - (ii) any transaction, other than any borrowing, the value of which is equal to or greater than 25% of the InvIT Assets of IndiGrid;
 - (iii) any borrowing in excess of specified limit as required under Regulation 20(2) of the InvIT Regulations;
 - (iv) any issue of Units after initial public offer by IndiGrid, in whatever form, other than any issue of Units which may be considered by SEBI, under Regulation 22(5) of the InvIT Regulations;
 - (v) increasing period for compliance with investment conditions to one year in accordance with Regulation 18(5)(c) of the InvIT Regulations;
 - (vi) any issue, in the ordinary course of business, which in the opinion of the Sponsor or the Trustee or the Investment Manager, is material and requires approval of the Unitholders, if any;
 - (vii) any issue for which SEBI or the designated stock exchanges requires approval.
4. In case of the following, approval from the Unitholders shall be required where the votes cast in favour of the resolution shall not be less than one and a half times the votes cast against the resolution:
- (i) any change in the Investment Manager, including removal of the Investment Manager or change in control of the Investment Manager;
 - (ii) any material change in investment strategy or any change in the management fee of IndiGrid;
 - (iii) the Sponsor or Investment Manager proposing to seek delisting of units of IndiGrid;
 - (iv) any issue, not in the ordinary course of business, which in the opinion of the Sponsor or Investment Manager or Trustee requires approval of the Unitholders, provided that if such approval is not obtained, an exit option shall be provided to the Unitholders to the extend and in the manner specified by SEBI;
 - (v) any issue for which SEBI or the designated stock exchanges require approval;
 - (vi) any issue taken up on request of the Unitholders including:
 - (a) removal of the Investment Manager and appointment of another investment manager to IndiGrid;
 - (b) removal of the Auditor and appointment of another auditor to IndiGrid;
 - (c) removal of the Valuer and appointment of another valuer to IndiGrid;
 - (d) delisting of IndiGrid, if the Unitholders have sufficient reason to believe that such delisting would act in the interest of the Unitholders;
 - (e) any issue which the Unitholders have sufficient reason to believe that is detrimental to the interest of the Unitholders;
 - (f) change in the Trustee if the Unitholders have sufficient reason to believe that acts of such Trustee is detrimental to the interest of the Unitholders.

With respect to the rights of the Unitholders under clauses 4(vi) above:

- (i) not less than 25% of the Unitholders by value, other than any party related to the transactions and its associates, shall apply, in writing, to the Trustee for the purpose;
- (ii) on receipt of such application, the Trustee shall require, with the Investment Manager to place the issue for voting in the manner as specified in the InvIT Regulations;
- (iii) with respect to clause 4(vi)(f) above, not less than 60% of the Unitholders by value shall apply, in writing, to the Trustee for the purpose.

Information rights

The Investment Manager, on behalf of IndiGrid, shall also submit such information to the Stock Exchanges and Unitholders, on a periodical basis as may be required under the InvIT Regulations. The Investment Manager (on behalf of IndiGrid) shall disclose to the Stock Exchanges, Unitholders and SEBI, all such information and in such manner as specified under the InvIT Regulations and such other requirements as may be specified by SEBI. The Investment Manager, on behalf of IndiGrid, shall also provide disclosures or reports specific to the sector or sub-sector in which IndiGrid has invested or proposes to invest, in the manner as may be specified by SEBI.

Buyback and Delisting of Units

Any buyback or delisting of Units, will be in accordance with the InvIT Regulations.

For additional details in relation to rights of Unitholders, please see the section entitled “*Parties to IndiGrid*” on page 97.

ISSUE INFORMATION

The summary provided below is, intended to provide a general outline of procedures for bidding, application, payment, Allocation and Allotment of Units to be issued pursuant to the Issue. The procedure followed in this Issue may differ from public issues or other issues of securities, and investors are presumed to have apprised themselves of the same from the Investment Manager or the Lead Managers.

Bidders are advised to inform themselves of any restrictions or limitations that may be applicable to them and are required to consult their respective advisers in this regard. Bidders will be required to confirm and will be deemed to have represented to the Trustee, the Investment Manager, the Lead Managers and their respective directors, officers, agents, affiliates and representatives that they are eligible under all applicable laws, rules, regulations, guidelines and approvals to acquire the Units. Bidders are also advised to make their independent investigations in accordance with applicable laws and ensure that the Bids submitted do not exceed the investment limits or maximum number of Units that can be held by them under applicable law or as specified herein. The Investment Manager, the Trustee, the Lead Managers, and their respective directors, officers, agents, affiliates and representatives accept no responsibility or liability for advising any Bidder on: (i) such Bidder's eligibility to acquire the Units; or (ii) investment limits (whether in terms of number of Units or investment amount) applicable to such Bidder. The Investment Manager, the Trustee and the Lead Managers, do not accept any responsibility for the completeness and accuracy of the information stated in this chapter and are not liable for any amendment, modification or change in the applicable law which may occur after the date hereof.

Authority for the Issue

IndiGrid is eligible to undertake the Issue in accordance with Clause 2 of the SEBI Preferential Issue Guidelines. The Issue was authorised and approved by the board of directors of the Investment Manager on April 24, 2018 and by the Unitholders pursuant to a resolution dated July 26, 2018 in accordance with Regulation 22(5) of the InvIT Regulations and Clause 2 of the SEBI Preferential Issue Guidelines.

IndiGrid has received in-principle approvals for the listing of the Units being issued pursuant to this Issue on the BSE and the NSE, pursuant to the letters dated April 30, 2019 and April 30, 2019, respectively. The Investment Manager has filed a copy of this Preliminary Placement Document, and will file a copy of the Placement Document, with the Stock Exchanges.

Preferential Issue of Units

The Issue is being made to Institutional Investors in accordance with the InvIT Regulations, including the SEBI Preferential Issue Guidelines. In terms of Clause 2 of the SEBI Preferential Issue Guidelines, listed InvIT may make preferential issue of units to an Institutional Investor, subject to the following conditions:

- A resolution of the unitholders of the InvIT approving the preferential issue in accordance with Regulation 22(5) of the InvIT Regulations has been passed;
- the InvIT is in compliance with the conditions for continuous listing and disclosure obligations under the InvIT Regulations and circulars issued thereunder;
- the InvIT is in compliance with the minimum public unitholding requirements as stipulated under Regulation 16(6) of the InvIT Regulations; and
- no preferential issue of units by the InvIT has been made in the six months preceding the relevant date.

“Relevant Date” for the purpose of the Issue, means the date of the meeting in which the board of directors of the Investment Manager, or a committee of directors duly authorised by the board of directors of the Investment Manager, decides to open the Issue.

Additionally, there is a minimum pricing requirement for pricing units in the SEBI Preferential Issue Guidelines. Under Clause 4 of the SEBI Preferential Issue Guidelines, the Floor Price shall not be less than the average of the weekly high and low of the closing prices of the Units quoted on the stock exchange during the two weeks preceding the Relevant Date. For the purpose of this clause, the term “stock exchange” means any of the recognised stock exchanges on which the Units are listed and on which the highest trading volume in such units has been recorded during the two weeks immediately preceding the Relevant Date.

The number of allottees for a preferential issue of units by an InvIT shall not be less than two and not more than 1,000 investors in a Financial Year.

Issue Procedure

This Issue is being conducted in accordance with applicable law, in relation to the Allotment of Units under this Issue, IndiGrid is not in violation of any applicable law, including but not limited to the Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015, as amended and the Securities and Exchange Board of India (Prohibition of Fraudulent and Unfair Trade Practices relating to Securities Market) Regulations, 2003, as amended. It is further represented by IndiGrid, the Investment Manager that any and all information provided by IndiGrid, the Investment Manager or the Sponsor and/or their respective agents and/or advisors, to any of the Eligible Investors, in relation to this Issue and/or the Allocation and Allotment of Units under this Issue and/or any information in relation to the Trust, its Portfolio Assets and/or their respective business and operations is (i) available in the public domain; and/or (ii) have been disclosed in this Preliminary Placement Document.

The Units have not been, and will not be, registered, listed or otherwise qualified in any other jurisdiction outside India and may not be offered or sold, and Bids may not be made by persons in any such jurisdiction, except in compliance with the applicable laws of such jurisdiction. The Units shall not be offered or sold where such offer or sale would require registration, qualification or listing.

Investors should note that Allotment of Units to successful Bidders will only be in the dematerialized form. Application Forms which do not specify the details of the Bidders' demat accounts including DP ID, PAN and Client ID will be treated as incomplete and will be rejected. Bidders will not have the option of receiving Allotment of Units in physical form. On Allotment, the Units will be traded only on the dematerialized segment of the Stock Exchanges.

1. The Lead Managers, in consultation with the Investment Manager, shall electronically circulate serially numbered copies of the Preliminary Placement Document and the Application Form to Eligible Investors. The Application Form will be specifically addressed to each Eligible Investor. The list of Eligible Investors to whom the serially numbered copies of the Preliminary Placement Document and the Application Form will be circulated, shall be determined by the Investment Manager, in consultation with the Lead Managers.
2. **Unless a serially numbered Preliminary Placement Document along with an Application Form is addressed to a particular Eligible Investor, no invitation to subscribe shall be deemed to have been made to such Eligible Investor.** Even if such documentation were to come into the possession of any person other than the intended recipient, no invitation to offer shall be deemed to have been made to such person and such person shall not be eligible to participate in the Issue.
3. Bidders may submit a filled-in Application Form to the Lead Managers, including any rectification of errors therein, only during the Bid/Issue Period.
4. Bidders will be required, *inter alia*, to indicate the following in the Application Form:
 - a. name of the Bidder to whom the Units are to be Allotted;
 - b. number of Units Bid for;
 - c. price at which the Bidder is agreeable to subscribe to the Units, which shall be any price as may be determined by Investment Manager, in consultation with the Lead Managers, at or above the Floor Price;
 - d. details of the demat accounts to which the Units should be credited;
 - e. a representation that such person is an "Institutional Investor" in terms of the InvIT Regulations;
 - f. unless the Sponsor is Bidding in accordance with paragraph 5.1 of the SEBI Preferential Issue Guidelines, a representation that such person is not one of the Parties to IndiGrid or a related party (as defined in the InvIT Regulations and other than mutual funds, insurance companies

and pension funds) of the Parties to IndiGrid;

- g. the details of Bidder's bank account along with fund transfer details, for purposes of any refund;
- h. a representation that the Bidder/Applicant is outside the United States acquiring the Units in an offshore transaction under Regulation S or, if in the United States, that it is, or is acting for the account or benefit of, a qualified institutional buyer as defined in Rule 144A, and in either case that it has agreed to certain other representations set forth in the Application Form; and
- i. any other information which may be relevant to the Bid.

Eligible FPIs are required to indicate their SEBI registration number in the Application Form.

- 5. Once a duly completed Application Form is submitted by a Bidder, such Application Form constitutes an irrevocable offer and cannot be withdrawn, subject to terms contained therein and the Preliminary Placement Document.
- 6. Upon receipt of the Application Form, the Investment Manager and the Trustee shall, after Bid/Issue Closing Date, determine the number of the Units to be Allotted pursuant to the Issue and the Issue Price, in consultation with the Lead Managers.
- 7. Upon determination of the Bidders to whom Allocation shall be made, the Lead Managers, on behalf of the Investment Manager, will send the CANs, along with the serially numbered Placement Document, to the Bidders who have been Allocated Units. The dispatch of a CAN shall be deemed a valid, binding and irrevocable contract in respect of the number of Units Allocated to the Bidder. The CAN shall contain details such as the number of Units Allocated to the Eligible Investor and the Issue Price, payment instructions including the details of the amounts payable by the Eligible Investor for Allotment of the Units in its name and the Pay-In Date as applicable to the respective Eligible Investor. **Please note that the Allocation and Allotment will be at the absolute discretion of the Investment Manager, and will be based on the recommendations of the Lead Managers.**
- 8. Each Bidder shall be required to make payment of the entire Bid Amount for the Units at the Issue Price, only through electronic transfer to the Cash Escrow Accounts by the Pay-In Date mentioned in the CAN sent to the respective Bidder.
- 9. No payment shall be made by Bidders in cash. Please note that any payment of Bid Amount for Units shall be made from the bank account of the relevant Bidder applying for Units, and the Lead Managers, on behalf of the Investment Manager, shall keep a record of the bank account from where such Bid Amounts have been received. The Bid Amount payable on Units to be held by joint holders shall be paid from the bank account of the person whose name appears first in the Application Form. Pending Allotment, all Bid Amounts received from Bidders shall be kept in the Cash Escrow Accounts.
- 10. Upon receipt of the Bid Amount from the Eligible Investors, the Investment Manager shall Allot Units of IndiGrid as per the details in the CAN sent to successful Bidders. The Investment Manager will intimate to the Stock Exchanges about the details of the Allotment and apply for approvals of the Units for listing and trading of the Units on the Stock Exchanges after the credit of Units into the demat accounts of the successful Bidders.
- 11. Allottees are advised to instruct their respective Depository Participant to accept the Units that may be Allotted to them pursuant to the Issue into their respective demat accounts as indicated in the Application Form.
- 12. The Units that shall be credited to the demat accounts of the Bidders shall be eligible for trading on the Stock Exchanges only upon the receipt of final listing and trading approvals from the Stock Exchanges. IndiGrid, the Investment Manager, the Sponsor, the Trustee and the Lead Managers shall not be responsible for any delay in, or non-receipt of, the communication of the final listing and trading permissions from the Stock Exchanges or any loss arising from such delay or non-receipt. Final listing and trading approvals granted by the Stock Exchanges are also placed on the respective websites of the Stock Exchanges. Bidders are advised to apprise themselves of the status of the receipt of the permissions from the Stock Exchanges.

13. The Bid Amounts will be transferred to the account of IndiGrid from the Cash Escrow Accounts only after receipt of the final listing and trading approvals for the Units from the Stock Exchanges.

Who can Bid?

Each Bidder should check if it is eligible to Bid under applicable law. Furthermore, certain categories of Bidders may not be permitted to Bid in the Issue or hold Units in excess of the limits specified under applicable law.

Only Institutional Investors are eligible to participate in this Issue. An Institutional Investor is defined in Regulation 2(1)(ya) of the InvIT Regulations.

In terms of the InvIT Regulations, “Institutional Investors” means:

- (i) qualified institutional buyers (as defined in Regulation 2(1)(zs) of the InvIT Regulations and Regulation 2(1)(ss) of the SEBI ICDR Regulations);
- (ii) family trusts; or
- (iii) systemically important non- banking financial companies registered with the RBI or intermediaries registered with SEBI, having a net worth of more than ₹ 5,000 million as per their last audited financial statements.

None of the Parties to IndiGrid or any of their related parties (other than mutual funds, insurance companies and pension funds) are eligible to participate in the Issue. However, the Sponsor may participate in the Issue only to the extent of ensuring compliance with Regulation 12(3) of the InvIT Regulations.

The Trustee and the Valuer who were involved in the valuation of IndiGrid are not permitted to Bid in this Issue.

Bids by FPIs

Foreign Portfolio Investors (other than Category III Foreign Portfolio Investors) are permitted to participate in the Issue subject to compliance with Schedule 8 of Foreign Exchange Management (Transfer or Issue of Security by a Person Resident outside India) Regulations, 2017. In case of Bids by FPIs the payment should be paid as inward remittance from abroad through banking channels or out of funds held in NRE or FCNR(B) account maintained in accordance with the Foreign Exchange Management (Deposit) Regulations, 2016, along with documentary evidence in support of the remittance. In case of Bids made by FPIs, a verified true copy of the certificate of registration issued by the designated depository participant under the FPI Regulations is required to be attached along with the Application Form, failing which the Investment Manager, in consultation with the Lead Managers, reserves the right to reject the Bid.

Bids by SEBI registered VCFs and AIFs

The SEBI VCF Regulations prescribe, amongst others, the investment restrictions on VCFs registered with SEBI. Further, the SEBI AIF Regulations prescribe, amongst others, the investment restrictions on AIFs. Further, VCFs which have not re-registered as an AIF under the SEBI AIF Regulations shall continue to be regulated by the SEBI VCF Regulations until the existing fund or scheme managed by the fund is wound up and such funds shall not launch any new scheme after the notification of the SEBI AIF Regulations. Additionally, VCFs and AIFs are subject to certain investment restrictions, including with respect to the percentage of investible funds held in each investee entity. Allotments made in respect of Bids by VCFs and AIFs in the Issue shall be subject to the rules and regulations that are applicable to each of them respectively.

Bids by Banking Companies

Bids may be made by banks as permitted by the RBI and is subject to conditions specified in the Prudential Guidelines – Banks’ investment in units of REITs and InvITs dated April 18, 2017. In case of Bids made by banking companies registered with the RBI, certified copies of (i) the certificate of registration issued by the RBI, and (ii) the approval of such banking company’s investment committee are required to be attached to the Application Form. Failing this, the Investment Manager, in consultation with the Lead Managers, reserves the right to reject the Bid.

Bids by Provident Funds/Pension Funds

On March 2, 2015, the Ministry of Finance issued a notification allowing investments by non-government provident funds, pension funds, superannuation funds and gratuity funds up to 5% in infrastructure investment trusts, as specified. On May 29, 2015, the Ministry of Labour and Employment issued a notification allowing investments by provident funds up to 5% in infrastructure investment trusts, as specified. However, such investments by provident funds, pension funds, superannuation funds and gratuity funds will be subject to, amongst others, the sponsor entity of the InvIT having a minimum of AA or equivalent rating in the applicable rating scale from at least two credit rating agencies registered with SEBI. In case of Bids made by provident funds/pension funds, subject to applicable laws, with minimum corpus of ₹250 million, a certified copy of certificate from a chartered accountant certifying the corpus of the provident fund/pension fund must be attached to the Application Form. Failing this, the Investment Manager, in consultation with the Lead Managers, reserves the right to reject the Bid.

Bids by NPS Schemes

The Pension Fund Regulatory and Development Authority issued circulars dated June 3, 2015 and September 2, 2015, respectively, allowing investments by national pension fund schemes (“NPS Schemes”) up to 5% in infrastructure investment trusts, as specified. However, in accordance with the circular dated May 4, 2017 (effective from May 8, 2017), as amended by the circular dated May 8, 2018, issued by PFRDA, such investments by NPS Schemes will be subject to, amongst others, such securities having a minimum of AA or equivalent rating in the applicable rating scale from at least two credit rating agencies registered with SEBI. In case of Bids made by NPS Schemes, subject to applicable laws, with minimum corpus of ₹250 million, a certified copy of certificate from a chartered accountant certifying the corpus of the provident fund/pension fund must be attached to the Application Form. Failing this, the Investment Manager, in consultation with the Lead Managers, reserves the right to reject the Bid.

Bids by Mutual Funds

The Bids made by asset management companies or custodians of Mutual Funds, if permitted under applicable law, shall specifically state the names of the concerned schemes for which the Bids are made. In case of a Mutual Fund, a separate Bid can be made in respect of each scheme of the Mutual Fund registered with SEBI and such Bids in respect of more than one scheme of the Mutual Fund will not be treated as multiple Bids provided that the Bids clearly indicate the scheme for which the Bid has been made.

Bids may be made by mutual funds under all its schemes, existing and future, subject to the investment conditions and other restrictions prescribed under the Securities and Exchange Board of India (Mutual Funds) Regulations, 1996 (including, the circular on mutual funds dated February 28, 2017 and any other circulars, notifications and guidelines issued thereunder). In case of Bids by mutual funds, a certified copy of the relevant mutual fund’s SEBI registration certificate must be attached with the Application Form. Failing this, the Investment Manager, in consultation with the Lead Managers, reserves the right to reject the Bid.

Bids by Insurance Companies

Bids may be made by insurance companies as permitted by the Insurance Regulatory and Development Authority of India in terms of the Master Circular – Investments, 2016 and the circular issued by the IRDAI entitled ‘Investment in Units of Real Estate Investment Trusts (REIT) & Infrastructure Investment Trusts (InvIT)’ and dated March 14, 2017. In case of Bids made by insurance companies registered with the IRDAI, a certified copy of the certificate of registration issued by IRDAI must be attached to the Application Form. Failing this, the Investment Manager, in consultation with the Lead Managers, reserves the right to reject the Bid.

Bids under Power of Attorney

In case of Bids made pursuant to a power of attorney by Institutional Investors, a certified copy of the power of attorney or the relevant resolution or authority, as the case may be, along with a certified copy of the memorandum of association and articles of association and/or bye laws must be submitted along with the Application Form. Failing this, the Investment Manager, in consultation with the Lead Managers, reserves the right to reject the Bid.

The Investment Manager, in consultation with the Lead Managers, in its absolute discretion, reserves the right to relax the above condition of simultaneous submission of the power of attorney along with the Application Form.

Allotments, if any, made to FVCIs, VCFs and AIFs in the Issue are subject to the respective rules and

regulations that are applicable to each of them.

Note: Affiliates or associates of the Lead Managers who are Eligible Investors may participate in the Issue in compliance with applicable law.

Maximum and Minimum Bid Size

- (i) Each Bidder is required to Bid for a Minimum Bid Size of ₹ 1 million and in multiples of 5,103 Units thereafter.
- (ii) No Bidder shall Bid for that number of Units which exceeds the Issue size.

The Sponsor, the Investment Manager, the Trustee and the Lead Managers shall not be liable for any amendment, modification or change in applicable law which occurs after the date of the Preliminary Placement Document. Eligible Investors are advised to make their independent investigations and satisfy themselves that they are eligible to apply in this Issue. Eligible Investors are advised to ensure that any single application from them does not exceed the investment limits or maximum number of Units that can be held by them under applicable law or regulation or as specified in the Preliminary Placement Document.

Application Process

Application Form

Bidders shall only use the Application Forms provided electronically by the Investment Manager, for the purpose of making a Bid (including any rectifications of errors therein) in terms of the Preliminary Placement Document.

By making a Bid (including any rectifications of errors therein) for the Units through an Application Form, each Bidder will be deemed to have made the following representations and warranties:

1. The Bidder confirms that it is an Institutional Investor in terms of Regulation 2(1)(ya) of the InvIT Regulations, and is eligible to participate in the Issue;
2. Subject to the terms of the Application Form and this Preliminary Placement Document, the Bidder has no right to withdraw its Bid once such Bid is submitted to the Lead Managers;
3. The Bidder confirms that it is eligible to apply for, and hold, any Units that may be Allotted to the Bidder pursuant to the Issue. The Bidder further confirms that any such Allotment of Units to, and the holding of Units by, the Bidder does not, and shall not, exceed the level permissible as per any law applicable to the Bidder;
4. Each Eligible Investor confirms that if Units are Allotted through this Issue, it shall not, for a period of one year from Allotment, sell such Units otherwise than on the Stock Exchanges; and
5. The Bidder confirms that it is outside the United States and it is purchasing the Units in an offshore transaction in reliance on Regulation S under the U.S. Securities Act.

ELIGIBLE INVESTORS MUST PROVIDE THEIR DEMAT ACCOUNT DETAILS, THEIR DEPOSITORY PARTICIPANT'S NAME, DEPOSITORY PARTICIPANT IDENTIFICATION NUMBER, BENEFICIARY ACCOUNT NUMBER AND BANK ACCOUNT DETAILS IN THE APPLICATION FORM. ELIGIBLE INVESTORS MUST ENSURE THAT THE NAME GIVEN IN THE APPLICATION FORM IS EXACTLY THE SAME AS THE NAME IN WHICH THE DEMAT ACCOUNT IS HELD.

Demographic details such as address and bank account details will be obtained from the Depositories as per the demat account details given in the Application Form.

Instructions for completing the Application Form

Bidders may note that forms not filled completely or correctly as per instructions provided in the Preliminary Placement Document and the Application Form are liable to be rejected. The Bids should adhere to the following:

- (i) Bids must be made only in the prescribed Application Form;

- (ii) Application Form must be completed in full, in BLOCK LETTERS in ENGLISH and in accordance with the instructions contained herein and in the Application Form. Incomplete Application Forms are liable to be rejected. Bidders must provide details of valid and active DP ID, Client ID and PAN clearly and without error. Invalid accounts, suspended accounts or where such account is classified as invalid or suspended shall not be considered for Allotment. Bidders should note that the Lead Managers and the Investment Manager will not be liable for errors in data entry due to incomplete or illegible Application Forms; and
- (iii) Bidders are required to sign the Application Form. Bidders should ensure that the thumb impressions and signatures other than in the languages specified in the Eighth Schedule to the Constitution of India, are attested by a Magistrate or a Notary Public or a Special Executive Magistrate under official seal.

Submission of Application Form

All Application Forms must be duly completed with information including the name of the Bidder, the price and the number of the Units applied for. The Application Form shall be submitted to the Lead Managers either through electronic form or through physical delivery at the following address:

<p>If to Edelweiss Financial Services Limited 14th Floor, Edelweiss House Off C.S.T. Road Kalina Mumbai 400 098 Tel: +91 22 4009 4400 Fax: +91 22 4086 3610 E-mail: indigrd.qip@edelweissfin.com Contact Person: Shubham Mehta/ Nishita John</p>	<p>If to Axis Capital Limited Axis House, Level 1 C-2 Wadia International Centre P. B. Marg, Worli Mumbai 400 025 India Tel: +91 22 4325 2183 Fax: +91 22 4325 3000 E-mail: indigrd.qip@axiscap.in Contact Person: Mayuri Arya</p>	<p>If to Citigroup Global Markets India Private Limited 1202, 12th Floor First International Financial Center G-Block, C54 & 55 Bandra Kurla Complex Bandra East Mumbai 400 098 Tel: +91 22 6175 9999 Fax: +91 22 6175 9898 E-mail: investors@cgmib.com Contact Person: Ashish Guneta</p>	<p>If to IndusInd Bank Limited 11th Floor Tower 1, One Indiabulls Centre S. B Marg, Elphinstone Road, Mumbai 400 013 Tel: +91 22 7143 2208 Fax: +91 22 7143 2270 E-mail: premal.doshi@indusind.com Contact Person: Premal Doshi</p>
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The Lead Managers shall not be required to provide any written acknowledgement of the Application Form.

PAN

Except for Bids (i) on behalf of the Central or State Governments and the officials appointed by the courts, who, in terms of the circular dated June 30, 2008 issued by SEBI, may be exempt from specifying their PAN for transacting in the securities market, and (ii) Bids by persons resident in the state of Sikkim, who, in terms of the circular dated July 20, 2006 issued by SEBI, may be exempted from specifying their PAN for transacting in the securities market, all Bidders should mention their PAN allotted under the IT Act. The exemption for the Central or the State Government and officials appointed by the courts and for investors residing in the State of Sikkim is subject to (a) the demographic details received from the respective depositories confirming the exemption granted to the beneficial owner by a suitable description in the PAN field and the beneficiary account remaining in “active status”; and (b) in the case of residents of Sikkim, the address as per the demographic details evidencing the same. **Each Eligible Investor must mention its PAN allotted under the IT Act. Each Eligible Investor is required to be submit a copy of its PAN card along with the Application Form.** Applications without this information will be considered incomplete and are liable to be rejected.

Bank Account for Payment of Bid Amount

The Investment Manager has opened the Cash Escrow Accounts with HDFC Bank Limited and IndusInd Bank Limited, acting as the Escrow Collection Banks in terms of the arrangement among IndiGrid, the Investment

Manager, the Lead Managers and the Escrow Collection Banks. Bidders are required to deposit the entire Bid Amount by the Pay-In Date, in favour of “India Grid Trust Escrow A/c QIP-2019” and “India Grid Trust Escrow A/c QIP-2019”.

The Trustee and the Investment Manager shall utilize the amount deposited in the Cash Escrow Accounts only for the purposes of: (i) adjustment against Allotment; or (ii) refund of application monies in case of any failure to allot Units in the Issue. For further details, please see the section entitled “- *Refunds*” on page 260.

Payment Instructions

Payments are to be made only through electronic fund transfer including through direct credit, NACH NEFT and RTGS. Payments through cheques or cash or any mode other than electronic mode shall be rejected.

If the payment is not made favouring the Cash Escrow Accounts within the time stipulated in the CAN, the Application Form and the CAN of the Eligible Investor are liable to be cancelled.

Allocation

Build-up of the book

The Bidders shall submit their Bids (including any rectifications of errors therein) for the Units within the Bid/Issue Period to the Lead Managers. The book shall be maintained by the Lead Managers.

Price Discovery and Allocation

Investment Manager and the Trustee, in consultation with the Lead Managers, shall determine the Issue Price, which shall be at or above the Floor Price.

After finalisation of the Issue Price, the Investment Manager shall update this Preliminary Placement Document with the Issue details and file the same with the Stock Exchanges as the Placement Document.

Method of Allocation

The Investment Manager shall determine the Allocation in consultation with the Lead Managers on a discretionary basis. After finalization of the Allocation, the Investment Manager will update this Preliminary Placement Document with the Issue details and file the Placement Document with the Stock Exchanges, and dispatch the CAN, together with a serially numbered Placement Document to each successful Bidder.

THE DECISION OF THE INVESTMENT MANAGER, IN CONSULTATION WITH THE LEAD MANAGERS, IN RESPECT OF ALLOCATION SHALL BE FINAL AND BINDING ON ALL BIDDERS. BIDDERS MAY NOTE THAT ALLOCATION OF THE UNITS IS AT THE SOLE AND ABSOLUTE DISCRETION OF THE INVESTMENT MANAGER, IN CONSULTATION WITH THE LEAD MANAGERS, AND BIDDERS MAY NOT RECEIVE ANY ALLOCATION EVEN IF THEY HAVE SUBMITTED VALID APPLICATION FORMS AND DEPOSITED THE BID AMOUNT. NEITHER THE INVESTMENT MANAGER NOR THE LEAD MANAGERS ARE OBLIGED TO ASSIGN ANY REASON FOR ANY SUCH NON-ALLOCATION.

Confirmation of Allocation Note or CAN

Based on the Application Forms, the Investment Manager, in consultation with the Lead Managers, in its sole and absolute discretion, will decide the Bidders to whom the serially numbered CANs shall be sent, pursuant to which the details of Units Allocated to them shall be notified to such Bidders. Further, details of the amounts payable for Allotment of the Units in their respective names shall be notified to such Bidders. Additionally, the CAN would include details of the Cash Escrow Accounts into which such payments would need to be made, Pay-In Date as well as the probable designated date, being the date of credit of the Units to the respective Bidder’s demat account (“**Designated Date**”).

Bidders, who have been Allocated Units, would also be sent a serially numbered Placement Document either in electronic form or by physical delivery along with the serially numbered CAN. The dispatch of the serially numbered Placement Document and the CAN to Bidders shall be deemed a valid, binding and irrevocable contract in respect of the number of Units Allocated to each successful Bidder.

Bidders are advised to instruct their Depository Participant to accept the Units that may be Allotted to them pursuant to the Issue.

Bidders' Demat Account and Bank Account Details

Bidders should note that on the basis of Bidders' PAN, DP ID and Client ID provided by them in the Application Form, the Lead Managers will obtain from the Depository the demographic details including the Bidders' address and bank account details (including the nine-digit Magnetic Ink Character Recognition ("MICR") code as appearing on a cheque leaf (the "**Demographic Details**"), from the Depository. The Demographic Details will be used for giving refunds (including through direct credit, NACH, NEFT and RTGS) to the Bidders. It is mandatory to provide the bank account details in the space provided in the Application Form and Application Forms that do not contain such details are liable to be rejected. Hence, Bidders are advised to immediately update their bank account details, PAN and Demographic Details as appearing on the records of the Depository Participant and ensure that they are true and correct. Failure to do so could result in delays in credit of refunds to Bidders at their sole risk and none of the Lead Managers, the Escrow Collection Banks, the Investment Manager or the Trustee will have any responsibility or undertake any liability for this. Accordingly, Bidders should carefully fill in their demat account details in the Application Form.

By signing the Application Form, the Bidder is deemed to have authorized the Depositories to provide to the Lead Managers, on request, the required Demographic Details as available in their records.

Closing Date and Allotment of the Units

The Investment Manager will endeavour to complete the Allotment of Units by the Closing Date.

The Investment Manager and the Lead Managers at their discretion, reserve the right to cancel the Issue at any time prior to the issuance of CAN, without assigning any reason whatsoever.

Following the Allotment of the Units, the Investment Manager will apply for final listing and trading approvals from the Stock Exchanges. The Investment Manager and the Lead Managers shall endeavour to allot the Units within 12 days from the Bid/Issue Closing Date.

Refunds

IndiGrid (acting through its Trustee), the Investment Manager, the Trustee, the Lead Managers and the Escrow Collection Banks have entered into the Cash Escrow Agreement dated April 30, 2019. The Escrow Collection Banks will act in terms of the Cash Escrow Agreement, and will maintain the monies in the Cash Escrow Accounts until the receipt of final listing and trading approvals for the Units from the Stock Exchanges, for and on behalf of the Bidders.

The Escrow Collection Banks will not exercise any lien whatsoever over the monies deposited therein and will hold the monies therein in trust for the Bidders. The Escrow Collection Banks shall transfer the monies lying to the credit of the Cash Escrow Accounts to IndiGrid only after the receipt of final listing and trading approvals for the Units from the Stock Exchanges.

In the event, (i) of any failure to obtain final listing and trading approvals in respect of the Units in the Issue from the Stock Exchanges within 12 Working Days from Bid/Issue Closing Date; or (ii) the Placement Agreement is terminated in accordance with its terms, the Lead Managers shall, with a copy to IndiGrid (acting through the Trustee) and the Investment Manager, instruct the Escrow Collection Banks to immediately refund the Bid Amounts deposited in the Cash Escrow Accounts to the Bidders.

Further, the provisions of the Cash Escrow Agreement shall not be terminated, modified or amended during the period commencing from the Pay-In Date until receipt of final listing and trading approvals for the Units from the Stock Exchanges, except if any amendment is required due to any change in law or as may be required by any statutory, regulatory or governmental authority, unless each such change is consented to by the Bidders and the amount deposited in escrow by each non-consenting Bidder is refunded immediately.

In the event that the process set out above is not followed, Bidders shall be entitled to claim refund of amounts deposited by Bidders in the Cash Escrow Accounts. Further, in the event of non-receipt of listing permission from the Stock Exchange(s), the Units shall not be eligible for listing and IndiGrid shall be liable to refund the Bid Amounts to the Allottees immediately along with interest at the rate of 15% per annum, from the date of Allotment

till such time prescribed under, and in compliance with, the InvIT Regulations.

Other Instructions

Right to Reject Applications

The Investment Manager, in consultation with the Lead Managers, may reject Bids, in part or in full, without assigning any reason whatsoever. The decision of the Investment Manager and the Lead Managers in relation to rejection of Bids shall be final and binding.

Units in Dematerialised form with NSDL or CDSL

In accordance with the InvIT Regulations, the Allotment of the Units shall be only in dematerialised form (i.e., not in physical certificates but represented by the statement issued through the electronic mode).

A Bidder applying for the Units to be issued pursuant to the Issue must have at least one beneficiary account with a Depository Participant of either NSDL or CDSL prior to making the Bid. Allotment to a successful Bidder will be credited in electronic form directly to the beneficiary account (with the Depository Participant) of such Bidder.

Units in electronic form can be traded only on the stock exchanges having electronic connectivity with NSDL and CDSL. BSE and NSE have electronic connectivity with NSDL and CDSL. The trading of the Units would be in dematerialised form only for all Unitholders in the respective demat segment of BSE and NSE.

The Trustee, the Investment Manager or the Lead Managers, will not be responsible or liable for the delay in the credit of the Units to be issued and transferred pursuant to the Issue due to errors in the Application Form, delay in payment of Bid Amount or otherwise on part of the Bidders.

SELLING RESTRICTIONS

The distribution of this Preliminary Placement Document or any offering material and the offering, sale or delivery of the Units is restricted by law in certain jurisdictions. Therefore, persons who may come into possession of this Preliminary Placement Document or any offering material are advised to consult with their own legal advisors as to what restrictions may be applicable to them and to observe such restrictions. This Preliminary Placement Document may not be used for the purpose of an offer or invitation in any circumstances in which such offer or invitation is not authorized.

General

No action has been taken or will be taken that would permit a public offering of the Units to occur in any jurisdiction. Accordingly, the Units may not be offered or sold, directly or indirectly, and neither this Preliminary Placement Document nor any offering materials or advertisements in connection with the Units may be distributed or published in or from any country or jurisdiction except under circumstances that will result in compliance with any applicable rules and regulations of any such country or jurisdiction. The Issue will be made in compliance with the applicable SEBI regulations including the InvIT Regulations. This Preliminary Placement Document is exclusive to the recipient and is a preferential issue under the SEBI Preferential Issue Guidelines and does not constitute an offer to the general public or any other investor to subscribe to the Units described. Each subscriber to the Units in the Issue will be deemed to have made representations, warranties, acknowledgments and agreements as described under this section entitled “*Transfer Restrictions*” and the sections entitled “*Notice to Investors*” and “*Representations by Investors*” on pages 267, 1 and 5 respectively.

Australia

Any offer or invitation of Units contained in this Preliminary Placement Document may only be made to persons who are “wholesale clients” within the meaning of section 761G(4) of the Corporations Act 2001 (Cth) (Australian Corporations Act) and either sophisticated investors or professional investors within the meaning of sections 708(8) and 708(11) of the Australian Corporations Act respectively. This Preliminary Placement Document is not a product disclosure statement or similar document required under Part 7.9 of the Corporations Act nor is it a prospectus or other disclosure document under Chapter 6D of the Corporations Act. Accordingly, this Preliminary Placement Document does not contain the information which would be contained in a product disclosure statement, prospectus or other disclosure document prepared under the Australian Corporations Act and does not purport to contain all of the information that may be necessary or desirable to enable a potential investor to properly evaluate and consider an investment in IndiGrid. The Units may not be resold in Australia within a period of 12 months after the date of Issue otherwise than by means of an offer exempt from the disclosure requirements of Parts 6D.2 and 7.9 of the Australian Corporations Act. This Preliminary Placement Document has not been lodged with the Australian Securities and Investments Commission. Any advice in this Preliminary Placement Document is of a general nature only and does not consider the specific objectives, financial intentions or needs of any particular person.

Canada

Prospective Canadian investors are advised that the information contained within this Preliminary Placement Document has not been prepared with regard to matters that may be of particular concern to Canadian investors. Accordingly, prospective Canadian investors should consult with their own legal, financial and tax advisers concerning the information contained within this Preliminary Placement Document and as to the suitability of an investment in the Units in their particular circumstances.

The Units may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the Units must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this Preliminary Placement Document (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser’s province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser’s province or territory for particulars

of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (“**NI 33-105**”), the Lead Managers are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

We hereby notify prospective Canadian purchasers that: (a) we may be required to provide personal information pertaining to the purchaser as required to be disclosed in Schedule I of Form 45-106F1 under NI 45-106 (including its name, address, telephone number and the aggregate purchase price of any Units purchased) (“**personal information**”), which Form 45-106F1 may be required to be filed by us under NI 45-106, (b) such personal information may be delivered to the Ontario Securities Commission (the “**OSC**”) in accordance with NI 45-106, (c) such personal information is collected indirectly by the OSC under the authority granted to it under the securities legislation of Ontario, (d) such personal information is collected for the purposes of the administration and enforcement of the securities legislation of Ontario, and (e) the public official in Ontario who can answer questions about the OSC’s indirect collection of such personal information is the Administrative Support Clerk at the OSC, Suite 1903, Box 55, 20 Queen Street West, Toronto, Ontario M5H 3S8, Telephone: (416) 593-3684. Prospective Canadian purchasers that purchase Units in the Issue will be deemed to have authorized the indirect collection of the Personal Information by the OSC, and to have acknowledged and consented to its name, address, telephone number and other specified information, including the aggregate purchase price paid by the purchaser, being disclosed to other Canadian securities regulatory authorities, and to have acknowledged that such information may become available to the public in accordance with requirements of applicable Canadian laws.

Upon receipt of this Preliminary Placement Document, each Canadian purchaser hereby confirms that it has expressly requested that all documents evidencing or relating in any way to the sale of the securities described herein (including for greater certainty any purchase confirmation or any notice) be drawn up in the English language only. Par la réception de ce document, chaque acheteur canadien confirme par les présentes qu’il a expressément exigé que tous les documents faisant foi ou se rapportant de quelque manière que ce soit à la vente des valeurs mobilières

Cayman Islands

This Preliminary Placement Document does not constitute a public offer of the Units, whether by way of sale or subscription, in the Cayman Islands. Each Lead Manager has represented and agreed that it has not offered or sold, and will not offer or sell, directly or indirectly, any Units to any member of the public in the Cayman Islands.

European Economic Area

Nothing in this Preliminary Placement Document should be construed as an offer or solicitation or as marketing of any Alternative Investment Fund (“**AIF**”) in the European Economic Area (the “**EEA**”) save in circumstances where such AIF is permitted to be marketed in accordance with the Alternative Investment Fund Managers Directive (2011/61/EU) (the “**Directive**”) and the laws, regulations or delegated acts implementing the directive in any EEA member state. As such, IndiGrid may not be marketed to, and this Preliminary Placement Document may not be sent to, investors resident, domiciled or with a registered office in any EEA member state unless: (a) in the United Kingdom, Luxembourg or Ireland where the applicable AIF has been notified to the competent authority of the relevant EEA member state by its Alternative Investment Fund Manager (“**AIFM**”) pursuant to Article 42 of the Directive in which case such AIF may be marketed to professional investors in that EEA member state subject to the requirements set forth for each such jurisdiction below; (b) the applicable AIF may be marketed under any other private placement regime or other exemption in the relevant EEA member state; or (c) such dialogue with an investor was responsive to an unsolicited specific request from the investor. This Preliminary Placement Document must not be distributed to, or relied upon by, investors in the EEA in any other circumstances.

United Kingdom

IndiGrid is an unregulated collective investment scheme for the purposes of the United Kingdom Financial Services and Markets Act 2000 (“**FSMA**”), the promotion of which in the United Kingdom is restricted by the FSMA. It has not been authorised, or otherwise recognised or approved, by the United Kingdom Financial Conduct Authority (the “**FCA**”) and, as an unregulated scheme, it cannot be promoted in the United Kingdom to the general public. Bidders in the United Kingdom are advised that all, or most, of the protections afforded by the United Kingdom regulatory system will not apply to an investment in IndiGrid and that compensation will not be available under the United Kingdom Financial Services Compensation Scheme.

If the promotion is made by a person who is not an authorized person under FSMA, the issue or distribution of this Preliminary Placement Document in the United Kingdom may only be made to and directed at persons who: (a) are investment professionals falling within Article 19 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005; or (b) are persons to whom the promotion may otherwise be lawfully made. If made by a person who is an authorized person under FSMA, the issue or distribution of this Preliminary Placement Document in the United Kingdom may only be made to and directed at persons who: (a) are investment professionals within Article 14 of the Financial Services And Markets Act 2000 (Promotion of Collective Investment Schemes) (Exemptions) Order 2001; (b) are persons to whom the promotion may be made under Rule 14.12.1 of the FCA's Conduct Of Business Sourcebook; or (c) are persons to whom the promotion may otherwise be lawfully made. Transmission of this Preliminary Placement Document to any other person in the United Kingdom is unauthorized and may contravene FSMA. Persons of any other description should not act or otherwise rely upon this Preliminary Placement Document.

Additionally, IndiGrid is an AIF and the Investment Manager is a third country AIFM for the purposes of the Directive and the United Kingdom Alternative Investment Fund Managers Regulations 2013 (The "**UK AIFMD Regulations**"). The Investment Manager has submitted a written notification to the FCA in accordance with Regulation 59 of the UK AIFMD Regulations and its entitlement (subject to compliance with the foregoing) to market the trust in the United Kingdom following submission of such notification has not been revoked by the FCA. The Investment Manager is not an authorised AIFM under the Directive, either in the UK or elsewhere, and accordingly is subject to compliance with only limited requirements of the Directive.

Ireland

Only those Units referred to in this Preliminary Placement Document are being marketed to professional investors in Ireland, as defined in the European Union (Alternative Investment Fund Managers) Regulations 2013 (the "**Irish AIFMD Regulations**"). In no circumstance shall any Units be marketed to any person in Ireland other than a professional investor. In particular, no Units are being marketed to retail investors in Ireland, as defined in the Irish AIFMD Regulations. None of (i) the Units in IndiGrid, or (ii) any investment therein has been authorised by the Central Bank of Ireland. This Preliminary Placement Document and the information contained herein are private and confidential and are for the use solely of the persons to whom this Preliminary Placement Document was sent. If a Bidder is not interested in making an investment in Units of IndiGrid, this Preliminary Placement Document should be promptly returned. This Preliminary Placement Document does not, and shall not be deemed to constitute an invitation to the public in Ireland to purchase Units in IndiGrid. No person receiving a copy of this Preliminary Placement Document may treat it as constituting an invitation to purchase Units in IndiGrid or a solicitation to anyone other than the addressee. No action has been taken or arrangement made with the central bank of Ireland (the competent authority in Ireland for the purpose of Directive 2003/71/ec (the "**Prospective Directive**")) for the use of this Preliminary Placement Document as an approved prospectus (as defined in the Prospectus Directive) in Ireland.

Luxembourg

The Units may not be offered or sold in the Grandduchy of Luxembourg, except where offered in circumstances that do not require the approval of a prospectus by the Luxembourg Financial Regulatory Authority in accordance with the Law of July 12, 2005 on prospectuses for securities. This Preliminary Placement Document shall be non-public and strictly confidential and shall only be disclosed to a limited number of professional investors for their consideration in connection with the private offering of the Units, in all cases under circumstances designed to preclude a distribution that would be other than a private placement. For the avoidance of doubt, the offering or sale of Units to professional investors in Luxembourg has been duly approved by the Luxembourg Financial Regulatory Authority in accordance with (i) Article 45 of the Law of July 12, 2013 on AIFMDs and (ii) the Luxembourg regulator's current practice and guidelines, and such approval has not been revoked. This Preliminary Placement Document may not be reproduced or used for any purpose, or provided to any person other than those to whom copies have been sent. The recipient will keep permanently confidential all information contained in this Preliminary Placement Document not already in the public domain and will use this Preliminary Placement Document for the sole purpose of evaluating a possible investment in IndiGrid.

Hong Kong

The Units may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in

the document being a “prospectus” within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the Units may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Mauritius

The Units are not being offered to the public in Mauritius and nothing in this Preliminary Placement Document or any information contained herein may be treated as a prospectus for the purpose of the Securities Act 2005 of Mauritius. Units may not be offered, distributed or sold, directly or indirectly, in Mauritius or to any resident of Mauritius, except as permitted by applicable Mauritius law, including but not limited to Securities Act 2005 of Mauritius.

New Zealand

No action has been or will be taken by the Lead Managers which would permit an offer of any of the Units to retail investors in New Zealand, or possession or distribution of any offering material in relation to the Units to retail investors in New Zealand. Each Lead Manager represents and agrees, that:

- (i). it has not offered, sold or delivered and will not directly or indirectly offer, sell or deliver any of the Units; and
- (ii). it will not distribute any Placement Document or advertisement in relation to any offer of the Units;

in New Zealand other than to “wholesale investors” within the meaning of clause 3(2) of Schedule 1 of the Financial Markets Conduct Act 2013 of New Zealand.

Each Lead Manager will be deemed to represent and agree that it has not offered or sold, and will not offer or sell, any of the Units to persons whom it believes to be persons to whom any amounts payable on the Units are or would be subject to New Zealand resident withholding tax, unless such persons certify that they hold a valid certificate of exemption for New Zealand resident withholding tax purposes and provide a New Zealand tax file number to such Lead Manager (in which event the Lead Manager shall provide details thereof to IndiGrid).

Singapore

This Preliminary Placement Document and any other document or material in connection with the offer or sale of the Units has not and will not be registered as a prospectus with the Monetary Authority of Singapore (“MAS”) as IndiGrid is invoking the exemptions from compliance with prospectus requirements pursuant to the exemption under Section 304 of the Securities and Futures Act (Cap. 289) of Singapore (“SFA”). The MAS assumes no responsibility for the contents of the Preliminary Placement Document.

The offer or invitation of interests in IndiGrid, which is the subject of this Preliminary Placement Document, does not relate to a collective investment scheme which is authorized under Section 286 of the SFA or recognized under Section 287 of the SFA. IndiGrid is not authorized or recognized by the MAS and the Units are not allowed to be offered to the retail public. The Preliminary Placement Document and any other document or material issued in connection with the offer or sale is not a prospectus as defined in the SFA. Accordingly, statutory liability under the SFA in relation to the content of prospectuses does not apply, and investors should consider carefully whether the investment is suitable for them.

This Preliminary Placement Document and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Units may not be circulated or distributed, nor may the Units be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than to an institutional investor (as defined in the SFA and relevant subsidiary legislation issued thereunder), or (ii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to compliance with conditions set forth in the SFA.

Investors should therefore ensure that their own transfer arrangements comply with the restrictions. Investors should seek legal advice to ensure compliance with the above arrangement.

United States

See the section of this Preliminary Placement Document entitled “*Transfer Restrictions*”.

TRANSFER RESTRICTIONS

The Units have not been and will not be registered, listed or otherwise qualified in any other jurisdiction outside India and may not be offered or sold, and Bids may not be made by persons in any such jurisdiction, except in compliance with the applicable laws of such jurisdiction. Until the expiry of 40 days after the commencement of the Issue, an offer or sale of the Units within the United States by a dealer (whether or not it is participating in the Issue) may violate the registration requirements of the Securities Act.

The Units are only being offered and sold:

- (i) in the United States or to, or for the account or benefit of, to U.S. QIBs in transactions exempt from or not subject to the registration requirements of the Securities Act; and
- (ii) outside the United States in offshore transactions in reliance on Regulation S under the Securities Act and the applicable laws of the jurisdiction where those offers and sales occur,

and, in each case, to purchasers who are deemed to have made the representations set forth immediately below.

Units Offered and Sold within the United States

Each purchaser that is acquiring the Units offered pursuant to this Issue within the United States, by its acceptance of this Preliminary Placement Document and of the Units, will be deemed to have acknowledged, represented to and agreed with IndiGrid and the Lead Managers that it has received a copy of this Preliminary Placement Document and such other information as it deems necessary to make an informed investment decision and that:

- (i). the purchaser is authorized to consummate the purchase of the Units offered pursuant to this Issue in compliance with all applicable laws and regulations;
- (ii). the purchaser acknowledges that the Units offered pursuant to this Issue have not been and will not be registered under the Securities Act or with any securities regulatory authority of any state of the United States and accordingly may not be offered or sold within the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act;
- (iii). the purchaser (i) is a U.S. QIB, (ii) is aware that the sale to it is being made in a transaction exempt from or not subject to the registration requirements of the Securities Act, and (iii) is acquiring such Units for its own account or for the account of a U.S. QIB with respect to which it exercises sole investment discretion;
- (iv). the purchaser is not an affiliate of IndiGrid or a person acting on behalf of an affiliate;
- (v). if, in the future, the purchaser decides to offer, resell, pledge or otherwise transfer such Units, or any economic interest therein, such Units or any economic interest therein may be offered, sold, pledged or otherwise transferred only (A) (i) to a person whom the beneficial owner and/or any person acting on its behalf reasonably believes is a U.S. QIB in a transaction meeting the requirements of Rule 144A, (ii) in an offshore transaction complying with Rule 903 or Rule 904 of Regulation S under the Securities Act, (iii) pursuant to an exemption from registration under the Securities Act provided by Rule 144 thereunder, if available, (iv) pursuant to another available exemption from the registration requirements of the Securities Act, or (v) pursuant to an effective registration statement under the Securities Act, and (B) in accordance with all applicable laws, including the securities laws of the states of the United States;
- (vi). the Units are “restricted securities” within the meaning of Rule 144(a)(3) under the Securities Act and no representation is made as to the availability of the exemption provided by Rule 144 for resale of any such Units;
- (vii). the purchaser will not deposit or cause to be deposited such Units into any depository receipt facility established or maintained by a depository bank other than a Rule 144A restricted depository receipt facility, so long as such Units are “restricted securities” within the meaning of Rule 144(a)(3) under the Securities Act;
- (viii). the purchaser agrees that neither the purchaser, nor any of its affiliates, nor any person acting on behalf of the purchaser or any of its affiliates, will make any “directed selling efforts” as defined in Regulation S under the Securities Act in the United States with respect to the Units;
- (ix). the purchaser understands that such Units (to the extent they are in certificated form), unless IndiGrid determines otherwise in accordance with applicable law, will bear a legend substantially to the following effect:

“THE UNITS REPRESENTED HEREBY HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR WITH

ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT (1) TO A PERSON WHOM THE SELLER OR ANY PERSON ACTING ON ITS BEHALF REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A UNDER THE SECURITIES ACT, OR (2) IN AN OFFSHORE TRANSACTION COMPLYING WITH RULE 903 OR RULE 904 OF REGULATION S UNDER THE SECURITIES ACT, OR (3) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE US SECURITIES ACT PROVIDED BY RULE 144 THEREUNDER, IF AVAILABLE, OR (4) PURSUANT TO ANOTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE US SECURITIES ACT, IN EACH CASE IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. NO REPRESENTATION CAN BE MADE AS TO THE AVAILABILITY OF THE EXEMPTION PROVIDED BY RULE 144 FOR RESALE OF ANY SUCH UNITS. NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THE FOREGOING, THESE UNITS MAY NOT BE DEPOSITED INTO ANY UNRESTRICTED DEPOSITARY RECEIPT FACILITY IN RESPECT OF THE UNITS ESTABLISHED OR MAINTAINED BY A DEPOSITARY BANK”; and

- (x). the purchaser acknowledges that IndiGrid, the Lead Managers, their respective affiliates and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements and agrees that, if any of such acknowledgements, representations and agreements deemed to have been made by virtue of its purchase of such Units are no longer accurate, it will promptly notify IndiGrid, and if it is acquiring any of such Units as a fiduciary or agent for one or more accounts, it represents that it has sole investment discretion with respect to each such account and that it has full power to make the foregoing acknowledgements, representations and agreements on behalf of such account.

All Other Units Offered and Sold in this Issue

Each purchaser that is acquiring the Units offered pursuant to this Issue outside the United States, by its acceptance of this Preliminary Placement Document and of the Units offered pursuant to this Issue, will be deemed to have acknowledged, represented to and agreed with IndiGrid and the Lead Managers that it has received a copy of this Preliminary Placement Document and such other information as it deems necessary to make an informed investment decision and that:

- (i). the purchaser is authorized to consummate the purchase of the Units offered pursuant to this Issue in compliance with all applicable laws and regulations;
- (ii). the purchaser acknowledges that the Units offered pursuant to this Issue have not been and will not be registered under the Securities Act or with any securities regulatory authority of any state of the United States and accordingly may not be offered, resold, pledged or transferred within the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act;
- (iii). the purchaser is purchasing the Units offered pursuant to this Issue in an offshore transaction meeting the requirements of Rule 903 of Regulation S under the Securities Act;
- (iv). the purchaser and the person, if any, for whose account or benefit the purchaser is acquiring the Units offered pursuant to this Issue, was located outside the United States at the time (i) the offer was made to it and (ii) when the buy order for such Units was originated and continues to be located outside the United States and has not purchased such Units for the account or benefit of any person in the United States or entered into any arrangement for the transfer of such Units or any economic interest therein to any person in the United States;
- (v). the purchaser is not an affiliate of IndiGrid or a person acting on behalf of an affiliate;
- (vi). the purchaser agrees that neither the purchaser, nor any of its affiliates, nor any person acting on behalf of the purchaser or any of its affiliates, will make any “directed selling efforts” as defined in Regulation S under the Securities Act in the United States with respect to the Units;
- (vii). the purchaser acknowledges that IndiGrid, the Lead Managers, their respective affiliates and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements and agrees that, if any of such acknowledgements, representations and agreements deemed to have been made by virtue of its purchase of such Units are no longer accurate, it will promptly notify IndiGrid, and if it is acquiring any of such Units as a fiduciary or agent for one or more accounts, it represents that it has sole investment discretion with respect to each such account and that it has full power to make the foregoing acknowledgements, representations and agreements on behalf of such account.

In relation to each EEA State that has implemented the Prospectus Directive (each, a “**Relevant Member State**”),

an offer to the public of any Units may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- (i). to any legal entity which is a qualified investor as defined under the Prospectus Directive;
- (ii). to fewer than 150 natural or legal persons (other than qualified investors), subject to obtaining the prior consent of the Lead Manager; or
- (iii). in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of Units shall result in a requirement for IndiGrid or any Lead Manager to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive and each person who receives any communication in respect of, or who acquires any Units under, the offers contemplated in this attached Preliminary Placement Document will be deemed to have represented, warranted and agreed to with the Lead Manager and IndiGrid that it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive.

TAXATION

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STATEMENT OF POSSIBLE TAX BENEFITS AVAILABLE TO INDIA GRID TRUST AND ITS UNITHOLDERS UNDER THE APPLICABLE LAWS IN INDIA

To
The Board of Directors
Sterlite Investment Managers Limited
Maker Maxity, 5 North Avenue, Level 5,
Bandra Kurla Complex, Bandra East,
Mumbai MH 400051

Dear Sirs,

Sub: Statement of possible tax benefits available to India Grid Trust and its unitholders

We hereby confirm that the enclosed Annexure, prepared by Sterlite Investment Managers Limited (the "Investment Manager") on behalf of India Grid Trust ("IndiGrid") states the possible tax benefits available to IndiGrid and the unitholders of IndiGrid under the Income-tax Act, 1961 ('Act') presently in force in India. Several of these benefits are dependent on IndiGrid or its unitholders fulfilling the conditions prescribed under the relevant provisions of the Act. Hence, the ability of IndiGrid or its unitholders to derive the tax benefits is dependent upon fulfilling such conditions, which based on the business imperatives, IndiGrid or its unitholders may or may not choose to fulfil.

The benefits discussed in the enclosed Annexure are not exhaustive and the preparation of the contents stated is the responsibility of the Investment Manager. We are informed that this statement is only intended to provide general information to the investors and hence is neither designed nor intended to be a substitute for professional tax advice. In view of the individual nature of the tax consequences and the changing tax laws, each investor is advised to consult his or her own tax consultant with respect to the specific tax implications arising out of their participation in the issue.

We do not express any opinion or provide any assurance as to whether:

- IndiGrid or its unitholders will continue to obtain these benefits in future;
- the conditions prescribed for availing the benefits have been/would be met with; and
- the revenue authorities/courts will concur with the views expressed herein.

The contents of the enclosed Annexure are based on information, explanations and representations obtained from the Investment Manager and on the basis of their understanding of the business activities and operations of IndiGrid.

For S R B C & Co LLP
ICAI Firm Registration Number: 324982E/E300003
Chartered Accountants

per Aryn Jassani
Partner
Membership Number: 046447

Place: Mumbai
Date: April 30, 2019

ANNEXURE TO STATEMENT OF POSSIBLE TAX BENEFITS AVAILABLE TO INDIA GRID TRUST AND ITS UNITHOLDERS UNDER THE APPLICABLE LAWS IN INDIA

I. UNDER THE INCOME-TAX ACT, 1961 (hereinafter referred to as 'the Act')

1. TAX BENEFITS AVAILABLE TO INDIA GRID TRUST ('IndiGrid') UNDER THE ACT

The following benefits are available to IndiGrid after fulfilling conditions as per the applicable provisions of the Act and in accordance with permissibility and the guidelines prescribed by the Securities and Exchange Board of India ('SEBI') [including the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014, as amended] ('SEBI Regulations').

1.1 Tax benefit in the hands of IndiGrid in respect of income received from the Special Purpose Vehicle(s) ('SPVs')/ Specified Domestic Company:

1.1.1 Interest income from SPVs

Interest received or receivable by IndiGrid from the Project SPVs should be exempt from tax, subject to satisfaction of conditions given in section 10(23FC) of the Act.

Further, in view of the provisions of section 14A of the Act, any expenditure incurred in relation to earning the above exempt income shall not be tax deductible. In case the Tax Authorities are not satisfied by the disallowance considered by IndiGrid, the quantum of disallowance shall be computed in accordance with the provisions of section 14A read with Rule 8D of the Income-tax Rules, 1961 ('the Rules').

1.1.2 Dividend income from Specified Domestic Company

Dividend income as referred in section 115-O(7) received or receivable by IndiGrid from a Specified Domestic Company shall be exempt from tax under the provisions of section 10(23FC), subject to satisfaction of conditions stipulated in the said provision of the Act.

Further, in view of the provisions of section 14A of the Act, any expenditure incurred in relation to earning the above exempt income shall not be tax deductible. In case the Tax Authorities are not satisfied by the disallowance considered by IndiGrid, the quantum of disallowance shall be computed in accordance with the provisions of section 14A read with Rule 8D of the Income Tax Rules, 1961 ('the Rules').

The above dividend income of IndiGrid may be liable to additional tax at the rate of 10% (plus applicable surcharge and cess) under the provisions of section 115BBDA of the Act in case total dividend received by the IndiGrid exceeds Rs.10 lakhs.

1.2 Benefits in the hands of IndiGrid in respect of income other than the income distributed by the SPVs/ Specified Domestic Company:

1.2.1 Section 10(34) of the Act: Income by way of dividend referred to under section 115-O of the Act

Dividend received or receivable by IndiGrid referred under section 115-O from domestic companies on investments is exempt from tax under section 10(34) of the Act.

The above dividend income of IndiGrid could be liable to additional tax @ 10% (plus applicable surcharge and cess) under the provisions of section 115BBDA of the Act in case total dividend received by the IndiGrid exceeds Rs. 10 lakhs.

Further, in view of the provisions of section 14A of the Act, any expenditure incurred in relation to earning the above exempt income shall not be tax deductible. In case the Tax Authorities

are not satisfied by the disallowance considered by IndiGrid, the quantum of disallowance shall be computed in accordance with the provisions of section 14A read with Rule 8D of the Rules.

Section 94(7) of the Act provides that losses arising from the sale/ transfer of securities or units purchased within a period of three months prior to the record date and sold/ transferred within three (for shares)/nine (for units) months after such date, will be disallowed to the extent specified income on such securities/ units is claimed as exempt from tax.

1.2.2 Section 10(35) of the Act - Income from specified units

The following incomes are exempt under section 10(35) of the Act, in the hands of IndiGrid (except income from transfer of units mentioned therein)

- a) Income received in respect of units of a mutual fund specified under section 10(23D) of the Act;
- b) Income received in respect of units from the Administrator of the specified undertaking as defined under the provisions of the Unit Trust of India (Transfer of Undertaking and Repeal) Act, 2002;
- c) Income received in respect of units from the company referred to in section 2(h) of the Unit Trust of India (Transfer of Undertaking and Repeal) Act, 2002.

In view of the provisions of section 14A of the Act, any expenditure incurred in relation to earning above exempt income shall not be tax deductible. In case the Tax Authorities are not satisfied by the disallowance considered by IndiGrid, the quantum of disallowance shall be computed in accordance with the provisions of section 14A read with Rule 8D of the Rules.

Section 94(7) of the Act provides that losses arising from the sale/ transfer of securities or units purchased within a period of three months prior to the record date and sold/ transferred within nine months after such date, will be disallowed to the extent specified income on such securities/ units is claimed as exempt from tax.

Further, as per the provisions of section 94(8) of the Act, if an investor purchases units within three months prior to the record date for entitlement of bonus units and is allotted bonus units without any payment on the basis of the original holding on the record date and such person sells / redeems the original units within nine months of the record date, then the loss arising from sale/ redemption of the original units will be ignored for the purpose of computing income chargeable to tax and the amount of such loss ignored shall be regarded as the cost of acquisition of the bonus units.

1.2.3 Section 10(34A) of the Act - Income from buy back of shares

The provisions of section 115QA mandate domestic companies to pay an additional tax at the rate of 20% (plus applicable surcharge and cess) on buy-back of shares (not being shares listed on a recognized stock exchange). Correspondingly, income arising from buy-back of unlisted shares shall not be taxable as per section 10(34A) of the Act in the hands of IndiGrid.

In view of the provisions of section 14A of the Act, any expenditure incurred in relation to earning such exempt income shall not be tax deductible. In case the Tax Authorities are not satisfied by the disallowance considered by IndiGrid, the quantum of disallowance shall be computed in accordance with the provisions of section 14A read with Rule 8D of the Rules.

1.2.4 Taxability of Long Term Capital Gains under section 112A of the Act

If the period of holding of a security (other than a unit) listed in a recognised stock exchange in India or a unit of the Unit Trust of India or a unit of an equity oriented fund or a zero coupon bond is more than 12 months, it will be considered a long term capital asset as per section 2(29A) of the Act. With respect to shares of a company not being listed on a recognized stock exchange, the determinative period of holding shall be more than 24 months for it to be regarded as long term capital asset. With respect to other assets including a unit of a mutual

fund other than equity oriented mutual fund or unit of a business trust, the determinative period of holding is more than 36 months for it to be regarded as long term capital asset. Asset not considered as long term capital asset shall be regarded as short term capital assets.

Long term capital gain exceeding Rs.1,00,000 on transfer of equity shares or units of equity oriented fund or units of a business trust on or after 1 April 2018 through a recognized stock exchange and subject to payment of securities transaction tax, shall be taxable at the concessional rate of 10% (plus applicable surcharge and cess) as per the provisions of section 112A of the Act introduced vide Finance Act, 2018.

In this regard, new clause (ac) inserted in section 55(2) vide Finance Act, 2018 which provides that cost of acquisition of the specified capital asset (referred in aforesaid section 112A of the Act) acquired prior to 1 February 2018, shall be higher of –

- (a) Cost of acquisition of asset; and
- (b) Lower of –
 - a. the fair market value of the asset (as defined in Explanation to section 55(2)(ac)); and
 - b. the full value of consideration received or accruing as a result of the transfer of the capital asset

1.2.5 Section 111A and section 112 of the Act - Taxability of capital gains at concessional rates (other than the gain covered above in para 1.2.4)

As per the provisions of section 111A of the Act, any income arising from transfer of short term capital asset being an equity share in a company or a unit of an equity oriented fund or a unit of an eligible business trust, transacted through a recognized stock exchange and subject to securities transaction tax, shall be taxable at a concessional rate of 15% (plus applicable surcharge and cess if any).

As per the provisions of section 112(1)(d) of the Act, gains arising on the transfer of long term capital assets shall be chargeable to tax in the hands of IndiGrid at the rate of 20% (plus applicable surcharge and cess). However, as per the proviso to section 112 of the Act, the tax on long term capital gains resulting on transfer of listed securities Zero Coupon Bonds shall be at the rate of 10% (plus applicable surcharge and cess) without indexation benefit.

Section 48 of the Act prescribes the mode of computation of Capital Gains and provides for deduction of cost of acquisition/ improvement and expenses incurred in connection with the transfer of a capital asset, from the sale consideration to arrive at the amount of Capital Gains. However, in respect of long term capital gains, section 48 provides for substitution of cost of acquisition/ improvement with indexed cost of acquisition/ improvement, which adjusts the cost of acquisition/ improvement by a cost inflation index as prescribed from time to time. Such indexation benefit would not be available on bonds and debentures.

1.2.6 Set off of Capital loss

As per section 70 read with section 74 of the Act, short term capital loss arising during a year is allowed to be set-off against short term capital gains as well as long term capital gains. Balance loss, if any, shall be carried forward and set-off against any capital gains arising during subsequent eight assessment years. Also, as per section 70 of the Act read with section 74, long term capital loss arising during a year is allowed to be set-off only against long term capital gains. Balance loss, if any, shall be carried forward and set-off against long term capital gains arising during subsequent eight assessment years.

2. TAX BENEFITS AVAILABLE TO UNIT-HOLDERS OF INDIGRID

2.1 Special Benefits available to the Unit-Holders of IndiGrid:

Following tax benefit is specifically available to the unitholders of IndiGrid subject to the fulfilment of the conditions specified in the Act and SEBI Regulations:

2.1.1 Section 10(23FD) of the Act - Tax exemption in respect of income distributed by IndiGrid:

As per the provisions of section 115UA(1) of the Act, the income distributed by IndiGrid shall be deemed to be of the same nature and in the same proportion in the hands of the Unit-holder as if such income was received by or accrued to IndiGrid.

As per the provisions of section 10(23FD), any income referred to in section 115UA(1) of the Act and distributed by IndiGrid shall not be included in the total income of the unit-holders. However, such benefit is not available in respect of interest income distributed by IndiaGrid and covered under clause (a) of Section 10(23FC)

IndiGrid shall not be subject to levy of dividend distribution tax on the amount of income distributed to its unit holders.

Section 115BBDA provides that where total income of all the assessee (except domestic company, section 12AA registered trust, specified institutions covered u/s 10(23C)(iv)/ (v)/ (vi)/ (via) and non-resident) includes any income exceeding Rs. 10 Lakh by way of dividend declared, distributed or paid by a domestic company, he should be liable to additional tax @ 10% on such dividend. Currently, the law is not clear and there is ambiguity on whether investors receiving income representing dividend from IndiGrid is likely to be considered as 'dividend declared, distributed or paid by a domestic company' referred to in section 115BBDA.

In view of the provisions of section 14A of the Act, any expenditure incurred in relation to earning the above exempt income shall not be tax deductible. In case the Tax Authorities are not satisfied by the disallowance considered by IndiGrid, the quantum of disallowance shall be computed in accordance with the provisions of section 14A read with Rule 8D of the Rules.

2.1.2 TDS under section 194LBA – Certain income from units of IndiGrid:

Where any distributed income referred in section 115UA, is in the nature referred to in sub clause (a) of clause (23FC) of section 10 i.e. interest payable by IndiGrid to its unit holder being a resident, shall at the time of credit of such payment deduct tax at the rate of 10%.

In case payment of interest referred to above is made to a non-resident unit holder, then the same shall be subjected to the tax deduction at the rate of 5%. Additionally, in view of section 90(2) of the Act, a non-resident will be governed by the provisions of the Agreement for Avoidance of Double Taxation (AADT) between India and the country of tax residence of the non-resident and the provisions of the Act apply to the extent they are more beneficial to the assessee.

No tax is required to be deducted on dividend income distributed by IndiGrid to the unit holders.

2.2 General Benefits available to the all the Unit-Holders of IndiGrid:

For resident Unit-holder:

2.2.1 Income arising from transfer of units of IndiGrid held for more than 36 months and subject to securities transaction tax, shall be considered as long term capital assets. Assets not considered as long term capital assets shall be considered as short term capital assets.

As per clause (hc) of explanation 1 to section 2(42A) the period of holding for the said units received in exchange of shares shall include the period for which the shares were held in the SPV.

- 2.2.2 Long term capital gain exceeding Rs. 1,00,000 on transfer of said units of a IndiGrid on or after 1 April 2018 through a recognized stock exchange and subject to securities transaction tax, shall be taxable at the concessional rate of 10% (plus applicable surcharge and cess) as per the provisions of section 112A of the Act introduced vide Finance Act, 2018.

In this regard, new clause (ac) inserted in section 55(2) vide Finance Act, 2018 which provides that cost of acquisition of the aforesaid capital asset (i.e., equity shares or units of equity oriented fund or units of a business trust) acquired prior to 1 February 2018, shall be higher of -

(c) Cost of acquisition of asset; and

(d) Lower of -

- a. the fair market value of the asset (as defined in Explanation to section 55(2)(ac)); and
- b. the full value of consideration received or accruing as a result of the transfer of the capital asset

- 2.2.3 Also, as per section 70 of the Act, long term capital loss arising during a year is allowed to be set-off only against long term capital gains. Balance loss, if any, shall be carried forward and set-off against long term capital gains arising during subsequent eight assessment years.

- 2.2.4 Short-term capital gains arising on transfer of the units of IndiGrid will be chargeable to tax at the rate of 15% (plus applicable surcharge and cess) as per the provisions of section 111A of the Act provided such transaction is subject to securities transaction tax. In case of a Unit-holder being an individual or HUF, where the total taxable income as reduced by short-term capital gains is below the basic exemption limit, the short-term capital gains will be reduced to the extent of the shortfall and only the balance short-term capital gains will be subjected to such tax in accordance with the proviso to sub-section (1) of section 111A of the Act.

- 2.2.5 Short Term Capital Loss computed for the given year is allowed to be set-off against Short Term/ Long Term Capital Gains computed for the said year under section 70 of the Act. Further, as per Section 71 of the Act, short term capital loss for the year cannot be set-off against income under any other heads for the same year. Balance loss, if any, shall be carried forward and set-off against any capital gains arising during subsequent eight assessment years

- 2.2.6 In accordance with, and subject to the conditions including ownership of not more than one residential house on the date of transfer (other than the new residential house referred hereinafter) and to the extent specified in section 54F of the Act, capital gains arising on transfer of a long term capital asset (not being residential house property) shall be exempt from capital gains under section 54F, if the net sale consideration is utilised, within a period of one year before, or two years after the date of transfer, for the purchase of a new residential house, or is utilised for construction of a residential house within three years. If the whole of the net sale consideration is not so utilised, the exemption shall be allowed on a pro rata basis.

- 2.2.7 Where the gains arising on the transfer of the units of IndiGrid are included in the business income of an assessee assessable under the head "Profits and Gains from Business or Profession" and on which securities transaction tax has been charged, such securities transaction tax shall be a deductible expense from business income as per the provisions of section 36(1)(xv) of the Act. The characterisation of gains/ losses, arising from sale of shares, as capital gains or business income would depend on the nature of holding in the hands of the shareholder and various other factors.

- 2.2.8 As per clauses (iie) and (fc) of Explanation 1 to section 115JB, following gains and losses shall not be considered while computing book profits for levy of Minimum Alternate Tax in the year in which such gain/ loss is credited/ debited to statement of profit or loss:

- a) Notional gain/loss arising to a company on transfer of shares of a Special Purpose Vehicle to a Business Trust in exchange of units allotted by such Trust as referred to in section 47(xvii);
- b) Notional gain/ loss resulting from change in carrying amount of the said units; and
- c) Gain arising on transfer of the units referred to in section 47(xvii).

As per clause (k) and (iif) of Explanation 1 to section 115JB any gain/ loss on transfer of such units allotted by the Business Trust shall be considered while computing the book profit for levy of Minimum Alternate Tax in the year of transfer of such units with reference to the cost of the original shares exchanged for units of the Business Trust or the carrying value of such shares at the time of exchange with units of Business Trust (if the shares were carried at a different value than the cost through statement of profit and loss).

For non-resident Unit-Holder (including FII and FPI)

- 2.2.9 Income arising from transfer of units of IndiGrid held for more than 36 months and subject to securities transaction tax, shall be considered as long term capital assets. Assets not considered as long term capital assets shall be considered as short term capital assets.
- 2.2.10 Long term capital gain exceeding Rs. 1,00,000 on transfer of units of a IndiGrid on or after 1 April 2018 through a recognized stock exchange and subject to securities transaction tax, shall be taxable at the concessional rate of 10% (plus applicable surcharge and cess) as per the provisions of section 112A of the Act introduced vide Finance Act, 2018.

In this regard, new clause (ac) inserted in section 55(2) vide Finance Act, 2018 which provides that cost of acquisition of the aforesaid capital asset (i.e., equity shares or units of equity oriented fund or units of a business trust) acquired prior to 1 February 2018, shall be higher of -

- (e) Cost of acquisition of asset; and
- (f) Lower of -
 - a. the fair market value of the asset (as defined in Explanation to section 55(2)(ac)); and
 - b. the full value of consideration received or accruing as a result of the transfer of the capital asset

- 2.2.11 As per section 70 of the Act, long term capital loss arising during a year is allowed to be set-off only against long term capital gains. Balance loss, if any, shall be carried forward and set-off against long term capital gains arising during subsequent eight assessment years.
- 2.2.12 Short-term capital gains arising on transfer of the units of IndiGrid will be chargeable to tax at the rate of 15% (plus applicable surcharge and cess) as per the provisions of section 111A of the Act if such transaction is chargeable to STT.
- 2.2.13 Short Term Capital Loss computed for the given year is allowed to be set-off against Short Term/ Long Term Capital Gains computed for the said year under section 70 of the Act. Further, as per Section 71 of the Act, short term capital loss for the year cannot be set-off against income under any other heads for the same year. Balance loss, if any, shall be carried forward and set-off against any capital gains arising during subsequent eight assessment years
- 2.2.14 In case the gains arising on the transfer of shares of the company are included in the business income of an assessee assessable under the head "Profits and Gains from Business or Profession" and on which securities transaction tax has been charged, such securities transaction tax shall be a deductible expense from business income as per the provisions of section 36(1)(xv) of the Act.
- 2.2.15 In accordance with, and subject to the conditions including ownership of not more than one residential house on the date of transfer (other than the new residential house referred

hereinafter) and to the extent specified in section 54F of the Act, capital gains arising on transfer of a long term capital asset (not being residential house property) shall be exempt from capital gains under section 54F, if the net sale consideration is utilised, within a period of one year before, or two years after the date of transfer, for the purchase of a new residential house, or is utilised for construction of a residential house within three years. If the whole of the net sale consideration is not so utilised, the exemption shall be allowed on a pro rata basis.

- 2.2.16 Under the provisions of section 90(2) of the Act, a non-resident will be governed by the provisions of the Agreement for Avoidance of Double Taxation (AADT) between India and the country of tax residence of the non-resident and the provisions of the Act apply to the extent they are more beneficial to the assessee.
- 2.2.17 As per Explanation 4 to section 115JB(2) and Central Board of Direct Tax press release dated 24 September 2015, the provisions of section 115JB shall not be applicable to a foreign company if the foreign company is a resident of a country having DTAA with India and such foreign company does not have a permanent establishment within the definition of the term in the relevant DTAA, or the foreign company is a resident of a country which does not have a DTAA with India and such foreign company is not required to seek registration under section 592 of the Companies Act 1956 or section 380 of the Companies Act 2013.

For unit-holders who are Foreign Portfolio Investors ('FPIs')/ Foreign Institutional Investors ('FIIs') (in addition to paragraphs 2.2.12 to 2.2.17)

- 2.2.18 As per section 2(14) of the Act, transfer of any shares/ securities by FPIs being invested in accordance with the regulations made under the Securities and Exchange Board of India Act, 1992 shall be deemed to be treated as Capital Gains.
- 2.2.19 As per section 196D, tax is not deducted from any income, by way of capital gains arising from the transfer of units to Foreign Institutional Investor.
- 2.2.20 In respect of non-residents, the tax rates and consequent taxation mentioned above will be further subject to any benefits available under the Tax Treaty, if any, between India and the country in which the FII has Fiscal domicile. As per the provisions of section 90(2) of the Act, the provisions of the Act would prevail over the provisions of the Tax Treaty to the extent they are more beneficial to the FII.

For unit-holders who are Mutual Funds:

- 2.2.21 Under section 10(23D) of the Act, any income earned by a Mutual Fund registered under the Securities and Exchange Board of India Act, 1992, or a Mutual Fund set up by a public sector bank or a public financial institution, or a Mutual Fund authorised by the Reserve Bank of India would be exempt from income-tax, subject to such conditions as the Central Government may by notification in the Official Gazette specify in this behalf.
- 2.2.22 IndiGrid is not required to withhold tax on interest payment to Mutual Fund set up under section 10(23D) of the Act.

For Venture Capital Companies/ Funds:

- 2.2.23 Under Section 10(23FB) of the Act, any income of Venture Capital Company to whom the certificate of registration is granted under SEBI (Venture Capital Funds) Regulations, 1996 before 21 May 2012 or as a sub-category I Alternative Investment Fund and is regulated under SEBI (Alternative Investment Funds Regulations) 2012, under the SEBI Act, 1992, from a Venture Capital Undertaking would be exempt from income tax, subject to conditions specified therein.

- 2.2.24 As per Section 115U of the Act, any income derived by a person from his investment in Venture Capital Company/ Venture Capital Fund would be taxable in the hands of the person making an investment in the same manner as if it were the income accruing or arising to or received by such person had the investments been made directly in the Venture Capital Undertaking.

For Investment Funds:

- 2.2.25 Income of an Investment Fund, being a Trust, Company, Limited Liability Partnership or a body corporate which has been granted a certificate of registration is granted under and is regulated under SEBI (Alternative Investment Funds Regulations), 2012 as Category I or Category II Alternate Investment Fund, other than the income chargeable under the head 'profits and gains of business and profession', shall be exempt from tax under 10(23FBA).
- 2.2.26 As per Section 115UB of the Act, any income derived by a person from his investment in an Investment Fund covered under section 10(23FBA), other than that proportion which is of the same nature as 'profits and gains of business and profession', would be taxable in the hands of the person making such investment in the same manner as if it were the income accruing or arising to or received by such person had the investments made by the Investment Fund been made directly by him.

Applicability of other provisions

No income tax is deductible at source from income by way of capital gains arising to a resident shareholder under the present provisions of the Act. However, as per the provisions of Section 195 of the Act, any income by way of capital gains payable to non-residents may be subject to withholding of tax at the rate under the domestic tax laws or under the tax laws or under the Double Tax Avoidance Agreement (DTAA), whichever is beneficial to the assessee, unless a lower withholding tax certificate is obtained from the tax authorities. However, the non-resident investor will have to furnish a certificate of his being a tax resident in a country outside India and a suitable declaration for not having a fixed base/ permanent establishment in India, to get the benefit of the applicable DTAA and such other document as may be prescribed as per the provision of section 90(4) of Act.

Pursuant to amendment in section 206AA vide notification 53/2016 dated 24 June 2016 introducing Rule 37BC, requirement of quoting permanent account number (PAN) in case of certain specified income is eliminated by maintaining specified documents as mentioned in the said Rule.

Notes:

1. The income-tax rates specified in this note are as applicable for the financial year 2018-19, and are exclusive of surcharge and education cess, if any. Rate of surcharge and cess are provided below:

Surcharge:

Domestic companies:

If the net income does not exceed INR 10 million - Nil

If the net income exceeds INR 10 million but does not exceed INR 100 million - 7 per cent

If the net income exceeds INR 100 million - 12 per cent

Foreign companies:

If the net income does not exceed INR 10 million - Nil

If the net income exceeds INR 10 million but does not exceed INR 100 million - 2 per cent

If the net income exceeds INR 100 million - 5 per cent

Individuals, HUF, AOP and BOI:

If the net income does not exceed INR 5 million - Nil

If the net income exceeds INR 5 million but does not exceed INR 10 million - 10%

If the net income exceeds INR 10 million - 15%

For other assesseees surcharge at the rate of 12% shall be applicable if the total income exceeds INR 10 million. Surcharge on dividend distribution tax shall be at the rate of 12%.

Education cess:

In all cases, education cess will be levied at the rate of 4 per cent of income-tax and surcharge.

2. The above statement of possible direct tax benefits sets out the provisions of law in a summary manner only and is not a complete analysis or listing of all potential tax consequences of the purchase, ownership and disposal of Shares and units.
3. The stated benefits will be available only to the sole/ first named holder in case the units are held by joint holders.
4. In respect of non-residents, the tax rates and the consequent taxation mentioned above shall be further subject to any benefits available under the applicable DTAA, if any, between India and the country in which the non-resident has fiscal domicile.
5. This statement is intended only to provide general information to the investors and is neither designed nor intended to be substituted for professional tax advice. In view of the individual nature of tax consequences, each investor is advised to consult his/her own tax advisor with respect to specific tax consequences of his/her participation in the scheme.
6. No assurance is given that the revenue authorities/courts will concur with the views expressed herein. Our views are based on the existing provisions of law and its interpretation, which are subject to changes from time to time. We do not assume responsibility to update the views consequent to such changes. We shall not be liable to any claims, liabilities or expenses relating to this assignment except to the extent of fees relating to this assignment, as finally judicially determined to have resulted primarily from bad faith or intentional misconduct. We will not be liable to any other person in respect of this statement.

7. This statement of possible direct tax benefits enumerated above is as per the Act as amended by the Finance Act, 2019. The above statement of possible Direct-tax Benefits sets out the possible tax benefits available to the company and its shareholders under the current tax laws presently in force in India. Several of these benefits available are dependent on the Company or its shareholders fulfilling the conditions prescribed under the relevant tax laws.
8. The information provided above sets out the possible tax benefits available to the unit holders in a summary manner only and is not a complete analysis or listing of all potential tax consequences of the purchase, ownership and disposal of equity shares and units, under the current tax laws presently in force in India. It is not exhaustive or comprehensive and is not intended to be a substitute for professional advice. Investors are advised to consult their own tax consultant with respect to the tax implications of an investment in the equity shares and units particularly in view of the fact that certain recently enacted legislation may not have a direct legal precedent or may have a different interpretation impacting the benefits, which an investor can avail.

U.S. Federal Income Taxation

The following discussion describes certain U.S. federal income tax consequences to U.S. Holders (as defined below), and solely to the extent described below under “—*FATCA*”, to non-U.S. persons, of an investment in the Units. This summary applies only to U.S. Holders that acquire Units in exchange for cash in the Issue, hold Units as capital assets within the meaning of Section 1221 of the Code (as defined below) and have the U.S. dollar as their functional currency.

This discussion is based on the tax laws of the United States as in effect on the date of this Preliminary Offering Memorandum, including the Internal Revenue Code of 1986, as amended (the “**Code**”), and U.S. Treasury regulations in effect or, in some cases, proposed, as of the date of this Preliminary Offering Memorandum, as well as judicial and administrative interpretations thereof available on or before such date. All of the foregoing authorities are subject to change, and any such change could apply retroactively and could affect the U.S. federal income tax consequences described below. The statements in this Preliminary Offering Memorandum are not binding on the U.S. Internal Revenue Service (the “**IRS**”) or any court, and thus we can provide no assurance that the U.S. federal income tax consequences discussed below will not be challenged by the IRS or will be sustained by a court if challenged by the IRS. Furthermore, this summary does not address the U.S. federal Medicare tax on net investment income, any estate or gift tax consequences, any state, local or non-U.S. tax consequences or any other tax consequences other than U.S. federal income tax consequences.

The following discussion does not describe all the tax consequences that may be relevant to any particular investor or to persons in special tax situations such as:

- banks and certain other financial institutions;
- regulated investment companies;
- real estate investment trusts;
- insurance companies;
- broker-dealers;
- traders that elect to mark to market;
- tax-exempt entities;
- individual retirement accounts or other tax-deferred accounts;
- persons liable for alternative minimum tax;
- U.S. expatriates;
- persons holding Units as part of a straddle, hedging, constructive sale, conversion or integrated transaction;
- persons that own directly, indirectly or through attribution 10% or more of the total IndiGrid’s voting power or value;
- persons subject to special tax accounting rules as a result of any item of gross income with respect to the Units being taken into account in an applicable financial statement;
- persons that are resident or ordinarily resident, or have a permanent establishment, in a jurisdiction outside the United States;
- persons who acquired Units pursuant to the exercise of any employee share option or otherwise as compensation; or
- partnerships or other pass-through entities and persons holding Units through partnerships or other pass-through entities.

PROSPECTIVE PURCHASERS ARE URGED TO CONSULT THEIR TAX ADVISORS ABOUT THE APPLICATION OF THE U.S. FEDERAL TAX RULES TO THEIR PARTICULAR CIRCUMSTANCES AS WELL AS THE STATE, LOCAL AND NON-U.S. TAX CONSEQUENCES TO THEM OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF UNITS.

As used herein, the term “**U.S. Holder**” means a beneficial owner of Units that, for U.S. federal income tax purposes, is or is treated as:

- an individual who is a citizen or resident of the United States;
- a corporation created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate whose income is subject to U.S. federal income taxation regardless of its source; or

- a trust that (1) is subject to the supervision of a court within the United States and the control of one or more U.S. persons or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

If a partnership (or any other entity or arrangement treated as a partnership for United States federal income tax purposes) holds the Units, the tax treatment of a partner in such partnership generally will depend on such partner's status and the activities of the partnership. A U.S. Holder that is a partner in such partnership should consult its tax advisor.

Passive Foreign Investment Company Rules

Based on the nature of our revenue and the way our business is operated, there is a significant risk that IndiGrid will be a PFIC for U.S. federal income tax purposes. IndiGrid will be classified as a passive foreign investment company (a "PFIC") for any taxable year if either:

- (1) at least 75% of its gross income is "passive income" for purposes of the PFIC rules, or
- (2) at least 50% of the value of its assets (based on an average of the quarterly value of the assets) is attributable to assets that produce or are held for the production of passive income.

For this purpose, IndiGrid will be treated as owning its proportionate share of the assets and earning its proportionate share of the income of any other corporation in which it owns, directly or indirectly, 25 percent or more (by value) of the stock.

Whether a non-U.S. corporation is treated as a PFIC is determined on an annual basis. If IndiGrid is a PFIC for any year during which a U.S. Holder holds Units, the Units generally will continue to be treated as an interest in a PFIC for all succeeding years during which a U.S. Holder holds the Units, unless (i) the U.S. Holder has made QEF or mark-to-market election effective from the first year of the U.S. Holder's holding period for the Units in which IndiGrid is a PFIC (or has made a "deemed sale" election in connection with making a QEF or mark-to-market in a later year) or (ii) IndiGrid ceases to be a PFIC and the U.S. Holder makes a "deemed sale" election with respect to the Units. If a U.S. Holder makes a "deemed sale" election in connection with IndiGrid's ceasing to be a PFIC, the U.S. Holder will be deemed to have sold the Units at their fair market value on the last day of the last taxable year in which IndiGrid is a PFIC, and any gain from the deemed sale would be subject to the excess distribution rules described below. After the deemed sale election, a U.S. Holder's Units with respect to which the deemed sale election was made will not be treated as interests in a PFIC unless IndiGrid subsequently become a PFIC. The QEF and mark-to-market elections are discussed further below.

For each taxable year that IndiGrid is treated as a PFIC with respect to a U.S. Holder's Units, the U.S. Holder will be subject to special tax rules with respect to any "excess distribution" (as defined below) received and any gain realized from a sale or disposition (including a pledge) of the Units (collectively the "excess distribution rules"), unless the U.S. Holder makes a valid QEF or mark-to-market election as discussed below. Distributions received by a U.S. Holder in a taxable year that are greater than 125% of the average annual distributions received during the shorter of the three preceding taxable years or the U.S. Holder's holding period for the Units will be treated as excess distributions. Under these special tax rules:

- (1) the excess distribution or gain will be allocated ratably over the U.S. Holder's holding period for the Units;
- (2) the amount allocated to the current taxable year, and any taxable years in the U.S. Holder's holding period prior to the first taxable year in which IndiGrid is a PFIC, will be treated as ordinary income; and
- (3) the amount allocated to each other taxable year will be subject to the highest tax rate in effect for individuals or corporations, as applicable, for each such year and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each such year.

The tax liability for amounts allocated to taxable years prior to the year of disposition or excess distribution cannot be offset by any net operating losses, and gains (but not losses) realized on the sale of the Units cannot be treated as capital gains, even though the U.S. Holder holds the Units as capital assets.

IndiGrid may hold, directly or indirectly, equity interests in subsidiaries and other entities that are PFICs (collectively, "**Lower-tier PFICs**"). If IndiGrid is a PFIC, under attribution rules, a U.S. Holder will be deemed to own its proportionate share of any Lower-tier PFICs and will be subject to U.S. federal income tax according to the excess distribution rules described in the paragraph above on (i) "excess distributions" by a Lower-tier PFIC and (ii) a disposition (or deemed disposition) of shares of a Lower-tier PFIC, in each case as if the U.S. Holder owned such shares directly, even though the U.S. Holder has not received the proceeds of those distributions or

dispositions directly. U.S. Holders should consult their tax advisors regarding the application of the PFIC rules to any of IndiGrid's subsidiaries.

If a non-U.S. corporation is a PFIC, a U.S. Holder of shares in that corporation may avoid taxation under the excess distribution rules described above by making a "qualified electing fund" election (a "**QEF election**"). However, a U.S. Holder may make a QEF election with respect to its Units only if IndiGrid provides U.S. Holders on an annual basis with certain financial information specified under applicable U.S. Treasury Regulations. If the IRS or other applicable tax authority were to determine that IndiGrid is a PFIC, IndiGrid would expect to provide U.S. Holders with the required information on an annual basis to allow U.S. Holders to make a QEF election with respect to the Units following such a determination. There can be no assurance, however, that IndiGrid would timely provide such information. The failure to provide such information on an annual basis could prevent a U.S. Holder from making a QEF election or result in the invalidation or termination of a U.S. Holder's prior QEF election.

A U.S. Holder that makes a QEF election with respect to its Units would generally be required to include in income for each year that IndiGrid is treated as a PFIC the U.S. Holder's pro rata share of IndiGrid's ordinary earnings for the year (which would be subject to tax as ordinary income) and net capital gains for the year (which would be subject to tax at the rates applicable to long-term capital gains), without regard to the amount of any distributions made in respect of the Units. Any net deficits or net capital losses of IndiGrid for a taxable year would not be passed through and included on the tax return of the U.S. Holder, however. A U.S. Holder's basis in the Units would be increased by the amount of income inclusions under the qualified electing fund rules. Dividends actually paid on the Units generally would not be subject to U.S. federal income tax to the extent of prior income inclusions and would reduce the U.S. Holder's basis in the Units by a corresponding amount.

If IndiGrid owns any interests in a Lower-tier PFIC, a U.S. Holder generally must make a separate QEF election for each Lower-Tier PFIC, subject to IndiGrid's providing the relevant tax information for each Lower-Tier PFIC on an annual basis. Otherwise, a U.S. Holder would continue to be subject to the excess distribution rules with respect to its indirect interest in any Lower-tier PFICs as described above, even if a QEF election is made for IndiGrid.

If a U.S. Holder does not make a QEF election (or a mark-to-market election, as discussed below) effective from the first taxable year of a U.S. Holder's holding period for the Units in which IndiGrid is a PFIC, then the Units will generally continue to be treated as an interest in a PFIC, and the U.S. Holder generally will remain subject to the excess distribution rules. A U.S. Holder that first makes a QEF election in a later year may avoid the continued application of the excess distribution rules to its Units by making a "deemed sale" election. In that case, the U.S. Holder will be deemed to have sold the Units at their fair market value on the first day of the taxable year in which the QEF election becomes effective, and any gain from such deemed sale would be subject to the excess distribution rules described above.

U.S. Holders should consult their tax advisors as to the availability and desirability of a QEF election.

Alternatively, a U.S. Holder of "marketable stock" (as defined below) in a PFIC may make a mark-to-market election for such stock to elect out of the excess distribution rules discussed above. If a U.S. Holder makes a mark-to-market election with respect to its Units, the holder will include in income for each year that IndiGrid is treated as a PFIC with respect to such Units an amount equal to the excess, if any, of the fair market value of the Units as of the close of the U.S. Holder's taxable year over the adjusted basis in the Units. A U.S. Holder will be allowed a deduction for the excess, if any, of the adjusted basis of the Units over their fair market value as of the close of the taxable year. However, deductions will be allowed only to the extent of any net mark-to-market gains on the Units included in the U.S. Holder's income for prior taxable years. Amounts included in income under a mark-to-market election, as well as gain on the actual sale or other disposition of the Units, will be treated as ordinary income. Ordinary loss treatment will also apply to the deductible portion of any mark-to-market loss on the Units, as well as to any loss realized on the actual sale or disposition of the Units, to the extent the amount of such loss does not exceed the net mark-to-market gains for such Units previously included in income. A U.S. Holder's basis in the Units will be adjusted to reflect any mark-to-market income or loss. If a U.S. Holder makes a mark-to-market election, any distributions IndiGrid makes would generally be subject to the rules discussed below under "—Dividends and Other Distributions on the Units," except the lower rates applicable to qualified dividend income would not apply.

The mark-to-market election is available only for "marketable stock," which is stock that is regularly traded on a qualified exchange or other market, as defined in applicable U.S. Treasury regulations. The Units are proposed to

be listed on the Stock Exchanges. A “qualified exchange” includes a non-U.S. exchange that is regulated by a government authority in the jurisdiction in which the exchange is located and in respect of which certain other requirements are met. Because a mark-to-market election cannot be made for equity interests in any Lower-tier PFICs, a U.S. Holder that does not make the applicable QEF elections generally will continue to be subject to the excess distribution rules with respect to its indirect interest in any Lower-tier PFICs as described above, even if a mark-to-market election is made for IndiGrid. There can be no assurance that either of the Stock Exchanges will be a qualified exchange or that trading in the Units will be sufficiently regular to qualify the Units as marketable stock.

If a U.S. Holder does not make a mark-to-market election (or a QEF election, as discussed above) effective from the first taxable year of a U.S. Holder’s holding period for the Units in which IndiGrid is a PFIC, then the U.S. Holder generally will remain subject to the excess distribution rules. A U.S. Holder that first makes a mark-to-market election with respect to the Units in a later year will continue to be subject to the excess distribution rules during the taxable year for which the mark-to-market election becomes effective, including with respect to any mark-to-market gain recognized at the end of that year. In subsequent years for which a valid mark-to-market election remains in effect, the excess distribution rules generally will not apply.

U.S. Holders should consult their tax advisors as to the availability and desirability of a mark-to-market election, as well as the impact of such election on interests in any Lower-tier PFICs.

A U.S. Holder of a PFIC may be required to file an IRS Form 8621 on an annual basis. U.S. Holders should consult their tax advisors regarding any reporting requirements that may apply to them if IndiGrid is a PFIC.

U.S. HOLDERS ARE STRONGLY URGED TO CONSULT THEIR TAX ADVISORS REGARDING THE POTENTIAL IMPACT OF INDIGRID’S BEING A PFIC ON AN INVESTMENT IN THE UNITS.

Dividends and Other Distributions on Units

Subject to the passive foreign investment company rules discussed above, the gross amount of distributions made by IndiGrid with respect to Units (including the amount of any non-U.S. taxes withheld therefrom, if any) generally will be includible as dividend income in a U.S. Holder’s gross income on the date on which the dividends are actually or constructively received, to the extent such distributions are paid out of IndiGrid’s current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts, if any, not treated as dividend income will constitute a return of capital and will first be applied to reduce a U.S. Holder’s tax basis in its Units, but not below zero, and then any excess will be treated as capital gain realized on a sale or other disposition of the Units. If IndiGrid does provide calculations of its earnings and profits under U.S. federal income tax principles, a U.S. Holder should expect all cash distributions to be reported as dividends for U.S. federal income tax purposes. Such dividends will not be eligible for the dividends-received deduction allowed to U.S. corporations with respect to dividends received from other U.S. corporations. Dividends received by non-corporate U.S. Holders may be “qualified dividend income,” which is taxed at the lower applicable capital gains rate, provided that (1) IndiGrid is eligible for the benefits of the income tax treaty between the United States and India (the “**Treaty**”), (2) IndiGrid is not a passive foreign investment company (as discussed above) for either the taxable year in which the dividend was paid or the preceding taxable year, (3) certain holding period and other requirements are met. U.S. Holders should consult their tax advisors regarding the availability of the lower rate for dividends paid with respect to Units.

The amount of any distribution paid in foreign currency will be equal to the U.S. dollar value of such currency, translated at the spot rate of exchange on the date such distribution is received, regardless of whether the payment is in fact converted into U.S. dollars at that time.

Dividends on Units generally will constitute foreign source income for foreign tax credit limitation purposes, subject to certain complex conditions and limitations, Indian taxes withheld on any distributions on Units may be eligible for credit against a U.S. Holder’s federal income tax liability. If a refund of the tax withheld is available under the laws of India or under the Treaty, the amount of tax withheld that is refundable will not be eligible for such credit against a U.S. Holder’s U.S. federal income tax liability (and will not be eligible for the deduction against U.S. federal taxable income). If the dividends constitute qualified dividend income as discussed above, the amount of the dividend taken into account for purposes of calculating the foreign tax credit limitation will generally be limited to the gross amount of the dividend, multiplied by the reduced rate applicable to the qualified dividend income, divided by the highest rate of tax normally applicable to dividends. The limitation on foreign

taxes eligible for credit is calculated separately with respect to specific classes of income. For this purpose, dividends distributed by IndiGrid with respect to Units will generally constitute “passive category income.” The rules relating to the determination of the U.S. foreign tax credit are complex, and U.S. Holders should consult their tax advisors regarding the availability of a foreign tax credit in their particular circumstances and the possibility of claiming an itemized deduction (in lieu of the foreign tax credit) for any foreign taxes paid or withheld.

Sale or Other Taxable Disposition of Units

Subject to the passive foreign investment company rules discussed above, upon a sale or other taxable disposition of Units, a U.S. Holder will recognize capital gain or loss in an amount equal to the difference between the amount realized and the U.S. Holder’s adjusted tax basis in such Units. Any such gain or loss generally will be treated as long-term capital gain or loss if the U.S. Holder’s holding period in the Units exceeds one year. Non-corporate U.S. Holders (including individuals) generally will be subject to U.S. federal income tax on long-term capital gain at preferential rates. The deductibility of capital losses is subject to significant limitations.

Gain or loss, if any, realized by a U.S. Holder on the sale or other disposition of Units generally will be treated as U.S. source gain or loss for U.S. foreign tax credit limitation purposes. As a result, the use of U.S. foreign tax credits relating to any Indian income tax imposed upon gains in respect of the Units may be limited. U.S. Holders should consult their tax advisors regarding the tax consequences if Indian taxes are imposed on a taxable disposition of Units and their ability to credit any Indian tax against their U.S. federal income tax liability.

If the consideration received upon the sale or other disposition of Units is paid in foreign currency, the amount realized will be the U.S. dollar value of the payment received, translated at the spot rate of exchange on the date of taxable disposition. If Units are treated as traded on an established securities market, a cash basis U.S. Holder and an accrual basis U.S. Holder who has made a special election (which must be applied consistently from year to year and cannot be changed without the consent of the IRS) will determine the U.S. dollar value of the amount realized in foreign currency by translating the amount received at the spot rate of exchange on the settlement date of the sale. An accrual basis U.S. Holder that does not make the special election will recognize exchange gain or loss to the extent attributable to the difference between the exchange rates on the sale date and the settlement date, and such exchange gain or loss generally will constitute ordinary income or loss.

A U.S. Holder’s initial tax basis in Units generally will equal the cost of such Units (generally determined in U.S. dollars at the time of purchase in the case any Units purchased with a foreign currency).

Information Reporting and Backup Withholding

Dividend payments with respect to Units and proceeds from the sale, exchange or redemption of Units may be subject to information reporting to the IRS and U.S. backup withholding. A U.S. Holder may be eligible for an exemption from backup withholding if the U.S. Holder furnishes a correct taxpayer identification number and makes any other required certification or is otherwise exempt from backup withholding. U.S. Holders who are required to establish their exempt status may be required to provide such certification on IRS Form W-9. U.S. Holders should consult their tax advisors regarding the application of the U.S. information reporting and backup withholding rules.

Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against a U.S. Holder’s U.S. federal income tax liability, and such U.S. Holder may obtain a refund of any excess amounts withheld under the backup withholding rules by timely filing an appropriate claim for refund with the IRS and furnishing any required information.

Information with Respect to Foreign Financial Assets

Certain U.S. Holders are required to report their holdings of certain foreign financial assets, including equity of foreign entities, if the aggregate value of all of these assets exceeds certain threshold amounts by filing IRS Form 8938 with their federal income tax return. Our ordinary shares are expected to constitute foreign financial assets subject to these requirements unless the ordinary shares are held in an account at certain financial institutions. U.S. Holders are urged to consult their tax advisors regarding their information reporting obligations, if any, with respect to their ownership and disposition of our ordinary shares, and the significant penalties for non-compliance.

U.S. Foreign Account Tax Compliance Act (FATCA)

Provisions under Sections 1471 through 1474 of the Code and applicable U.S. Treasury Regulations commonly referred to as “FATCA” generally impose 30% withholding on certain “withholdable payments” and, subject to the proposed regulations discussed below, may impose such withholding on “foreign passthru payments” made by a “foreign financial institution” (each as defined in the Code) that has entered into an agreement with the U.S. Internal Revenue Service to perform certain diligence and reporting obligations with respect to the foreign financial institution’s U.S. owned accounts. Under recently proposed regulations, any withholding on foreign passthru payments would apply to passthru payments made on or after the date that is two years after the date of publication in the Federal Register of applicable final regulations defining foreign passthru payments. Although these recent regulations are not final, taxpayers generally may rely on them until final regulations are issued.

The United States has entered into an intergovernmental agreement, or IGA, with India, which modifies the FATCA withholding regime described above. It is not yet clear how foreign passthru payments will be addressed under FATCA. IndiGrid could be subject to these diligence, reporting and withholding obligations if it were treated as a financial institution under FATCA or the IGA. Prospective investors should consult their tax advisors regarding the potential impact of FATCA, the India IGA and any non-U.S. legislation implementing FATCA on the investment in the Units.

THE DISCUSSION ABOVE IS A GENERAL SUMMARY. IT DOES NOT COVER ALL TAX MATTERS THAT MAY BE IMPORTANT TO YOU. EACH PROSPECTIVE PURCHASER SHOULD CONSULT ITS TAX ADVISOR ABOUT THE TAX CONSEQUENCES OF AN INVESTMENT IN UNITS UNDER THE INVESTOR’S OWN CIRCUMSTANCES.

SPECIAL PURPOSE COMBINED FINANCIAL STATEMENTS

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INDEPENDENT AUDITORS' REPORT

To
The Board of Directors
Sterlite Investment Managers Limited
Maker Maxity, 5 North Avenue, Level 5,
Bandra Kurla Complex, Bandra East Mumbai
Mumbai MH 400051

Report on the Combined Financial Statements

We have audited the accompanying Special Purpose Combined Financial Statements of Bhopal Dhule Transmission Company Limited, Jabalpur Transmission Company Limited, Maheshwaram Transmission Limited, RAPP Transmission Company Limited, Purulia & Kharagpur Transmission Company Limited, Patran Transmission Company Limited, Odisha Generation Phase II Transmission Limited and NRSS XXIX Transmission Limited (together referred to as the "SPV Group"), which comprise the Combined Balance Sheets as at March 31, 2019, March 31, 2018 and March 31, 2017, the Combined Statements of Profit and Loss (including Other Comprehensive Income), the Combined Cash Flow Statements, the Combined Statements of Changes in Equity for the years ended March 31, 2019, March 31, 2018 and March 31, 2017 and a Summary of Significant Accounting Policies and Other Explanatory Information (collectively, the "Combined Financial Statements").

The Combined Financial Statements have been prepared in accordance with the basis of preparation as set out in note 2.1 to the Combined Financial Statements.

Management's Responsibility for the Combined Financial Statements

The Board of Directors of Sterlite Investment Managers Limited (the "Investment Manager") is responsible for the preparation of these Combined Financial Statements that give a true and fair view of the state of affairs (financial position), profit or loss (financial performance including other comprehensive income), cash flows and changes in equity of the SPV Group in accordance with the basis of preparation as set out in note 2.1 to the Combined Financial Statements. This includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Combined Financial Statements that give a true and fair view and are free from material misstatement whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the Combined Financial Statements based on our audit. We conducted our audit in accordance with the Standards on Auditing, issued by the Institute of Chartered Accountants of India. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the Combined Financial Statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Combined Financial Statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the

Combined Financial Statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the management's preparation of Combined Financial Statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the Combined Financial Statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Combined Financial Statements.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid Combined Financial Statements give a true and fair view of the state of affairs (financial position) of the SPV Group as at March 31, 2019, March 31, 2018 and March 31, 2017 and of its losses (financial performance including other comprehensive income), its cash flows and the changes in equity for the years ended March 31, 2019, March 31, 2018 and March 31, 2017 in accordance with the basis of preparation as set out in note 2.1 to the Combined Financial Statements.

Emphasis of matter - Basis of Accounting

We draw attention to Note 2.1 to the Combined Financial Statements, which describes that the SPV Group has not formed a separate legal group of entities during the years ended March 31, 2019, March 31, 2018 and March 31, 2017, which also describes the basis of preparation of the Combined Financial Statements, including the approach to and the purpose for preparing them. Consequently, the SPV Group's Combined Financial Statements may not necessarily be indicative of the financial performance and financial position of the SPV Group that would have occurred if it had operated as a separate standalone group of entities during the periods presented. The Combined Financial Statements have been prepared solely in connection with the proposed Preferential Issue of units by India Grid Trust and for inclusion in the Preliminary Placement Document and the Placement Document prepared by the Investment Manager. As a result, the Combined Financial Statements may not be suitable for another purpose.

Our opinion is not modified in respect of this matter.

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Other Matter

We did not audit the financial statements and other financial information, in respect of Patran Transmission Company Limited as of and for the years ended March 31, 2018 and March 31, 2017, whose financial statements reflected total assets of Rs 2,238.93 million and Rs. 2,033.97 million and net assets of Rs 475.36 million and Rs 485.22 million as at March 31, 2018 and March 31, 2017 respectively and total revenues of Rs 243.68 million and Rs 85.60 million and net cash inflows of Rs 109.74 million and Rs. 11.44 million for the years ended March 31, 2018 and March 31, 2017 respectively. These financial statements and other financial information have been audited by other auditors, which financial statements, other financial information and auditor's reports have been furnished to us by the management. Our opinion on the Combined Financial Statements, in so far as it relates to the amounts and disclosures included in respect of the above entity, is based solely on the reports of such other auditors.

For S R B C & CO LLP
Chartered Accountants
Firm registration number: 324982E/E300003

per Aryn Jassani
Partner
Membership Number: 046447

Place: Mumbai
Date: April 30, 2019

SPV Group
(as defined in Note 1 - General Information)
Special Purpose Combined Balance Sheet as on

	Note	31 March 2019 (Rs. in million) ^(a)	31 March 2018 (Rs. in million) ^(a)	31 March 2017 (Rs. in million) ^(a)
ASSETS				
Non-current assets				
Property, plant and equipment	3A	77,516.07	55,793.42	46,616.10
Capital work-in-progress	3A	11,227.41	28,945.71	18,964.65
Financial assets				
Other non-current financial assets	4	3.99	12.89	3.48
Deferred tax assets (net)	5	-	-	16.27
Other non current assets	6	280.03	3,878.86	3,818.30
		89,027.50	88,630.88	69,418.80
Current assets				
Financial assets				
i. Loans	7	2,757.62	-	-
ii. Investments	8	1,383.63	210.03	812.01
iii. Trade receivables	9	1,983.43	1,235.34	1,070.93
iv. Cash and cash equivalents	10	367.83	750.49	630.33
v. Bank Balances other than (iv) above	11	23.47	70.36	30.58
vi. Other current financial assets	4	2,731.30	597.11	783.76
Other current assets	6	113.75	101.21	215.53
		9,361.03	2,964.54	3,543.14
Total assets		98,388.53	91,595.42	72,961.94
EQUITY AND LIABILITIES				
Equity				
Equity Share Capital	12A	859.36	856.75	856.75
Other equity				
Securities premium	12B	7,431.89	7,162.57	7,162.57
Retained earnings		(6,548.84)	(2,896.49)	(2,465.96)
Other reserves		75.24	-	-
Adjustment on combination of SPVs		5,755.93	5,969.19	-
		7,573.58	11,092.02	5,553.36
Liabilities				
Non-current liabilities				
Financial Liabilities				
i. Borrowings	13A	84,037.89	64,884.65	43,778.52
Deferred tax liability (net)	5	236.55	88.76	68.11
		84,274.44	64,973.41	43,846.63
Current liabilities				
Financial liabilities				
i. Borrowings	13B	1,811.42	9,951.69	11,861.08
ii. Trade payables	14	189.91	129.03	110.37
iii. Other financial liabilities	15	4,006.49	5,410.86	11,553.28
Current Tax Liability		-	6.43	4.06
Other current liabilities	16	532.69	31.98	33.16
		6,540.51	15,529.99	23,561.95
Total liabilities		90,814.95	80,503.40	67,408.58
Total equity and liabilities		98,388.53	91,595.42	72,961.94
Summary of significant accounting policies	2.2			

^(a) The above financial information represents the combined financial position of the entities comprising the SPV Group. (Refer Note 1 - General Information and Note 2.1 - Basis of Preparation)

The accompanying notes are an integral part of the special purpose combined financial statements.

As per our report of even date

For S R B C & Co LLP
Firm Registration No. 324982E/E300003
Chartered Accountants

per **Amy Jassani**
Partner
Membership Number: 046447

Place: Mumbai
Date: April 30, 2019

**For and on behalf of the Board of Directors of
Sterlite Investment Managers Limited
(as Investment Manager of India Grid Trust)**

Pratik Agarwal
Director
DIN: 03040062

Place: Mumbai
Date: April 30, 2019

Harsh Shah
CEO & Whole Time Director
DIN: 02496122

Place: Mumbai
Date: April 30, 2019

SPV Group
(as defined in Note 1 - General Information)
Special Purpose Combined Statement of Profit and Loss for the year ended

	Note	31 March 2019 (Rs. in million) ^(a)	31 March 2018 (Rs. in million) ^(a)	31 March 2017 (Rs. in million) ^(a)
INCOME				
Revenue from contracts with customers	17	9,905.19	7,487.27	6,209.48
Other income	18	4.35	69.43	10.03
Total income (I)		9,909.54	7,556.70	6,219.51
EXPENSES				
Employee benefits expense	19	-	0.22	37.76
Other expenses	20	741.54	500.63	323.55
Total expenses (II)		741.54	500.85	361.31
Earnings before interest, tax, depreciation and amortisation (EBITDA) (I) - (II)		9,168.00	7,055.85	5,858.20
Depreciation and amortisation expense	23	2,364.62	1,798.07	1,619.11
Impairment of property, plant and equipment	32	991.57	287.81	2,474.06
Finance costs	21	7,978.58	5,321.42	3,477.88
Finance income	22	(94.96)	(64.12)	(32.19)
Loss before tax		(2,071.81)	(287.33)	(1,680.66)
Tax expense	5			
Current tax		154.23	155.03	163.47
Less: MAT credit entitlement		(154.23)	(216.54)	(52.63)
Net current tax expense		-	(61.51)	110.84
Deferred tax charge/(credit)		297.45	253.46	289.75
Income tax for earlier years		0.12	(48.75)	-
Total tax expenses		297.57	143.20	400.59
Loss for the year		(2,369.38)	(430.53)	(2,081.25)
Other comprehensive income				
Other comprehensive income to be reclassified to profit or loss in subsequent periods		-	-	-
Other comprehensive income not to be reclassified to profit or loss in subsequent periods		-	-	-
Other comprehensive income for the year		-	-	-
Total comprehensive income for the year		(2,369.38)	(430.53)	(2,081.25)
Earnings per share - refer note 24				
Summary of significant accounting policies	2.2			

^(a) The above financial information represents the combined financial performance of the entities comprising the SPV Group. (Refer Note 1 - General Information and Note 2.1 - Basis of Preparation)

The accompanying notes are an integral part of the special purpose combined financial statements

As per our report of even date

For S R B C & Co LLP
Firm Registration No. 324982E/E300003
Chartered Accountants

per **Amyr Jassani**
Partner
Membership Number: 046447

Place: Mumbai
Date: April 30, 2019

**For and on behalf of the Board of Directors of
Sterlite Investment Managers Limited
(as Investment Manager of India Grid Trust)**

Pratik Agarwal
Director
DIN: 03040062

Place: Mumbai
Date: April 30, 2019

Harsh Shah
CEO & Whole Time Director
DIN: 02496122

Place: Mumbai
Date: April 30, 2019

SPV Group
(as defined in Note 1 - General Information)
Special Purpose Combined Statement of Changes in Equity

A. Equity Share capital

Equity shares of Rs 10 each issued, subscribed and fully paid	Number of shares (in million)	Amount (Rs. in million)
As at 01 April 2016	82.79	827.92
Issued during the year	2.88	28.83
As at 31 March 2017	85.68	856.75
Issued during the year	-	-
As at 31 March 2018	85.68	856.75
Issued during the year (conversion of loan into equity share capital)	0.26	2.61
As at 31 March 2019	85.94	859.36

B. Other equity

(Rs. in million)

Particulars	Convertible loan classified as equity	Securities premium	Retained earnings	Debenture redemption reserve	Total
Balance as at 01 April 2016 ^(a)	11,060.71	4,731.03	(384.71)	-	15,407.03
Loss for the year	-	-	(2,081.25)	-	(2,081.25)
Other comprehensive income	-	-	-	-	-
	-	-	(2,081.25)	-	(2,081.25)
Conversion of loan into equity share capital	(1,210.00)	-	-	-	(1,210.00)
Premium on issue of shares	-	2,431.54	-	-	2,431.54
Convertible loan reclassified to liability during the year	(9,850.71)	-	-	-	(9,850.71)
Balance as at 31 March 2017 ^(a)	-	7,162.57	(2,465.96)	-	4,696.61
Loss for the year	-	-	(430.53)	-	(430.53)
Other comprehensive income	-	-	-	-	-
	-	-	(430.53)	-	(430.53)
Balance as at 31 March 2018 ^(a)	-	7,162.57	(2,896.49)	-	4,266.08
Loss for the year	-	-	(2,369.38)	-	(2,369.38)
Less: Interim dividend declared and paid for the year ended 31 March 2019: Rs. 46.84 per share (year ended 31 March 2018: Rs. Nil per share; year ended 31 March 2017: Rs. Nil per share)	-	-	(1,001.77)	-	(1,001.77)
Less: Dividend distribution tax on interim dividend	-	-	(205.96)	-	(205.96)
Less: Transfer to debenture redemption reserve	-	-	(75.24)	75.24	-
Other comprehensive income	-	-	-	-	-
	-	-	(3,652.35)	75.24	(3,577.11)
Conversion of loan into equity share capital at premium	-	269.32	-	-	269.32
Balance as at 31 March 2019 ^(a)	-	7,431.89	(6,548.84)	75.24	958.29

Summary of significant accounting policies

2.2

(a) The above financial information represents the combined statement of changes in equity of the entities comprising the SPV Group. (Refer Note 1 - General Information and Note 2.1 - Basis of Preparation)

The accompanying notes are an integral part of the special purpose combined financial statements

As per our report of even date

For S R B C & Co LLP
Firm Registration No. 324982E/E300003
Chartered Accountants

**For and on behalf of the Board of Directors of
Sterlite Investment Managers Limited**
(as Investment Manager of India Grid Trust)

per Amyr Jassani
Partner
Membership Number: 046447

Place: Mumbai
Date: April 30, 2019

Pratik Agarwal
Director
DIN: 03040062

Place: Mumbai
Date: April 30, 2019

Harsh Shah
CEO & Whole Time Director
DIN: 02496122

Place: Mumbai
Date: April 30, 2019

SPV Group

(as defined in Note 1 - General Information)

Special Purpose Combined Statement of Cash Flows for the year ended

	31 March 2019 (Rs. in million) (a)	31 March 2018 (Rs. in million) ^(a)	31 March 2017 (Rs. in million) ^(a)
A. Cash flow from operating activities			
Net loss as per statement of profit and loss	(2,369.38)	(430.53)	(2,081.25)
Adjustment for taxation	297.57	143.20	400.59
Loss before tax	(2,071.81)	(287.33)	(1,680.66)
Non-cash adjustment to reconcile loss before tax to net cash flows			
- Depreciation and amortisation expense	2,364.62	1,798.07	1,619.11
- Deposits written off	12.79	-	-
- Impairment of property plant & equipment	991.57	287.81	2,474.06
- Liabilities no longer required written back	(2.37)	(67.75)	-
Finance cost	7,978.56	5,321.41	3,477.88
Finance income	(94.97)	(64.12)	(32.18)
Operating profit before working capital changes	9,178.39	6,988.09	5,858.21
Movements in working capital :			
- Increase/(Decrease) in trade payables	59.98	64.85	(123.58)
- Increase/(Decrease) in other current financial liabilities	66.75	(284.19)	161.16
- Increase/(Decrease) in other current liabilities	496.76	(0.97)	(11.38)
- Decrease/(Increase) in trade receivables	(759.34)	(164.40)	(450.34)
- Decrease/(Increase) in other non current financial asset	(0.04)	(0.04)	(0.71)
- Decrease/(Increase) in other current financial asset	(2,133.01)	186.30	(254.23)
- Decrease/(Increase) in other non-current assets	(42.57)	(115.68)	-
- Decrease/(Increase) in other current assets	(27.03)	89.46	(60.90)
Change in working capital	(2,338.50)	(224.67)	(739.98)
Cash generated from operations	6,839.89	6,763.42	5,118.23
Direct taxes paid (net of refunds)	(191.04)	(151.68)	(156.95)
Net cash flow from operating activities (A)	6,648.85	6,611.74	4,961.28
B. Cash flow from investing activities			
Purchase of property plant & equipment, including capital work-in-progress and capital advances*	(3,851.00)	(18,102.63)	(14,511.56)
Interest income	4.01	28.66	10.57
Dividend income on current investment	45.42	35.88	20.12
Investment in bank fixed deposit having maturity for more than 3 months but less than 12 months	(0.33)	(49.11)	(13.86)
Redemption of fixed deposits	55.80	-	-
Investment in mutual funds	(1,157.59)	(14,860.28)	(789.47)
Loan given to related party	(2,757.62)	-	-
Proceeds from mutual funds	28.61	15,462.60	-
Net cash flow used in investing activities (B)	(7,632.70)	(17,484.88)	(15,284.20)
C. Cash flow from financing activities			
Proceeds from issue of non-convertible debentures	-	7,350.00	-
Proceeds of borrowings from banks and financial institutions	15,343.62	18,041.85	14,915.05
Repayment of borrowings from banks and financial institutions	(6,761.58)	(31,527.24)	(1,948.96)
(Repayment)/Proceeds of loan from holding company (net)	(3,638.34)	(6,400.45)	1,004.50
Loan taken from India Grid Trust	6,059.70	32,757.60	-
Loan repaid to India Grid Trust	(303.37)	(1,709.61)	-
Loan repaid to fellow subsidiary	-	(25.00)	-
Issue of equity share capital (including premium)	-	-	1,250.37
Interim dividend paid (including DDT)	(1,207.73)	-	-
Finance costs	(8,891.11)	(7,493.85)	(4,496.60)
Net cash flow from financing activities (C)	601.19	10,993.30	10,724.36
Net increase/(decrease) in cash and cash equivalents (A + B + C)	(382.66)	120.16	401.44
Cash and cash equivalents as at beginning of year	750.49	630.33	228.89
Cash and cash equivalents as at year end	367.83	750.49	630.33

SPV Group
(as defined in Note 1 - General Information)
Special Purpose Combined Statement of Cash Flows for the year ended

Components of Cash and cash equivalents:

	31 March 2019 (Rs. in million) (a)	31 March 2018 (Rs. in million) (a)	31 March 2017 (Rs. in million) (a)
Balances with banks:			
- On current accounts**	367.83	750.49	630.33
Total cash and cash equivalents (refer note 10)	367.83	750.49	630.33

* Represents combined cash flows of the SPVs included in the SPV group and does not include the acquisition values paid over and above the book values which have been considered as adjustments on combination of SPVs (refer note 12B)

Reconciliation between opening and closing balances for liabilities arising from financing activities:-

Particulars	Long term borrowings	Short term borrowings
01 April 2016	33,673.00	10.68
Cash flow		
- Interest	(4,496.60)	-
- Proceeds/(repayments)	12,619.68	1,999.69
Accrual	4,240.08	-
Reclassified to liability	-	9,850.71
31 March 2017	46,036.16	11,861.08
Cash flow		
- Interest	(7,477.00)	(16.74)
- Proceeds/(repayments)	20,396.54	(1,909.39)
Accrual	7,533.81	16.74
31 March 2018	66,489.51	9,951.69
Cash flow		
- Interest	(8,764.04)	(127.07)
- Proceeds/(repayments)	18,632.86	(7,868.20)
- Conversion of loan into equity share capital	-	(272.00)
Accrual	9,283.12	127.00
31 March 2019	85,641.46	1,811.42

** Out of this, an amount of Rs. Nil (31 March 2018: Rs. 63.92 million; 31 March 2017: Rs. 166.19 million) has been kept towards Debt Service Reserve Account as per the requirements of loan agreement with bank.

Summary of significant accounting policies 2.2

(a) The above financial information represents the combined cash flows of the entities comprising the SPV Group. (Refer Note 1 - General Information and Note 2.1 - Basis of Preparation)

As per our report of even date

For S R B C & Co LLP
Firm Registration No. 324982E/E300003
Chartered Accountants

**For and on behalf of the Board of Directors of
Sterlite Investment Managers Limited
(as Investment Manager of India Grid Trust)**

per **Amyr Jassani**
Partner
Membership Number: 046447

Pratik Agarwal
Director
DIN: 03040062

Harsh Shah
CEO & Whole Time Director
DIN: 02496122

Place: Mumbai
Date: April 30, 2019

Place: Mumbai
Date: April 30, 2019

Place: Mumbai
Date: April 30, 2019

SPV Group

(as defined in Note 1 - General Information)

Notes to Special Purpose Combined Financial Statements

1. General information

The special purpose combined financial statements ("Special Purpose Combined Financial Statements") comprise the financial statements of Bhopal Dhule Transmission Company Limited ('BDTCL'), Jabalpur Transmission Company Limited ('JTCL'), Maheshwaram Transmission Limited ('MTL'), RAPP Transmission Company Limited ('RTCL'), Purulia & Kharagpur Transmission Company Limited ('PKTCL'), Patran Transition Company Limited ('PTCL'), NRSS XXIX Transmission Limited ('NRSS') and Odisha Generation Phase II Transmission Limited ('OGPTL') (individually referred to as "SPV" and together referred to as "SPV Group"). The SPVs are companies domiciled in India and having their registered office at F-1, The Mira Corporate Suites, Ishwar Nagar, New Delhi 110065.

The SPVs are developers for the designing, construction and maintenance of power transmission lines and substations on Build, Own, Operate and Maintain ('BOOM') basis and are required to operate and maintain the transmission systems for a period of 35 years.

Sterlite Power Grid Ventures Limited ("SPGVL" or the "Sponsor") settled India Grid Trust (the "IndiGrid") on October 21, 2016 as an irrevocable trust, pursuant to the Trust Deed, under the provisions of the Indian Trusts Act, 1882 and which is registered with SEBI as an Infrastructure Investment Trust under Regulation 3(1) of the Securities Exchange Board of India (Infrastructure Investment Trust) Regulations, 2014. The Trustee to IndiGrid is Axis Trustee Services Limited (the "Trustee") and the Investment Manager for IndiGrid is Sterlite Investment Managers Limited (the "Investment Manager"). BDTCL, JTCL, MTL, RTCL and PKTCL were subsidiaries of the Sponsor and were transferred from the Sponsor to IndiGrid during the year ended March 31, 2018 whereas PTCL was acquired by IndiGrid during the year ended March 31, 2019 from third party. Sterlite Grid 2 Limited ('SGL2'), Sterlite Grid 3 Limited ('SGL3'), NRSS and OGPTL are currently subsidiaries of the Sponsor and are proposed to be transferred to IndiGrid pursuant to the proposed Preferential Issue being undertaken by IndiGrid. SGL2 and SGL3 are intermediate holding companies for NRSS and OGPTL respectively and do not own any project assets. Hence SGL2 and SGL3 have not been included in the SPV Group for the preparation of these Special Purpose Combined Financial Statements.

As required by the Guidance Note on Combined and Carve-Out Financial Statements issued by the Institute of Chartered Accountants of India, the details of various entities included in the Special Purpose Combined Financial Statements are as given below:

Name of SPV	Shareholding/Proposed shareholding of IndiGrid	Nature of Investment/ Proposed Investment	Date of acquisition by IndiGrid
Bhopal Dhule Transmission Company Limited	100%	Subsidiary	May 30, 2017
Jabalpur Transmission Company Limited	100%	Subsidiary	May 30, 2017
Maheshwaram Transmission Limited	100%	Subsidiary	February 15, 2018
RAPP Transmission Company Limited	100%	Subsidiary	February 15, 2018
Purulia & Kharagpur Transmission Company Limited	100%	Subsidiary	February 15, 2018
Patran Transmission Company Limited	100%	Subsidiary	August 30, 2018
Odisha Generation Phase II Transmission Limited	100%	Subsidiary	To be acquired
NRSS XXIX Transmission Limited	100%	Subsidiary	To be acquired

Except PTCL, the other SPVs were subsidiaries of the Sponsor before being acquired by IndiGrid. Further, post-acquisition by IndiGrid, SPGVL has been the project manager for all such SPVs.

Dates of commencement of commercial operations

The details of incorporation and commencement of operations of the SPVs comprising the SPV Group are as given below:

Name of the entity	Date of incorporation	Element	Commercial operation date of the element
BDTCL*	September 8, 2009	Bhopal Substation	September 30, 2014
		Dhule Substation	December 6, 2014
		Bhopal Bhopal Line	August 12, 2014
		Bhopal Indore Line	November 19, 2014
		Jabalpur Bhopal Line	June 9, 2015
		Dhule Dhule Line	December 6, 2014
		Dhule Vadodara Line	June 13, 2015
JTCL	September 8, 2009	Aurangabad Dhule Line	December 5, 2014
		Jabalpur Bina Line	July 1, 2015
		Dharamjaigarh Jabalpur Line	September 12, 2015
RAPP	December 20, 2012	Kota to Shujalpur Line	March 1, 2016
PKTCL	December 15, 2012		
		Purulia Ranchi Line	January 7, 2017
		Kharagpur Chaibasa Line	June 18, 2016
MTL	August 14, 2014	Mehboobnagar – Maheshwaram Line	December 15, 2017
		Nizamabad – Shankrapally Line	October 14, 2017
PTCL	December 19, 2012	Patran Substation (Punjab)	June 16, 2015
OGPTL	April 17, 2015		
		Raipur Jharsuguda	In progress
		OPGC Jharsuguda	August 30, 2017

SPV Group

(as defined in Note 1 - General Information)

Notes to Special Purpose Combined Financial Statements

NRSS	July 29, 2013	Jalandhar-Samba line	June 24, 2016
		Samba-Amargarh line	August 23, 2018
		Amargarh Substation	August 23, 2018

*Commercial operation dates for BDTCL as per CERC order dated November 26, 2015/

2. Significant Accounting Policies

2.1 Basis of preparation

The Special Purpose Combined Financial Statements have been prepared for the purpose of the proposed Preferential Issue of units by IndiGrid. The Special Purpose Combined Financial Statements of the SPV Group comprise the Special Purpose Combined Balance Sheets as at March 31, 2019, March 31, 2018, and March 31, 2017 and the Special Purpose Combined Statements of Profit and Loss, Special Purpose Combined Cash Flow Statements, Special Purpose Combined Statements of Changes in Equity and a Summary of Significant Accounting Policies and Other Explanatory Information for the years ended March 31, 2019, March 31, 2018, and March 31, 2017.

The Special Purpose Combined Financial Statements were authorised for issue in accordance with resolutions passed by the Board of Directors of the Investment Manager on April 30, 2019.

The Special Purpose Combined Financial Statements have been prepared in accordance with Indian Accounting Standards (Ind AS) and/or any addendum thereto as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 as amended, prescribed under the SEBI (Infrastructure Investment Trusts) Regulations, 2014 and the circulars issued thereunder and the Guidance Note on Combined and Carve-Out Financial Statements issued by the Institute of Chartered Accountants of India ("Guidance Note").

The Special Purpose Combined Financial Statements are special purpose financial statements and have been prepared by the Investment Manager solely to depict the historical financial information of the SPV Group and for inclusion in the Preliminary Placement Document/Placement Document prepared by the Investment Manager in connection with the proposed Preferential Issue ('Preferential Issue') of units of IndiGrid. As a result, the Special Purpose Combined Financial Statements may not be suitable for another purpose. Further, the Special Purpose Combined Financial Statements are not prepared in accordance with the requirements of Schedule III notified under the Companies Act, 2013.

These combined financial statements are special purpose combined financial statements prepared to present the combined financial position and performance of the SPVs based on the line-by-line addition of the SPVs' separate financial statements for the respective financial years. Further, as required by Para 16 of the Guidance Note, in case the combining entities or any one of the combining entities are under common control, the carrying amounts pertaining to a subsidiary, as reflected in the consolidated financial statements of the parent, should be used for the purpose of preparing combined financial statements. Accordingly, for the purpose of these Special Purpose Combined Financial Statements, the carrying amounts of SPVs which are owned by IndiGrid have been considered as reflected in the consolidated financial statements of IndiGrid from the respective dates of acquisition of such SPVs by IndiGrid. The difference between the carrying amounts of such SPVs reflected in the consolidated financial statements of IndiGrid and the separate financial statements of such SPVs has been credited to "Adjustment on combination of SPVs" which is disclosed under "Other Equity" in the Special Purpose Combined Financial Statements. Consequently, the depreciation charge for the respective years is also based on the carrying amounts of Property, plant and equipment pertaining to such SPVs as reflected in the consolidated financial statements of IndiGrid. The Special Purpose Combined Financial Statements do not take into account the accounting adjustments that would arise on acquisition of SGL2, SGL3, NRSS and OGPTL by IndiGrid from the Sponsor. Accordingly, these Special Purpose Combined Financial Statements are not indicative in any manner of the consolidated financial performance, consolidated financial position, consolidated cash flows and consolidated changes in equity of IndiGrid and will not be comparable with the consolidated financial statements of IndiGrid post the proposed Preferential Issue and acquisition of SGL2, SGL3, OGPTL and NRSS. Further, these Special Purpose Combined Financial Statements may not necessarily be indicative of the financial performance, financial position, cash flows and changes in equity of the SPV Group that would have occurred if it had operated as a separate stand-alone Group of entities during the period presented or of the SPV Group's future performance.

The Special Purpose Combined Financial Statements are presented in Indian Rupees millions, except when otherwise indicated.

The Special Purpose Combined Financial Statements have been prepared on a historical cost basis, except for the following assets and liabilities which have been measured at fair value or revalued amount:

- § Derivative financial instruments;
- § Certain financial assets measured at fair value (refer accounting policy regarding financial instruments).

Basis of Combination

These Special Purpose Combined Financial Statements have been prepared on a basis that combines the Balance sheets, Statements of profit and loss, Statements of changes in equity and Cash flows of the legal entities comprising the SPV Group as per the principles elaborated in the Guidance Note. The Combined Financial Statements have been prepared using uniform accounting policies for like transactions and other events in similar circumstances. The financial statements of all the SPVs used for the purpose of combination are drawn up to the same reporting date i.e. year ended on March 31 each year.

The procedure for preparing Special Purpose Combined Financial Statements of the SPV Group are stated below:

- a) combine like items of assets, liabilities, equity, income, expenses and cash flows of the SPVs;
- b) as explained above, for SPVs owned by IndiGrid, the carrying amounts have been considered as reflected in the consolidated financial statements of IndiGrid from the respective dates of acquisition of such SPVs as required by the Guidance Note;

SPV Group

(as defined in Note 1 - General Information)

Notes to Special Purpose Combined Financial Statements

- c) eliminate in full intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions among entities of the SPV Group (profits or losses resulting from intragroup transactions that are recognised in assets, such fixed assets, are eliminated in full). Ind AS-12 Income Taxes applies to temporary differences that arise from the elimination of profits and losses resulting from intragroup transactions.

These Special Purpose Combined Financial Statements correspond to the classification provisions contained in Ind AS 1 'Presentation of Financial Statements'. For clarity purposes, various items are aggregated in the Special Purpose Combined Statement of Profit and Loss and Special Purpose Combined Statement of Financial Position. These items are disaggregated separately in the notes to the Special Purpose Combined Financial Statements, where applicable or required.

2.2 Summary of significant accounting policies

The following is the summary of significant accounting policies applied by the SPV Group in preparing the combined financial statements:

a) Current versus non-current classification

The SPV Group presents assets and liabilities in the combined balance sheet based on current/non-current classification. An asset is current when it is:

- § Expected to be realised or intended to be sold or consumed in the normal operating cycle
- § Held primarily for the purpose of trading
- § Expected to be realised within twelve months after the reporting period or
- § Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

All other assets are classified as non-current.

A liability is current when:

- § It is expected to be settled in the normal operating cycle
- § It is held primarily for the purpose of trading
- § It is due to be settled within twelve months after the reporting period or
- § There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period.

The SPV Group classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

Operating cycle of the SPV Group is the time between the acquisition of assets for processing and their realisation in cash or cash equivalents. The SPV Group has identified twelve months as its operating cycle.

b) Foreign currencies

The SPV Group's combined financial statements are presented in INR, which is its functional currency. The SPV Group does not have any foreign operation.

Transactions and balances

Transactions in foreign currencies are initially recorded by the SPV Group's entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date.

Differences arising on settlement or translation of monetary items are recognised in profit or loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions.

c) Fair value measurement

The SPV Group measures financial instruments such as derivatives at fair value at each balance sheet date.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- § In the principal market for the asset or liability, or
- § In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the SPV Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The SPV Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

SPV Group

(as defined in Note 1 - General Information)

Notes to Special Purpose Combined Financial Statements

All assets and liabilities for which fair value is measured or disclosed in the combined financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1- Quoted (unadjusted) market prices in active markets for identical assets or liabilities;

Level 2- Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable;

Level 3- Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the SPV Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

External valuers are involved for valuation of significant assets such as property plant and equipment. Involvement of external valuers is decided by each SPV management on a need basis and relevant approvals. The valuers involved are selected based on criteria like market knowledge, reputation, independence and professional standards. The management of each SPV decides after discussion with the external valuers, which valuation techniques and inputs to use for each case.

At each reporting date, the management of each SPV analyses the movement of assets and liabilities which are required to be re-measured or reassessed as per the SPV's accounting policies. For this analysis, the management of each SPV verifies the major inputs applied in the latest valuation by agreeing the information in the valuation computation to contracts and other relevant documents.

The management in conjunction with each SPV's external valuers also compares the change in fair value of each asset and liability with relevant external sources to determine whether the change is reasonable. The valuation results are discussed at the Audit Committee.

For the purpose of fair value disclosures, the SPV Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy, as explained above.

This note summarises accounting policy for fair value. Other fair value related disclosures are given in the relevant notes.

§ Quantitative disclosures of fair value measurement hierarchy (note 33B)

§ Investment in quoted mutual fund (note 8)

§ Financial instruments (including those carried at amortised cost) (note 33A and 33B)

d) Revenue from contracts with customers

Revenue from contracts with customers is recognised when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the SPV Group expects to be entitled in exchange for those goods or services. The SPV Group has concluded that it is the principal in its revenue arrangements because it typically controls the services before transferring them to the customer.

Power transmission services

Revenue from contracts with customers comprises of revenue from power transmission services rendered in India to Long Term Transmission Customers (LTTCS) pursuant to the respective Transmission Services Agreements (TSAs) executed by the SPV Group with LTTCS for periods of 35 years. The SPV Group is required to ensure that the transmission assets meet the minimum availability criteria under the respective TSAs. The Group's performance obligation under the TSAs is to provide power transmission services. The performance obligation is satisfied over time as the customers receive and consume the benefits provided by the Group's performance as the Group performs. Accordingly, the revenue from power transmission services is recognised over time based on the transmission asset availabilities and the tariff charges approved under the respective CERC tariff orders and includes unbilled revenues accrued up to the end of the accounting period. The payment is generally due within 60 days upon receipt of monthly invoice by the customer.

Contract balances

A receivable represents the SPV Group's right to an amount of consideration that is unconditional (i.e. only the passage of time is required before payment of the consideration is due). Amounts which have been billed to the customers are disclosed as Trade receivables and amounts which are to be billed to the customers (and not conditional on the group's future performance) are disclosed under Other financial assets. Refer accounting policies for financial assets in Financial instruments – initial recognition and subsequent measurement.

e) Interest income/Dividend income

Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

Income from dividend on investments is accrued in the year in which it is declared, whereby the Group's right to receive is established.

f) Taxation

Current income tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the tax authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date.

Current income tax relating to items recognised outside statement of profit or loss is recognised outside statement of profit or loss (either in other comprehensive income or in equity). Current tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

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Notes to Special Purpose Combined Financial Statements

Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax

Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- § When the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss;
- § In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except:

- § When the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss;
- § In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are re-assessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside statement of profit or loss is recognised outside statement of profit or loss. Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable SPV Group and the same taxation authority.

Sales/value added taxes paid on acquisition of assets or on incurring expenses

Expenses and assets are recognised net of the amount of sales/value added taxes paid, except:

- § When the tax incurred on a purchase of assets or services is not recoverable from the tax authority, in which case, the tax paid is recognised as part of the cost of acquisition of the asset or as part of the expense item, as applicable
- § When receivables and payables are stated with the amount of tax included

The net amount of tax recoverable from, or payable to, the tax authority is included as part of receivables or payables in the balance sheet.

g) Property, plant and equipment

Capital work in progress, property, plant and equipment are stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Such cost includes the cost of replacing part of the plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met. When significant parts of the plant and equipment are required to be replaced at intervals, the SPV Group depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in statement of profit or loss as incurred. No decommissioning liabilities are expected or be incurred on the assets of plant and equipment.

Depreciation is calculated on a straight-line basis (*) over the estimated useful lives of the assets as follows:

Asset Category	Useful considered	(Life in number of years)	
		Life	Useful life (Schedule II#)
Lease hold Land	Period of lease		N/A
Building-Substation	25		30
Plant and equipment			
- Substation (including components)	5-35		40
- Power transmission lines (including components)	25-35		40
- General plant and equipment	2-5		15
Data Processing Equipments (Computers)	3-5		3-6
Furniture & Fittings	7.5		10
Office Equipments	4		3
Vehicles	5		8

SPV Group

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Notes to Special Purpose Combined Financial Statements

Schedule II to the Companies Act, 2013 which is applicable to the SPVs.

(*) except for Patran Transmission Company Limited for which depreciation was calculated on written down value basis. However, for the purpose of these Special Purpose Combined Financial Statements, such depreciation has been considered on straight line basis from the date of post acquisition by IndiGrid.

The SPV Group, based on technical assessments made by technical experts and management estimates, depreciates the certain items of building, plant and equipment, data processing equipments, furniture and fittings, office equipments and vehicles over estimated useful lives which are different from the useful life prescribed in Schedule II to the Companies Act, 2013. The management believes that these estimated useful lives are realistic and reflect fair approximation of the period over which the assets are likely to be used.

An item of property, plant and equipment and any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the statement of profit or loss when the asset is derecognised.

The residual values, useful lives and methods of depreciation of property, plant and equipment are reviewed at each financial year end and adjusted prospectively, if appropriate.

h) Intangible Assets

Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less accumulated amortisation and accumulated impairment losses. Internally generated intangible assets, excluding capitalised development costs, are not capitalised and the expenditure is recognised in the Statement of Profit and Loss in the period in which the expenditure is incurred.

Currently, the SPV Group does not incur any cost on research and development.

The useful lives of intangible assets are assessed as either finite or indefinite.

Intangible assets with finite lives are amortised over their useful economic lives and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit or loss.

The SPV Group does not have any intangible assets with indefinite useful lives.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the statement of profit or loss when the asset is derecognised.

Amortisation

Amortisation is calculated on a straight-line basis over the estimated useful lives of the intangible assets. Currently, the only intangible asset is computer software which is amortised over five years on straight line basis.

i) Borrowing Costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other costs that the SPV Group incurs in connection with the borrowing of funds. Borrowing cost also includes exchange differences to the extent regarded as an adjustment to the borrowing costs.

j) Leases

The determination of whether an arrangement is (or contains) a lease is based on the substance of the arrangement at the inception of the lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly stated in the arrangement.

SPV Group as a lessee

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the SPV Group is classified as a finance lease. All other leases are classified as operating leases.

Operating lease payments are recognised as an expense in the statement of profit and loss on a straight-line basis over the lease term.

k) Impairment of non-financial assets

The SPV Group assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the SPV Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an

SPV Group

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Notes to Special Purpose Combined Financial Statements

asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The SPV Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the SPV Group's CGUs to which the individual assets are allocated. These forecasts, especially for the transmission lines are based on the transmission services agreements (TSA) signed by the individual SPV's for their respective assets. Accordingly, a substantial part of the revenue considered for impairment calculations is based on the transmission services agreement. These budgets and forecast calculations generally cover the entire period of project life.

Impairment losses of continuing operations are recognised in the statement of profit and loss.

An assessment is made at each reporting date to determine whether there is an indication that previously recognised impairment losses no longer exist or have decreased. If such indication exists, the SPV Group estimates the asset's or CGU's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the statement of profit or loss unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation increase.

l) Provisions

Provisions are recognised when the SPV Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When the SPV Group expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognised as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the statement of profit or loss net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

m) Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets

Initial recognition and measurement

All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the SPV Group commits to purchase or sell the asset.

Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in four categories:

- i. Debt instruments at amortised cost
- ii. Debt instruments at fair value through other comprehensive income (FVTOCI)
- iii. Debt instruments, derivatives and equity instruments at fair value through profit or loss (FVTPL)
- iv. Equity instruments measured at fair value through other comprehensive income (FVTOCI)

Debt instruments at amortised cost

A 'debt instrument' is measured at the amortised cost if both the following conditions are met:

- a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
- b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the statement of profit or loss. The losses arising from impairment are recognised in the statement of profit or loss.

Debt instrument at FVTOCI

A 'debt instrument' is classified as the FVTOCI if both of the following criteria are met:

- a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and

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- b) The asset's contractual cash flows represent SPPI.

Debt instruments included within the FVTOCI category are measured initially as well as at each reporting date at fair value. Fair value movements are recognized in the other comprehensive income (OCI). However, the SPV Group recognizes interest income, impairment losses and reversals and foreign exchange gain or loss in the statement of profit or loss. On derecognition of the asset, cumulative gain or loss previously recognised in OCI is reclassified from the equity to statement of profit or loss. Interest earned whilst holding FVTOCI debt instrument is reported as interest income using the EIR method. The SPV Group does not have significant financial assets which are subsequently measured at FVTOCI.

Debt instrument at FVTPL

FVTPL is a residual category for debt instruments. Any debt instrument, which does not meet the criteria for categorization as at amortized cost or as FVTOCI, is classified as at FVTPL.

In addition, the SPV Group may elect to designate a debt instrument, which otherwise meets amortized cost or FVTOCI criteria, as at FVTPL. However, such election is allowed only if doing so reduces or eliminates a measurement or recognition inconsistency (referred to as 'accounting mismatch'). The SPV Group has not designated any debt instrument as at FVTPL.

Debt instruments included within the FVTPL category are measured at fair value with all changes recognized in the statement of profit or loss.

Equity investments

All equity investments in scope of Ind AS 109 are measured at fair value. Equity instruments which are held for trading and contingent consideration recognised by an acquirer in a business combination to which Ind AS103 applies are classified as at FVTPL. For all other equity instruments, the SPV Group may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value. The SPV Group makes such election on an instrument-by-instrument basis. The classification is made on initial recognition and is irrevocable.

If the SPV Group decides to classify an equity instrument as at FVTOCI, then all fair value changes on the instrument, excluding dividends, are recognized in the OCI. There is no recycling of the amounts from OCI to statement of profit or loss, even on sale of investment. However, the SPV Group may transfer the cumulative gain or loss within equity.

Equity instruments included within the FVTPL category are measured at fair value with all changes recognized in the statement of profit or loss.

The SPV Group does not have significant investments in the nature of Equity investments which are in scope of Ind AS 109.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e. removed from the SPV Group's combined balance sheet) when:

- § The rights to receive cash flows from the asset have expired, or
- § The SPV Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the SPV Group has transferred substantially all the risks and rewards of the asset, or (b) the SPV Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the SPV Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the SPV Group continues to recognise the transferred asset to the extent of the SPV Group's continuing involvement. In that case, the SPV Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the SPV Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the SPV Group could be required to repay.

Impairment of financial assets

Majority of the financial assets of the SPV Group pertain to Trade and other receivables. Considering the nature of business, the SPV Group does not foresee any credit risk on its trade and other receivables which may cause an impairment. As per the TSA, the receivables are covered by clause of payment security mechanism which ensures receipt of all trade receivables. Also, the SPV group does not have any past history of impairment of Trade and other receivables.

Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The SPV Group's financial liabilities include borrowings and related costs, trade and other payables, and derivative financial instruments.

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Subsequent measurement

The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the SPV Group that are not designated as hedging instruments in hedge relationships as defined by Ind AS 109. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognised in the profit or loss.

The SPV Group has not designated any financial liability as at fair value through profit and loss.

Loans and borrowings

This is the category most relevant to the SPV Group. After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit or loss.

This category generally applies to borrowings. For more information refer Note 13.

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the statement of profit or loss.

Embedded derivatives

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. An embedded derivative causes some or all of the cash flows that otherwise would be required by the contract to be modified according to a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss.

If the hybrid contract contains a host that is a financial asset within the scope of Ind AS 109, the SPV Group does not separate embedded derivatives. Rather, it applies the classification requirements contained in Ind AS 109 to the entire hybrid contract. Derivatives embedded in all other host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated at fair value through profit or loss. These embedded derivatives are measured at fair value with changes in fair value recognised in profit or loss, unless designated as effective hedging instruments.

Reclassification of financial assets

The SPV Group determines classification of financial assets and liabilities on initial recognition. After initial recognition, no reclassification is made for financial assets which are equity instruments and financial liabilities. For financial assets which are debt instruments, a reclassification is made only if there is a change in the business model for managing those assets. Changes to the business model are expected to be infrequent. The SPV Group's senior management determines change in the business model as a result of external or internal changes which are significant to the SPV Group's operations. Such changes are evident to external parties. A change in the business model occurs when the SPV Group either begins or ceases to perform an activity that is significant to its operations. If the SPV Group reclassifies financial assets, it applies the reclassification prospectively from the reclassification date which is the first day of the immediately next reporting period following the change in business model. The SPV Group does not restate any previously recognised gains, losses (including impairment gains or losses) or interest.

The following table shows various reclassification and how they are accounted for:

Original classification	Revised Classification	Accounting Treatment
Amortised Cost	FVTPL	Fair value is measured at reclassification date. Difference between previous amortised cost and fair value is recognised in statement of profit or loss.
FVTPL	Amortised Cost	Fair value at reclassification date becomes its new gross carrying amount. EIR is calculated based on the new gross carrying amount.
Amortised cost	FVTOCI	Fair value is measured at reclassification date. Difference between previous amortised cost and fair value is recognised in OCI. No change in EIR due to reclassification.
FVTOCI	Amortised cost	Fair value at reclassification date becomes its new amortised cost carrying amount. However, cumulative gain or loss in OCI is adjusted against fair value. Consequently, the asset is measured as if it had always been measured at amortised cost.
FVTPL	FVTOCI	Fair value at reclassification date becomes its new carrying amount. No other adjustment is required.
FVTOCI	FVTPL	Assets continue to be measured at fair value. Cumulative gain or loss previously recognised in OCI is reclassified to statement of profit or loss at the reclassification date.

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Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the combined balance sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

n) Derivative financial instruments and hedge accounting

Initial recognition and subsequent measurement

The SPV Group uses derivative financial instruments, such as forward currency contracts and interest rate swaps to hedge its foreign currency risks and interest rate risks respectively. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

The purchase contracts that meet the definition of a derivative under Ind AS 109 are recognised in the statement of profit or loss.

Since the SPV Group does not meet the strict criteria for hedge accounting, it has not applied hedge accounting in respect of its derivative contracts.

o) Cash and cash equivalents

Cash and cash equivalent in the balance sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value.

For the purpose of the combined statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above, net of outstanding bank overdrafts as they are considered an integral part of the SPV Groups cash management.

2.3 Standards issued but not yet effective as of 31 March 2019

Ind AS 116 Leases was notified on 30 March 2019 and it replaces Ind AS 17 Leases, including appendices thereto. Ind AS 116 is effective for annual periods beginning on or after 1 April 2019. Ind AS 116 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under Ind AS 17. Lessor accounting under Ind AS 116 is substantially unchanged from the current accounting under Ind AS 17. Lessors will continue to classify all leases using the same classification principle as in Ind AS 17 and distinguish between two types of leases: operating and finance leases.

The SPV Group intends to adopt this standard, if applicable, when it becomes effective. As the SPV Group does not have any material leases, therefore the adoption of this standard is not likely to have a material impact.

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Notes to special purpose combined financial statements for the year ended

Note 3B: Other intangible assets

(Rs. in million)

Particulars	Software & Licenses	Total
Cost		
At April 01, 2016	1.38	1.38
Additions	-	-
Disposals	-	-
At March 31, 2017	1.38	1.38
Additions	-	-
Disposals	-	-
At March 31, 2018	1.38	1.38
Additions	-	-
Disposals	-	-
At March 31, 2019	1.38	1.38
Amortisation		
At April 01, 2016	1.38	1.38
Charge for the year	-	-
Disposals	-	-
At March 31, 2017	1.38	1.38
Charge for the year	-	-
Disposals	-	-
At March 31, 2018	1.38	1.38
Charge for the year	-	-
Disposals	-	-
At March 31, 2019	1.38	1.38
Net Block		
At March 31, 2017	-	-
At March 31, 2018	-	-
At March 31, 2019	-	-

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	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Loan to related party (unsecured, considered good) (refer note 34)	2,757.62	-	-
Total	2,757.62	-	-

Note:
Loan to related party amounting to Rs. 2,757.62 million pertains to loan given by NRSS to Sterlite Grid 2 Limited and carries nil rate of interest. Loan is receivable on demand.

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Note 8: Current investments			
Investment in mutual funds (valued at fair value through profit or loss)			
Quoted			
1,72,973.71 units (31 March 2018: Nil units; 31 March 2017: Nil units) of L&T Liquid Direct Plan -Growth*	243.74	-	-
212,207.93 units (31 March 2018: Nil units; 31 March 2017: Nil units) of Axis Liquid Fund - Direct Plan- Daily Dividend*	212.41	-	-
Nil units (31 March 2018: Nil units; 31 March 2017: 1,247,802.43 units) of Birla Sun life Cash Plus Fund - Daily Dividend	-	-	125.02
Nil units (31 March 2018: 6,747.012 units; 31 March 2017: 2,974.55 units) of Reliance Liquid Fund - Treasury Plan - Direct Growth Plan - Growth Option	-	28.61	11.80
Nil units (31 March 2018: Nil units; 31 March 2017: 215,907.46 units) of Reliance Liquid Fund-Treasury Fund	-	-	330.07
1,44,906.81 units (31 March 2018: 359,944.55 units; 31 March 2017: 797,603.364 units) of SBI Premier Liquid Fund - Direct Plan - Daily Dividend*	145.37	181.42	345.12
2,12,178.80 units (31 March 2018: Nil units; 31 March 2017: Nil units) of DSP Liquidity Fund - Direct Plan - Daily Dividend*	212.38	-	-
2,08,359.66 units (31 March 2018: Nil units; 31 March 2017: Nil units) of UTI liquid cash plan - Daily Dividend reinvestment plan*	212.41	-	-
14,45,854.55 units (31 March 2018: Nil units; 31 March 2017: Nil units) of Aditya Birla sun life Liquid fund -Direct Plan - Daily Dividend*	144.87	-	-
1,38,912.46 units (31 March 2018: Nil units; 31 March 2017: Nil units) of Reliance Liquid Fund - Direct Plan Daily Dividend Option*	212.45	-	-
Total	1,383.63	210.03	812.01

* Out of this an amount of Rs. 974.61 million (31 March 2018: Rs. Nil; 31 March 2017: Rs. Nil) has been kept towards Debt Service Reserve Account as per the requirements of loan agreement with bank.

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Note 9: Trade receivables			
Current			
Trade receivables	1,983.43	1,235.34	1,070.93
Total	1,983.43	1,235.34	1,070.93
Break-up of security details:			
-Unsecured, considered good	1,983.43	1,235.34	1,070.93

As at 31 March 2019, there are no trade receivables which have significant increase in credit risk or receivables where credit is impaired.

No trade or other receivable are due from directors or other officers of the respective SPVs either severally or jointly with any other person. Nor any trade or other receivable are due from firms or private companies respectively in which any director is a partner, a director or a member.

Trade receivables are non-interest bearing and are generally on terms of 60 days

See Note 35A on credit risk of trade receivables, which explains how the SPV Group manages and measures credit quality of trade receivables that are neither past due nor impaired.

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Note 10: Cash and cash equivalents			
Balance with banks - on current accounts*	367.72	743.60	630.33
Deposit with original maturity of less than 3 months	0.11	6.89	-
Total	367.83	750.49	630.33

* Out of this an amount of Rs. Nil (31 March 2018: Rs. 63.92 million; 31 March 2017: Rs. 166.19 million) has been kept towards Debt Service Reserve Account as per the requirements of loan agreement with bank.

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Note 11: Other bank balances			
Bank deposits with original maturity for more than 3 months but less than 12 months*	23.47	70.36	30.58
Bank deposits with original maturity of more than 12 months *	0.49	9.36	-
	23.95	79.72	30.58
Amount disclosed under the head "other non current financial assets" (refer note 4)	(0.49)	(9.36)	-
Total	23.47	70.36	30.58

* Bank deposits of Rs. 19.32 million (31 March 2018: Rs. 19.43 million; 31 March 2017: Rs. 0.10 million) have been held as lien by bank against bank guarantee given by SPVs. Further, deposits of Rs. Nil (31 March 2018: Rs. 55.91 million; 31 March 2017: Rs. Nil) have been pledged with banks to fulfill collateral requirements.

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Note 12A: Equity Share capital*			
Authorised shares			
93.50 million (31 March 2018: 93.32 million, 31 March 2017: 93.32 million) equity shares of Rs. 10 each	935.00	933.20	933.20
Issued, subscribed and fully paid-up shares			
85.936 million (31 March 2018: 85.675 million, 31 March 2017: 85.675 million) equity shares fully paid-up	859.36	856.75	856.75
Total issued, subscribed and fully paid-up share capital	859.36	856.75	856.75

a. Reconciliation of the shares outstanding at the beginning and at the end of the reporting period

	Number of shares (in million)	Rs. in million
As at 01 April 2016	82.79	827.92
Issued during the year	2.88	28.83
As at 31 March 2017	85.68	856.75
Issued during the year	85.68	856.75
As at 31 March 2018	85.68	856.75
Conversion of loan into equity share capital	0.26	2.61
As at 31 March 2019	85.94	859.36

b. Terms/rights attached to equity shares

The entities in the SPV Group have only one class of equity shares having at par value of Rs. 10 per share. Each holder of equity shares is entitled to one vote per share. In the event of liquidation of an entity forming part of the SPV Group, the holders of equity shares will be entitled to receive remaining assets of the entity, after distribution of all preferential amounts. The distribution will be in proportion to the number of equity shares held by the shareholders.

*Equity share capital of the SPV group is line by line aggregate of authorized share capital and paid-up share capital of each SPV. It does not represent legal share capital of the SPV group.

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Note 12B: Other equity

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Convertible loan from related parties classified as equity*			
Opening balance	-	-	11,060.71
Less: Converted into equity share capital (including premium)	-	-	(1,210.00)
Less: Reclassified to liability	-	-	(9,850.71)
Closing Balance	-	-	-
Securities premium			
Opening balance	7,162.57	7,162.57	4,731.03
Add: Premium on issue of shares	-	-	2,431.54
Add: Premium on conversion of loan into equity shares	269.32	-	-
Closing balance	7,431.89	7,162.57	7,162.57
Debt redemption reserve			
Opening balance	-	-	-
Add: Transferred from retained earnings	75.24	-	-
Closing balance	75.24	-	-
Retained earnings			
Opening balance	(2,896.49)	(2,465.96)	(384.71)
Add: Loss for the year	(2,369.38)	(430.53)	(2,081.25)
Less: Interim dividend declared and paid for the period ended 31 March 2019: Rs. 46.84 per share (year ended 31 March 2018: Rs. Nil per share; year ended 31 March 2017: Rs. Nil per share)	(1,001.77)	-	-
Less: Dividend distribution tax on interim dividend	(205.96)	-	-
Less: Transferred to debt redemption reserve	(75.24)	-	-
Total retained earnings	(6,548.84)	(2,896.49)	(2,465.96)
Adjustment on combination of SPVs **			
Opening balance	5,969.19	-	-
Add: Acquisition of SPVs during the year	209.51	5,969.19	-
Less: Reversal of payable towards project acquired ##	(422.77)	-	-
Closing balance	5,755.93	5,969.19	-

*Convertible loan from related parties pertains to convertible loan availed by each of the SPV from their respective holding companies combined together as at 31 March 2017.

** As required by para 16 of the Guidance Note on Combined and Carve Out Financial Statements issued by ICAI, in case the combining entities or any one of the combining entities are under common control, the carrying amounts pertaining to a subsidiary, as reflected in the consolidated financial statements of the parent, should be used for the purpose of preparing combined financial statements. Accordingly, for the purpose of these special purpose combined financial statements, carrying amounts of SPVs owned by IndiGrid have been considered as reflected in the consolidated financial statements of IndiGrid.

During the year ended 31 March 2018, India Grid Trust (IndiGrid) had acquired Sterlite Grid 1 Limited, which in turn holds 100% of the equity share capital of Bhopal Dhule Transmission Company Limited and Jabalpur Transmission Company Limited pursuant to the Securities Purchase Agreement dated May 8, 2017. Further, SGLI entered into share purchase agreements and shareholders' agreements dated 14 February, 2018 with Sterlite Grid 2 Limited and Sterlite Grid 3 Limited for acquisition of equity stake in RAPP Transmission Company Limited, Punulia & Kharagpur Transmission Company Limited and Maheshwaram Transmission Company Limited. Further, during the year ended 31 March 2019, India Grid Trust acquired Patran Transmission Company Limited with effect from 30 August, 2018. Since the carrying amounts pertaining to the above SPVs in these special purpose combined financial statements have been considered as reflected in the consolidated financial statements of IndiGrid from the respective dates of their acquisitions, the differences between the acquisition values of above SPVs and the book values have been disclosed as part of Other equity.

BDTCL had filed petition dated October 15, 2016 with CERC for grant of incremental tariff to compensate for additional expenditure incurred on the project. Pursuant to the Project Implementation and Management Agreement dated 10 November, 2016 as amended ("PIMA"), IndiGrid was required to issue additional units to Sterlite Power Grid Ventures Limited ("SPGVL") in case any additional tariff is approved by CERC. The units to be issued would be to the extent of 80% of the additional capital expenditure as approved by CERC in respect of the pending petition. Accordingly, IndiGrid had estimated and recorded an amount of Rs. 579.50 million in previous year towards the units issuable to SPGVL in accordance with PIMA as payable for asset acquisition.

During the year, CERC approved a part of the claim, for additional expenditure due to change in tax rates of Rs. 195.91 million (out of which Rs. 156.72 million is payable to SPGVL) which resulted in increase in non escalable tariff revenue by 0.69% however certain portion of the claim is still pending with CERC. The period for such one time payment to SPGVL in respect of the claim which is still pending with CERC expired on 6 December, 2018 (being 18 months from the date of listing of IndiGrid). Accordingly, IndiGrid has reversed the liability of Rs. 422.77 million with corresponding effect to property, plant and equipment in the special purpose combined financial statements.

Note 13A: Long term borrowings*

	Non-current			Current		
	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Debentures						
7.85% Non-convertible debentures (secured)	6,820.00	6,870.00	-	50.00	480.00	-
9.57% Non-convertible debentures (secured)	29,594.47	-	-	330.00	-	-
Term loans						
Indian rupee loan from banks (secured)	4,928.94	7,265.07	29,139.44	166.45	915.51	929.34
Indian rupee loan from financial institution (secured)	2,867.80	10,053.90	9,987.50	96.85	37.01	879.66
Local bills discounting and acceptances (secured)	728.91	6,848.30	2,226.05	-	-	-
Factoring bills payable (secured)	-	500.00	-	338.02	-	-
Foreign currency loan from financial institution (secured)	2,286.54	2,301.03	2,425.53	166.65	139.58	143.40
Loan from India Grid Trust (unsecured)	36,811.24	31,046.35	-	-	-	-
Interest accrued	-	-	-	455.58	32.76	305.24
Total	84,037.89	64,884.65	43,778.52	1,603.56	1,604.86	2,257.64
The above amount includes:						
Secured borrowings	47,226.65	33,838.30	43,778.52	1,158.04	1,597.83	2,257.64
Unsecured borrowings	36,811.24	31,046.35	-	445.52	7.03	-
Less: Amount disclosed under the head "other current financial liabilities" (refer note 15)	-	-	-	(1,603.56)	(1,604.86)	(2,257.64)
Total	84,037.89	64,884.65	43,778.52	-	-	-

* The borrowings above do not include the following external borrowings availed in India Grid Trust and Sterlite Grid 2 Limited (holding company of NRSS) since these entities do not form part of the SPV group for which these special purpose combined financial statements have been prepared.

Name of Entity	31 March 2019	31 March 2018	31 March 2017
India Grid Trust	16,795.46	9,941.47	-
Sterlite Grid 2 Limited	2,500.00	-	-

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Note 14: Trade payables

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Current			
Trade payables*			
- total outstanding dues of micro enterprises and small enterprises (refer note 31)	58.59	29.83	12.10
- total outstanding dues of creditors other than micro enterprises and small enterprises	44.67	33.34	76.66
Project management/investment management fees payable** (refer note 34)	79.67	64.43	-
Management fees payable to related parties*** (Refer note 34)	6.98	1.43	21.61
Total	189.91	129.03	110.37

* Trade payables are not-interest bearing and are normally settled on 30-90 days terms.

** Project management/investment management fees are not-interest bearing and is settled in 180 days terms.

*** Management fees payable to related parties are not-interest bearing and is settled in 180 days terms.

For explanation on the SPV Group's risk management policies, refer note 35A.

Note 15: Other financial liabilities

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Current			
Derivative Instruments at fair value through profit or loss			
Foreign exchange forward contracts	157.58	164.42	100.60
Cross currency interest rate swap	12.13	39.29	77.25
	169.70	203.71	177.85
Other financial liabilities at amortised cost			
Current maturities of long-term borrowings (refer note 13 and note 34)	1,147.97	1,572.10	1,952.40
Interest accrued on long-term borrowings	10.07	25.73	305.24
Interest accrued on short term borrowings	-	30.54	-
Interest payable to related parties (refer note 13 and 34)	445.52	7.03	-
Payables for purchase of property, plant and equipment	2,145.95	3,530.80	8,729.67
Reimbursement of expenses payable to related parties (refer note 34)	-	0.10	268.46
Other payable to related parties (refer note 34)	50.41	-	-
Others	36.87	40.85	119.66
	3,836.79	5,207.15	11,375.43
Total	4,006.49	5,410.86	11,553.28

Derivative instruments reflect the change in fair value of foreign exchange forward contracts and Currency / interest rate swaps to hedge of interest rate and foreign exchange fluctuation risks on foreign currency loan in USD. These contracts are not designated in hedge relationships and are measured at fair value through profit or loss. Refer note 28.

Payables for purchase of property, plant and equipment are non-interest bearing and are normally settled on 90-120 days terms.

Other payables are non-interest bearing and have an average term of six months.

Note 16: Other current liabilities

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Service tax payable	-	-	0.14
Advance from customers	438.10	-	-
GST Payable	0.03	0.40	-
Withholding taxes (TDS) payable	94.56	31.50	30.23
WCT payable	-	0.08	2.79
Total	532.69	31.98	33.16

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Note 17: Revenue from contracts with customers

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Type of service			
Power transmission services	9,905.19	7,487.27	6,209.48
Total	9,905.19	7,487.27	6,209.48

Projectwise breakup of revenue from contracts with customers

Bhopal Dhule Transmission Company Limited	2,577.49	2,584.86	2,600.36
Jabalpur Transmission Company Limited	2,149.79	2,455.09	2,067.01
Maheshwaram Transmission Limited	572.33	229.72	-
RAPP Transmission Company Limited	487.91	313.06	321.38
Purulia & Kharagpur Transmission Company Limited	746.24	526.10	281.21
Patran Transmission Company Limited	265.19	243.29	84.42
NRSS XXIX Transmission Limited	3,006.32	1,107.58	855.10
Odisha Generation Phase II Transmission Limited	99.93	27.57	-
Total	9,905.19	7,487.27	6,209.48

Revenue from contracts with customers comprises of revenue from power transmission services rendered in India to Long Term Transmission Customers (LTTCS) pursuant to the respective Transmission Services Agreements (TSAs) executed by the Group with LTTCS. The TSAs are executed for a period of 35 years and have fixed tariff charges as approved by CERC (except some escalable portion and some incentives/penalties relating to transmission assets availabilities). Under the TSAs, the SPV Group's performance obligation is to provide power transmission services. The SPV Group is required to ensure that the transmission assets meet the minimum availability criteria under the respective TSAs failing which could result in certain disincentives/penalties. The performance obligation is satisfied over-time as the customers receive and consume the benefits provided by the SPV Group's performance as the SPV Group performs. The payment is generally due within 60 days upon receipt of monthly invoice by the customer.

The SPV Group receives payments as per the pooling arrangements specified under the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 ('Pooling Regulations'). In the Point of Connection (PoC) mechanism, the transmission charges to be recovered from the entire system are allocated between users based on their location in the grid. Under the PoC mechanism, all the charges collected by the Central Transmission Utility (i.e. Power Grid Corporation of India Limited) from LTTCS are disbursed pro-rata to all Transmission Service Providers from the pool in proportion of the respective billed amount. Applying the practical expedient as given in Ind AS 115, the SPV Group has not disclosed the remaining performance obligation related disclosures since the revenue recognized corresponds directly with the value to the customer of the entity's performance completed to date. The impact on account of applying Ind AS 115- Revenue from contract with customers on the special purpose combines financial statements of the SPV Group is not material.

Reconciliation of the amount of revenue recognised in the statement of profit and loss with the contracted price

Revenue as per contracted price	9,613.64	7,282.74	5,997.02
Adjustments			
Incentives earned for higher asset availabilities	293.70	238.90	207.00
Surcharges received for late payments	71.04	27.44	31.06
Rebates given for early payments	(73.19)	(61.81)	(25.60)
Total revenue from contracts with customers	9,905.19	7,487.27	6,209.48

Note 18: Other income

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Liabilities no longer required written back*	2.37	67.76	-
Insurance claim received	-	-	10.00
Miscellaneous income	1.98	1.67	0.03
Total	4.35	69.43	10.03

* Amount of Rs. 2.37 millions for the financial year ended 31 March 2019 pertains to liabilities no longer payable written back by Patran Transmission Company Limited. Further, an amount of Rs. 67.76 million for the financial year ended 31 March 2018 pertains to reversal of liability made in the books of Bhopal Dhule Transmission Company Limited and Jabalpur Transmission Company Limited in the financial year ended March 31, 2017 for prepayment charges payable on long term borrowings.

Note 19: Employee benefit expense

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Salaries, wages and bonus	-	0.22	36.22
Gratuity expenses	-	-	0.78
Staff welfare expenses	-	-	0.76
Total	-	0.22	37.76

Note:

Employee benefit expenses for the previous years ended 31 March 2018 and 31 March 2017 represents the cost allocated by parent for the common employee related cost incurred at group level.

Note 20: Other expenses

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Transmission infrastructure maintenance charges	204.50	156.77	144.42
Power and fuel	17.00	9.84	9.25
Rent	2.42	1.84	1.49
Rates and taxes	118.28	19.70	21.63
Insurance expenses	138.91	119.00	89.90
Travelling and conveyance expenses	9.02	10.08	14.36
Management fees (refer note 34)	17.88	3.64	-
Project management fees (refer note 34)	39.54	26.47	-
Investment management fees (refer note 34)	130.53	87.54	-
Legal and professional fees	13.62	21.89	19.40
Payment to auditors	6.02	5.11	3.49
Security charges	7.91	7.02	6.37
Directors sitting fees	-	0.25	0.32
Liquidated damages	-	8.00	-
Miscellaneous expenses	27.13	23.48	12.92
Total	741.54	500.63	323.55

Other expenses as above are net of amounts capitalised to property, plant and equipment. Refer note 26.

Note 21: Finance Cost

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Interest on financial liabilities measured at amortised cost*	7,836.17	5,077.28	3,304.81
Exchange difference to the extent considered as adjustment to borrowing cost	147.79	7.80	(62.76)
Mark to market loss / (gain) on derivatives	(34.00)	145.80	152.35
Bank charges	28.62	90.54	83.48
Total	7,978.58	5,321.42	3,477.88

Finance costs as above are net of amounts capitalised to property, plant and equipment. Refer note 26.

*Includes interest charged by India Grid Trust on loans given to the SPVs owned by it.

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Note 22: Finance income

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Dividend income from investment measured at fair value through profit or loss	86.62	57.13	28.16
Interest income on deposits with banks	8.34	6.69	0.54
Other income	-	0.30	3.49
Total	94.96	64.12	32.19

Note 23: Depreciation and amortisation expense

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Depreciation of tangible assets	2,364.62	1,798.07	1,619.11
Total	2,364.62	1,798.07	1,619.11

Note 24: Earnings per share

These financial statements are special purpose combined financial statements prepared on the basis of line by line addition of the separate financial statements of the SPVs as described in Note 2.1. The SPV group does not qualify as a group under Ind AS 110 - "Consolidated Financial Statements". As a result, disclosures relating to Earnings per share have not been given.

Note 25: Significant accounting judgements, estimates and assumptions

The preparation of the SPV Group's special purpose combined financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenue, expenses, assets and liabilities and the accompanying disclosures and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

Judgements

In the process of applying the SPV Group's accounting policies, management has made the following judgements, which have the most significant effect on the amounts recognised in the special purpose combined financial statements.

Applicability of Appendix C - Service Concession Arrangements of Ind AS 115 Revenue from contracts with customers / Appendix A - Service Concession Arrangements of Ind AS 11 Construction Contracts *

BDTCL, JTCL, RTCL, PKTCL, MTL, PTCL, NRSS and OGPTL are transmission licensees under the Electricity Act, 2003 holding valid license for 25 years. They have also entered into a Transmission Services Agreement ("TSA") with Long Term Transmission Customers ("LTTTC") through a tariff based bidding process and is required to Build, Own, Operate and Maintain ("BOOM") the transmission infrastructure for a period of 35 years. The management of the SPV Group is of the view that the grantor as defined under Appendix C of Ind AS 115* ("Appendix C") / Appendix A of Ind AS 11 ("Appendix A") requires transmission licensee to obtain various approvals under the regulatory framework to conduct its operations both during the period of the license as well as at the end of the license period. However, in the view of management, the grantor's involvement and approvals are to protect public interest and are not intended to control through ownership, beneficial entitlement or otherwise, any significant residual interest in the transmission infrastructure at the end of the term of the arrangement. Accordingly, management is of the view that Appendix C / Appendix A is not applicable to the SPV Group.

* Ind AS 115 Revenue from contracts with customers is effective from April 1, 2018.

Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond the control of the SPV Group. Such changes are reflected in the assumptions when they occur.

Impairment of non-financial assets

Impairment exists when the carrying value of an asset or cash generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. For the purpose of assessment for impairment, the SPV Group has compared the carrying value of an asset or cash generating unit with the value in use. The value in use calculation is based on a DCF model. The recoverable amount is sensitive to the discount rate used for the DCF model as well as the expected future cash inflows and other assumptions. Also refer Note 32.

Note 26: Capitalisation of expenditure

The expenditure incidental to the setting up of the project is treated as pre-operative expenditure and included in Capital Work in Progress (CWIP) which is apportioned to the assets on completion of the project and commencement of commercial operations. The SPV Group has capitalised the following expenses to the cost of property, plant & equipment / capital work-in-progress (CWIP):

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
A. Opening Balance	2,537.28	826.61	589.65
B. Additions during the year			
Finance cost	1,431.56	2,183.69	762.20
Rent	0.02	0.19	0.17
Legal and professional fees	1.68	8.52	197.00
Conveyance and travelling	-	-	-
General Expenses	1.80	6.54	14.04
Total (B)	1,435.06	2,198.94	973.40
C. Transferred to property, plant and equipment during the year	2,357.58	488.27	736.45
D. Closing Balance of expenditure in CWIP (A+B-C)	1,614.76	2,537.28	826.61

Note 27: Capital and other commitments

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
(a) Commitment relating to completion of the transmission projects, net of capital advances	-	1,875.81	20,703.55

(b) The SPVs have entered into transmission services agreement (TSA) with long term transmission customers pursuant to which the SPVs have committed to transmit power of contracted capacity and have also committed minimum availability of transmission lines/substations over the life of the TSA period. The TSA contains provision for penalties in case of certain defaults.

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Note 28: Derivative instruments

The SPV Group has entered into the following derivative instruments:

(a) The following are the outstanding Forward Exchange Contracts entered into by the SPV Group, for hedge purpose, as on 31 March 2019, 31 March 2018 and 31 March 2017:

Year ended	Currency Type	Foreign Currency (In million)	Amount (Rs. in million)	Buy/Sell	No. of contracts (Quantity)
Hedge of foreign currency loan from financial institution					
31 March 2019	US \$	35.81	2,453.19	Buy	4
31 March 2018	US \$	37.95	2,440.62	Buy	4
31 March 2017	US \$	40.16	2,604.14	Buy	10

(b) Interest rate/Cross currency interest rate swap contracts outstanding as at year end to hedge against exposure to variable interest outflow on loans/foreign currency fluctuations:

Year	Currency type	No. of contracts	Foreign currency	Period of Contract	Floating rate	Fixed rate
31 March 2019	US \$	1	5.14	31 Dec 2015 to 31 Mar 2021	USD 6m LIBOR + 2.10% to 3.80%	6.71% on INR principal
31 March 2018	US \$	1	7.28	31 Dec 2015 to 31 Mar 2021	USD 6m LIBOR + 2.10% to 3.80%	6.71% on INR principal
31 March 2017	US \$	1	9.49	31 Dec 2015 to 31 Mar 2021	USD 6m LIBOR + 2.10% to 3.80%	6.71% on INR principal
31 March 2017	US \$	1	41.40	31 Dec 2015 to 27 Dec 2017	USD 6 Month Libor on USD principal	1.95% on USD principal

The SPV Group had outstanding interest rate swap contracts to swap 6m LIBOR to 1.045% / 1.950% on foreign currency loan from financial institution. During the year ended March 31, 2016, the SPV Group entered into further swap contracts on the same loan whereby the foreign exchange rate for principal and interest payments has been fixed at INR 65.05 / USD and the interest rate fixed at 6.71% on the loan amount converted in INR at the fixed USD rate. As a combined result of the swap contracts, the SPV Group would pay interest in INR at 6.71% on the foreign currency loan converted to INR at INR 65.05/USD and receive interest at 6m LIBOR + 2.10% to 3.80% on the foreign currency loan amount.

Note 29: Contingent liability

	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Disputed liabilities in appeal			
- Entry tax demand*	409.85	369.35	346.99
- VAT demand*	104.34	104.34	104.34
Total	514.19	473.69	451.33

* These contingent liabilities are recoverable from SPGVL as per the share purchase agreements.

Notes:

31 March 2019:

Entry tax demand of Rs 165.80 millions for Bhopal Dhule Transmission Company Limited (BDTCL) and Rs 138.70 millions for Jabalpur Transmission Company Limited (JTCL) pertains to demands under the Entry tax act read with Madhya Pradesh Vat Act, 2002 for payment of entry tax upon completion of assessment by tax authorities for the year 2012-13, 2013-14, 2014-15 and 2015-16. BDTCL and JTCL have preferred an appeal against the demand before High Court, Jabalpur (Madhya Pradesh). Both the SPVs are contesting the demand and the management, including its tax advisors, believe that it's position will likely be upheld in the appellate process. No expense has been accrued in the special purpose combined financial statements for the tax demands raised. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on the consolidated financial position and results of the operations. BDTCL and JTCL have deposited Rs. 58.38 millions and Rs 49.14 millions respectively with the tax authorities against the said demands to comply the order of hon'ble High court of Madhya Pradesh. The Hon'ble high court has accepted the plea of SPVs and has given stay on entire demand after deposit of specified amount till the disposal of case.

Entry tax demand of Rs 92.05 millions for Jabalpur Transmission Company Limited (JTCL) pertains to demand under Entry Tax Act read with Chhattisgarh Value Added Tax Act, 2005 for payment of entry tax upon completion of assessment by tax authorities for the year 2012-13, 2013-14 and 2014-15. JTCL has preferred an appeal against the demand before the Chairman Chhattisgarh Commercial tax Tribunal, Raipur (C.G.). The management, including its tax advisors, believe that it's position will likely be upheld in the appellate process. No expense has been accrued in the special purpose combined financial statements for the tax demand raised. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on combined financial position and results of the operations. JTCL has deposited Rs. 57.62 millions with the tax authorities against the said demand as per the provision of Chhattisgarh Value Added Tax Act, 2005 for filing of appeal.

Entry tax demand of Rs 13.30 millions for RAPP Transmission Company Limited (RTCL) pertains to demands under the Entry tax act read with Madhya Pradesh Vat Act, 2002 for payment of entry tax upon completion of assessment by tax authorities for the year 2014-15 and year 2015-16. RTCL has appealed against the demand before High Court, Jabalpur (Madhya Pradesh). The management, including its tax advisors, believe that it's position will likely be upheld in the appellate process. No expense has been accrued in the special purpose combined financial statements for the tax demands raised. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on the financial position and results of the operations of RTCL. RTCL has deposited Rs 4.72 millions with the tax authorities against the said demands to comply the order of hon'ble High court of the Madhya Pradesh. The Hon'ble high court has accepted the plea of RTCL and has given stay on entire demand after deposit of specified amount till the disposal of case.

VAT demand of Rs 104.34 millions for Purnulia & Kharagpur Transmission Company Limited (PKTCL) pertains to demand under Jharkhand Value Added Tax (Amendment) Act, 2005 for payment of VAT for the year 2015-16. The SPV has preferred an appeal against the demand before Jharkhand High Court. The management, including its tax advisors, believe that it's position will likely be upheld in the appellate process. No expense has been accrued in the special purpose combined financial statements for the tax demand raised. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on the financial position and results of the operations. PKTCL has deposited Rs. 26.09 millions with the tax authorities against the said demand.

31 March 2018:

Entry tax demand of Rs 165.80 millions for Bhopal Dhule Transmission Company Limited (BDTCL) and Rs 138.70 millions for Jabalpur Transmission Company Limited (JTCL) pertains to demands under the Entry tax act read with Madhya Pradesh Vat Act, 2002 for payment of entry tax upon completion of assessment by tax authorities for the year 2012-13, 2013-14, 2014-15 and 2015-16. BDTCL and JTCL have preferred an appeal against the demand before High Court, Jabalpur (Madhya Pradesh). Both the SPVs are contesting the demand and the management, including its tax advisors, believe that it's position will likely be upheld in the appellate process. No expense has been accrued in the special purpose combined financial statements for the tax demands raised. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on the consolidated financial position and results of the operations. BDTCL and JTCL have deposited Rs. 58.37 millions and Rs 49.00 millions respectively with the tax authorities against the said demands to comply the order of hon'ble High court of Madhya Pradesh. The Hon'ble high court has accepted the plea of SPVs and has given stay on entire demand after deposit of specified amount till the disposal of case.

Entry tax demand of Rs 51.55 millions for Jabalpur Transmission Company Limited (JTCL) pertains to demand under Entry Tax Act read with Chhattisgarh Value Added Tax Act, 2005 for payment of entry tax upon completion of assessment by tax authorities for the year 2012-13 and 2013-14. JTCL has preferred an appeal against the demand before the Chairman Chhattisgarh Commercial tax Tribunal, Raipur (C.G.). The management, including its tax advisors, believe that it's position will likely be upheld in the appellate process. No expense has been accrued in the special purpose combined financial statements for the tax demand raised. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on combined financial position and results of the operations. JTCL has deposited Rs. 12.05 millions with the tax authorities against the said demand as per the provision of Chhattisgarh Value Added Tax Act, 2005 for filing of appeal.

Entry tax demand of Rs 13.30 millions for RAPP Transmission Company Limited (RTCL) pertains to demands under the Entry tax act read with Madhya Pradesh Vat Act, 2002 for payment of entry tax upon completion of assessment by tax authorities for the year 2014-15 and year 2015-16. RTCL has appealed against the demand before High Court, Jabalpur (Madhya Pradesh). The management, including its tax advisors, believe that it's position will likely be upheld in the appellate process. No expense has been accrued in the special purpose combined financial statements for the tax demands raised. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on the financial position and results of the operations of RTCL. RTCL has deposited Rs 4.72 millions with the tax authorities against the said demands to comply the order of hon'ble High court of the Madhya Pradesh. The Hon'ble high court has accepted the plea of RTCL and has given stay on entire demand after deposit of specified amount till the disposal of case.

VAT demand of Rs 104.34 millions for Purnulia & Kharagpur Transmission Company Limited (PKTCL) pertains to demand under Jharkhand Value Added Tax (Amendment) Act, 2005 for payment of VAT for the year 2015-16. The SPV has preferred an appeal against the demand before Jharkhand High Court. The management, including its tax advisors, believe that it's position will likely be upheld in the appellate process. No expense has been accrued in the special purpose combined financial statements for the tax demand raised. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on the financial position and results of the operations. PKTCL has deposited Rs. 26.09 millions with the tax authorities against the said demand.

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31 March 2017:

Entry tax demand of Rs 164.13 millions for Bhopal Dhule Transmission Company Limited (BDTCL) and Rs 125.04 millions for Jabalpur Transmission Company Limited (JTCL) pertains to demands under the Entry tax act read with Madhya Pradesh Vat Act, 2002 for payment of entry tax upon completion of assessment by tax authorities for the year 2012-13, 2013-14 and 2014-15. BDTCL and JTCL have preferred an appeal against the demand before High Court, Jabalpur (Madhya Pradesh). Both the SPVs are contesting the demand and the management, including its tax advisors, believe that it's position will likely be upheld in the appellate process. No expense has been accrued in the special purpose combined financial statements for the tax demands raised. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on the consolidated financial position and results of the operations. BDTCL and JTCL have deposited Rs. 57.77 millions and Rs 44.29 millions respectively with the tax authorities against the said demands to comply the order of Hon'ble High court of the Madhya Pradesh. The Hon'ble high court has accepted the plea of SPVs and has given stay on entire demand after deposit of specified amount till the disposal of case.

Entry tax demand of Rs 51.55 millions for Jabalpur Transmission Company Limited (JTCL) pertains to demand under Entry Tax Act read with Chhattisgarh Value Added Tax Act, 2005 for payment of entry tax upon completion of assessment by tax authorities for the year 2012-13 and 2013-14. JTCL has preferred an appeal against the demand before the Chairman Chhattisgarh Commercial tax Tribunal, Raipur (C.G.). The management, including its tax advisors, believe that it's position will likely be upheld in the appellate process. No expense has been accrued in the special purpose combined financial statements for the tax demand raised. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on combined financial position and results of the operations. JTCL has deposited Rs. 12.05 millions with the tax authorities against the said demand as per the provision of Chhattisgarh Value Added Tax Act, 2005 for filing of appeal.

Entry tax demand of Rs 6.27 millions for RAPP Transmission Company Limited (RTCL) pertains to demands under the Entry tax act read with Madhya Pradesh Vat Act, 2002 for payment of entry tax upon completion of assessment by tax authorities for the year 2014-15. RTCL has appealed against the demand before High Court, Jabalpur (Madhya Pradesh). The management, including its tax advisors, believe that it's position will likely be upheld in the appellate process. No expense has been accrued in the special purpose combined financial statements for the tax demands raised. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on the financial position and results of the operations of RTCL. RTCL has deposited Rs 2.39 millions with the tax authorities against the said demands to comply the order of Hon'ble High court of the Madhya Pradesh. The Hon'ble high court has accepted the plea of RTCL and has given stay on entire demand after deposit of specified amount till the disposal of case.

VAT demand of Rs 104.34 millions for Purulia & Kharagpur Transmission Company Limited (PKTCL) pertains to demand under Jharkhand Value Added Tax (Amendment) Act, 2005 for payment of VAT for the year 2015-16. The Group has preferred an appeal against the demand before Joint Commissioner of commercial tax, Ranchi. The management, including its tax advisors, believe that it's position will likely be upheld in the appellate process. No expense has been accrued in the special purpose combined financial statements for the tax demand raised. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on the Group's financial position and results of the operations. PKTCL has deposited Rs 26.09 millions with the tax authorities against the said demand.

Note 30: Segment reporting

The SPV Group's activities comprise of transmission of electricity in certain states in India. Based on the guiding principles given in Ind AS 108 on "Segment Reporting", this activity falls within a single business and geographical segment and accordingly the disclosures of Ind AS 108 have not been separately given.

Under Point of Connection (PoC) mechanism, Power Grid Corporation of India Limited (PGCIL) is designated as central transmission utility with the responsibility for billing and collecting of usage charges from Inter-State Transmission Services (ISTS) users. Hence the entire amount of revenue and trade receivables pertaining to transmission charges is receivable from PGCIL.

Note 31: Details of Dues to Micro and Small Enterprises as defined under MSMED Act, 2006

Particulars	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
(i) The principal amount and the interest due thereon (to be shown separately) remaining unpaid to any supplier as at the end of each accounting year.			
Principal amount due to micro and small enterprises	58.59	29.83	12.10
Interest due on above	0.05	-	-
(ii) The amount of interest paid by the buyer in terms of section 16, of the Micro Small and Medium Enterprise Development Act, 2006 along with the amounts of the payment made to the supplier beyond the appointed day during each accounting year.	-	-	-
(iii) The amount of interest due and payable for the period of delay in making payment (which have been paid but beyond the appointed day during the year) but without adding the interest specified under Micro Small and Medium Enterprise Development Act, 2006.	-	-	-
(iv) The amount of interest accrued and remaining unpaid at the end of each accounting year.	-	-	-
(v) The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues as above are actually paid to the small enterprise for the purpose of disallowance as a deductible expenditure under section 23 of the Micro Small and Medium Enterprise Development Act, 2006	-	-	-

Interest payable as per section 16 of the Micro, Small and Medium Enterprises Development Act, 2006 is Rs. 0.05 million (31 March 2018: Rs. Nil million ; 31 March, 2017: Rs. Nil million). Dues to micro and small enterprises have been determined to the extent such parties have been identified on the basis of intimations received from the "suppliers" / information available with the Company regarding their status under the Micro, Small and Medium Enterprises Act, 2006.

Note 32: Key assumptions for impairment testing

As required by Ind AS 36 - Impairment of Assets, the SPV Group has determined the recoverable amounts of the transmission assets in BDTCL as at 31 March 2019, JTCL as at 31 March 2019 and 31 March 2017, OGPTL as at 31 March 2018 and MTL as at 31 March 2019 on the basis of the value in use by estimating the future cash flows over the period of transmission services agreements (TSA) of the respective transmission assets. For such estimation, management has used certain key assumptions which are as follows:

- i. Tax adjusted discounting rate:
 - As at 31 March 2019- BDTCL- 8.24%; JTCL - 8.30% ; MTL- 8.12%
 - As at 31 March 2017- JTCL - 8.14%
- ii. Normal tax rate:
 - As at 31 March 2019- BDTCL, JTCL & MTL - 29.12%
 - As at 31 March 2017- JTCL - 34.61%
- iii. MAT rate:
 - As at 31 March 2019- BDTCL, JTCL & MTL - 21.55%
 - As at 31 March 2017- JTCL - 21.34%
- iv. Availability of transmission lines at 99.75% throughout the TSA period;
- v. Escalable tariff inflation rate:
 - As at 31 March 2019- BDTCL, JTCL & MTL - 5.73%
 - As at 31 March 2017- JTCL - 6.42%
- vi. Cost of equity:
 - As at 31 March 2018- OGPTL- 14.00%
- vii. Cost of debt:
 - As at 31 March 2019- BDTCL, JTCL & MTL - 8.45%
 - As at 31 March 2018- OGPTL - 8.50%
- viii. Debt refinancing after completion of OGPTL project: Rs. 610.00 million (over project cost)
- ix. Total cost of OGPTL project: Rs. 10,430.00 million

Based on management evaluation, these assumptions are considered reasonable as at 31 March 2019, 31 March 2018 and 31 March 2017. The entities have obtained valuation reports from external valuers in order to arrive at the recoverable amounts as at 31 March 2019, 31 March 2018 and 31 March 2017. The recoverable amount for the transmission assets in BDTCL was lower than the carrying value as at 31 March 2019 by Rs. 166.12 million and accordingly impairment charge of Rs. 166.12 million was recorded in the books. The recoverable amount of JTCL was lower than the carrying value as at 31 March 2019 by Rs. 390.00 million and accordingly impairment charge of Rs. 390.00 million was recorded in the books. The recoverable amount for the transmission assets in MTL was lower than the carrying value as at 31 March 2019 by Rs. 66.96 million and accordingly impairment charge of Rs. 66.96 million was recorded in the books. The recoverable amount for the transmission assets in OGPTL was lower than the carrying value as at 31 March 2018 by Rs. 287.81 million and accordingly impairment charge of Rs. 287.81 million was recorded in the books. The recoverable amount for the transmission assets in JTCL was lower than the carrying value as at 31 March 2017 by Rs. 2,474.06 million and accordingly Impairment charge of Rs. 2,474.06 million was recorded in the books. These assumptions are reassessed on a periodic basis for the purpose of determination of the recoverable amounts of the transmission assets. Any change in key assumptions can have a material effect on the recoverable amounts of the respective transmission asset.

BDTCL received CERC Order dated April 24, 2019 disallowing the claim filed by it towards tariff increase on account of IDC. Accordingly, estimated tariff income in respect of such claim has been excluded from the valuation of BDTCL for the purpose of impairment testing. Accordingly an impairment charge of Rs. 166.12 million has been recognised in respect of BDTCL project as at March 31, 2019 in the special purpose combined financial statements. Since the Order was received post approval of the annual consolidated financial statements of IndiGrid by the Board of the Investment Manager, the above effect could not be given in the consolidated financial statements of IndiGrid. Management is in the process of filing appeal with APTEL as it believes that the CERC order is contrary to its previous orders.

Further, as at 31 March 2019, an impairment charge of Rs. 368.49 million is recognised in OGPTL on the basis of expected recoverable value as per the share purchase agreement.

SPV Group
(as defined in Note 1 - General Information)
Notes to Special Purpose Combined Financial Statements

Note 33A: Fair value measurements

Set out below, is a comparison by class of the carrying amounts and fair value of the SPV Group's financial instruments, other than those with carrying amounts that are reasonable approximations of fair values:

Particulars	Carrying value			Fair value		
	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)	31 March 2019 (Rs. in million)	31 March 2018 (Rs. in million)	31 March 2017 (Rs. in million)
Financial assets						
Investments in mutual funds	1,383.63	210.03	812.01	1,383.63	210.03	812.01
Total	1,383.63	210.03	812.01	1,383.63	210.03	812.01
Financial liabilities						
Derivative instruments	169.70	203.71	177.85	169.70	203.71	177.85
Total	169.70	203.71	177.85	169.70	203.71	177.85

The management has assessed that the financial assets and financial liabilities as at year end other than above are reasonable approximations of their fair values.

The fair value of the financial assets and liabilities is included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. The following methods and assumptions were used to estimate the fair values:

a) The fair value of the quoted mutual fund is based on the price quotations at reporting date.

b) The SPV Group enters into derivative financial instruments with financial institutions with investment grade credit ratings. Foreign exchange forward contracts and interest rate swaps are valued using valuation techniques, which employs the use of market observable inputs. The most frequently applied valuation techniques include forward pricing model, using present value calculations. The models incorporate various inputs including the credit quality counterparties, foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spread between the respective currencies, interest rate curves etc. The changes in counterparty credit risk had no material effect on financial instruments recognised at fair value through profit and loss.

Note 33B: Fair Value Hierarchy

The following table provides the fair value measurement hierarchy of the SPV Group's assets and liabilities:

Quantitative disclosures of fair value measurement hierarchy for assets/liabilities as at 31 March 2019, 31 March 2018 and 31 March 2017:

	Amount	Fair value		
		Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)
(Rs. in million)				
Assets/(liabilities) measured at fair value through profit and loss				
Investments in Mutual Funds (Asset)				
As at 31 March 2019	1,383.63	1,383.63	-	-
As at 31 March 2018	210.03	210.03	-	-
As at 31 March 2017	812.01	812.01	-	-
Derivative instruments (Liability)				
As at 31 March 2019	(169.70)	-	(169.70)	-
As at 31 March 2018	(203.71)	-	(203.71)	-
As at 31 March 2017	(177.85)	-	(177.85)	-

There have been no transfers among Level 1, Level 2 and Level 3.

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Note 24 : Related party disclosures

(A) Name of related party and nature of its relationship:

I. Related parties where control exists

1. Bhopal Dhule Transmission Company Limited ('BDTCL') and Jabalpur Transmission Company Limited ('JTCL')

Sterlite Grid 1 Limited ('SGL1')	Immediate holding company
- Till 29 May 2017*	
Sterlite Power Grid Ventures Limited (SPGVL)	Intermediate holding company
Sterlite Power Transmission Limited ('SPTL')	Intermediate holding company
Twin Star Overseas Limited, Mauritius	Intermediate holding company
Volcan Investments Limited, Bahamas	Ultimate holding company

- From 30 May 2017*
India Grid Trust
Ultimate Parent

*On 30 May 2017, the equity shares representing 100% of the equity stake in Sterlite Grid 1 Limited were transferred by Sterlite Power Grid Ventures Limited (SPGVL) to India Grid Trust ('IndiGrid') in exchange of units issued by IndiGrid to SPGVL. As a result, BDTCL and JTCL became wholly owned subsidiaries of India Grid Trust with effect from 30 May 2017.

2. Parulfa & Khargapur Transmission Company Limited ('PKTCL'), RAPP Transmission Company Limited ('RTCL') and Maheshwaram Transmission Limited ('MTL')

- Till 14 February 2018**	
Sterlite Grid 2 Limited ('SGL2')	Intermediate holding company
Sterlite Power Grid Ventures Limited (SPGVL)	Intermediate holding company
Sterlite Power Transmission Limited ('SPTL')	Intermediate holding company
Twin Star Overseas Limited, Mauritius	Intermediate holding company
Volcan Investments Limited, Bahamas	Ultimate holding company

- From 15 February 2018**
India Grid Trust
Ultimate Parent

**On 15 February 2018, the equity shares representing 49% of the equity stake along with all rights (i.e. 100% share holding rights) in RAPP Transmission Company Limited and Maheshwaram Transmission Limited and 100% of the equity stake in Parulfa & Khargapur Transmission Company Limited have been transferred to Sterlite Grid 1 Limited (which is wholly owned subsidiary of India Grid Trust) from Sterlite Grid 2 Limited. As a result, PKTCL, RTCL and MTL became wholly owned subsidiaries of India Grid Trust with effect from 15 February 2018.

3. Patran Transmission Company Limited ('PTCL')

- Till 29 August 2018***	
Techno Electric & Engineering Company Limited	Entity with significant influence
Techno Power Grid Company Limited	Entity with significant influence
Shri P P Gupta	Individual with significant influence

- From 30 August 2018***
India Grid Trust
Ultimate Parent

***On 30 August 2018, the equity shares representing 74% of the equity stake along with all rights (i.e. 100% share holding rights) in Patran Transmission Company Limited have been acquired from Techno Power Grid Company Limited and Techno Electric & Engineering Company Limited. As a result, PTCL became wholly owned subsidiary of India Grid Trust with effect from 30 August 2018.

4. NRSS XXXIX Transmission Limited ('NRSS')

Sterlite Grid 2 Limited	Immediate holding company
Sterlite Power Grid Ventures Limited	Intermediate holding company
Sterlite Power Transmission Limited	Intermediate holding company
Twin Star Overseas Limited, Mauritius	Intermediate holding company
Volcan Investments Limited, Bahamas	Ultimate holding company

5. Odisha Generation Phase II Transmission Limited ('OGPTL')

Sterlite Grid 3 Limited	Immediate holding company
Sterlite Power Grid Ventures Limited	Intermediate holding company
Sterlite Power Transmission Limited	Intermediate holding company
Twin Star Overseas Limited, Mauritius	Intermediate holding company
Volcan Investments Limited, Bahamas	Ultimate holding company

II. Other related parties with whom transactions have taken place during the year

(i) Fellow subsidiaries/entities with significant influence

Bhopal Dhule Transmission Company Limited ('BDTCL') and Jabalpur Transmission Company Limited ('JTCL')

- Till 29 May 2017*
Sterlite Grid 2 Limited ('SGL2')
Fellow subsidiary

- From 30 May 2017*
Sterlite Power Grid Ventures Limited (SPGVL)
Sterlite Investment Managers Limited ('SIML')
Sterlite Power Transmission Limited (SPTL)
Entity with significant influence on the Company's Parent (Also the Project Manager for IndiGrid)
Fellow subsidiary of the Entity with significant influence on the Company's Parent (Also the Investment Manager for IndiGrid)
Holding Company of the Entity with significant influence on the Company's Parent

Punjab & Siharagar Transmission Company Limited (PKTCL), RAPP Transmission Company Limited (RTCL)

- From 15 February 2018**
Sterlite Power Grid Ventures Limited (SPGVL) Entity with significant influence on the Company's Parent (Also the Project Manager for IndiGrid)
Sterlite Investment Managers Limited (SIML) Fellow subsidiary of the Entity with significant influence on the Company's Parent (Also the Investment Manager for IndiGrid)

Maheshwaram Transmission Limited (MTL)
- From 15 February 2018**
Sterlite Grid 3 Limited Subsidiary of the entity with significant influence on the Company's Parent
Sterlite Power Grid Ventures Limited (SPGVL) Entity with significant influence on the Company's Parent (Also the Project Manager for IndiGrid)
Sterlite Investment Managers Limited (SIML) Fellow subsidiary of the Entity with significant influence on the Company's Parent (Also the Investment Manager for IndiGrid)

Patran Transmission Company Limited
- From 30 August 2018**
Sterlite Power Grid Ventures Limited (SPGVL) Entity with significant influence on the Company's Parent (Also the Project Manager for IndiGrid)
Sterlite Investment Managers Limited (SIML) Fellow subsidiary of the Entity with significant influence on the Company's Parent (Also the Investment Manager for IndiGrid)

III. Additional related parties as per the Companies Act, 2013 with whom transactions have taken place during the year

(i) **Key management personnel (KMP)**
Mr. Avantika Kakkar Director (RTCL, NRSS and PKTCL)
Mr. Lalit Narayan Tandon Director (RTCL, NRSS and PKTCL)

(B) **The transactions with related parties during the year are as follows:-**

Particulars	SPGVL - as holding company	SPGVL - as entity with significant influence	India Grid Trust	SIML	SPTL	SGL1 - as holding company	SGL2 - as holding company	SGL2 - as fellow subsidiary	SGL3	Mr. Avantika Kakkar	Mr. Lalit Narayan Tandon	(Rs. in Millions)
												Teechno Electric & Engineering Company Limited
Transactions during the year												
31 March 2015												
Purchase of capital goods and services (net of indirect taxes)	7,341.62	-	-	-	7.91	-	1,445.35	-	-	-	-	-
Conversion of unsecured loan into equity share capital (including premium)	-	-	-	-	-	-	177.80	-	94.13	-	-	-
Unsecured loans taken	-	-	6,068.26	-	-	-	649.34	-	1,048.70	-	-	-
Unsecured loans repaid	-	-	303.37	-	-	-	-	-	-	-	-	-
Interest on Loans taken	-	-	4,885.93	-	-	-	5,336.38	-	-	-	-	-
Received towards indemnification of liabilities	-	-	50.41	-	-	-	-	-	-	-	-	-
Project Management Fees	-	39.54	-	-	-	-	-	-	-	-	-	-
Investment Management Fees	-	-	-	130.53	-	-	-	-	-	-	-	-
Loans and advances given	-	-	-	-	-	-	2,757.62	-	-	-	-	-
Interim dividend paid (excluding DDT)	-	-	-	-	-	-	1,001.77	-	-	-	-	-
Management fees	13.17	-	-	-	-	-	4.72	-	-	-	-	-
Reimbursement of expenses (paid or payable)	-	-	-	-	-	-	-	-	-	-	-	-
Interest on Compulsorily Convertible Debentures	-	-	-	-	-	-	-	-	-	-	-	-
Directors sitting fees	-	-	-	-	-	-	-	-	-	-	-	-
31 March 2016												
Purchase of capital goods and services (net of indirect taxes)	7,862.49	-	-	-	0.66	-	-	-	-	-	-	242.50
Unsecured loans taken	-	-	32,777.62	-	-	-	4,192.70	-	1,197.87	-	-	-
Unsecured loans repaid	-	-	1,731.26	-	-	-	-	-	850.74	-	-	-
Interest on Loans taken	-	-	2,765.68	-	-	9,419.12	732.51	25.00	-	-	-	-
Project Management Fees	-	26.44	-	-	-	-	-	-	-	-	-	-
Investment Management Fees	-	-	-	87.54	-	-	-	-	-	-	-	-
Management fees	6.21	-	-	-	-	-	-	-	0.03	-	-	-
Reimbursement of expenses (paid or payable)	57.81	-	-	-	-	-	-	-	18.32	-	-	-
Interest on Compulsorily Convertible Debentures	0.01	-	-	-	-	-	-	-	-	-	-	-
Directors sitting fees	-	-	-	-	-	-	-	-	-	0.08	0.17	-
31 March 2017												
Purchase of capital goods and services (net of indirect taxes)	15,575.38	-	-	-	-	-	-	-	-	-	-	336.47
Advance given against purchase of capital goods and services	3,254.97	-	-	-	-	-	-	-	-	-	-	-
Unsecured loans taken	-	-	-	-	-	800.23	662.81	-	1,751.81	-	-	-
Unsecured loans repaid	-	-	-	-	-	-	360.00	-	1,261.05	-	-	-
Conversion of interest payable and management fees payable into unsecured loan	-	-	-	-	-	402.36	-	-	-	-	-	-
Conversion of unsecured loan into equity share capital (including premium)	-	-	-	-	-	-	1,000.00	-	210.00	-	-	-
Subscription of equity shares (including securities premium)	-	-	-	-	-	-	-	-	1,250.37	-	-	-
Reimbursement of expenses (paid or payable)	179.38	-	-	-	-	-	-	-	-	-	-	-
Directors sitting fees	-	-	-	-	-	-	-	-	-	0.15	0.15	-
Corporate Guarantee Given	22,500.00	-	-	-	-	-	-	-	-	-	-	-

(C) The outstanding balances of related parties are as follows:-

Particulars	SPGVL - as holding company	SPGVL - as entity with significant influence	India Grid Trust	SIML	SPTL	SGL1 - as holding company	SGL2 - as holding company	SGL2 - as fellow subsidiary	SGL3	Mr. Avantika Kakkar	Mr. Lalit Narayan Tandon	(Rs in Million)
												Techno Electric & Engineering Company Limited
31 March 2015												
Payable for purchase of property, plant and equipment	242.94	-	-	-	-	-	1,676.61	-	-	-	-	-
Unsecured loan payable	-	-	36,811.24	-	-	-	-	-	1,811.42	-	-	-
Interest Payable (net of TDS)	-	-	445.51	-	-	-	-	-	-	-	-	-
Amount payable against indemnification of dues	-	-	50.41	-	-	-	-	-	-	-	-	-
Loans and advances receivable	-	-	-	-	-	-	-	-	-	-	-	-
Project Management Fee Payable (net of TDS)	-	18.25	-	-	-	-	2,757.62	-	-	-	-	-
Investment Management Fee payable (net of TDS)	-	-	-	61.42	-	-	-	-	-	-	-	-
Advance recoverable in cash	1,749.04	-	-	-	-	-	-	-	-	-	-	-
Management fee payable (net of TDS)	2.60	-	-	-	-	-	4.35	-	-	-	-	-
31 March 2018												
Payable for purchase of property, plant and equipment	3,531.31	-	-	-	-	-	-	-	-	-	-	-
Advance outstanding against purchase of capital goods	3,676.16	-	-	-	-	-	-	-	-	-	-	-
Unsecured loan payable	-	-	31,046.36	-	-	-	4,864.84	-	856.84	-	-	-
Interest Payable (net of TDS)	-	-	7.03	-	-	-	-	-	-	-	-	-
Project Management Fee Payable (net of TDS)	-	14.92	-	-	-	-	-	-	-	-	-	-
Investment Management Fee payable (net of TDS)	-	-	-	49.52	-	-	-	-	-	-	-	-
Management fee payable (net of TDS)	1.43	-	-	-	-	-	-	-	0.03	-	-	-
Reimbursement of expenses (paid or payable)	6.08	-	-	-	-	-	-	-	-	-	-	-
31 March 2017												
Payable for purchase of property, plant and equipment	8,690.05	-	-	-	-	-	-	-	-	-	-	41.42
Advance outstanding against purchase of capital goods	3,899.02	-	-	-	-	-	-	-	-	-	-	-
Unsecured loan payable	-	-	-	-	-	21,076.56	1,404.64	25.00	509.71	-	-	-
Management fees payable (net of TDS)	-	-	-	-	-	-	21.61	-	-	-	-	-
Reimbursement of expenses (paid or payable)	283.48	-	-	-	-	3.56	0.66	0.03	18.32	-	-	-

Note 35A: Financial risk management objectives and policies

The SPV Group's principal financial liabilities, comprise borrowings, trade and other payables and other financial liabilities. The main purpose of these financial liabilities is to finance the SPV Group's operations. The SPV Group's principal financial assets include investments, trade and other receivables, cash and short-term deposits and other financial assets that derive directly from its operations.

The SPV Group is exposed to market risk, credit risk and liquidity risk. The senior management oversees the management of these risks. All derivative activities for risk management purposes are carried out by specialist teams that have the appropriate skills, experience and supervision. It is the SPV Group's policy that no trading in derivatives for speculative purposes may be undertaken. The SPV Group reviews and agrees policies for managing each of these risks, which are summarised below

The Risk Management policies of the SPV Group are established to identify and analyse the risks faced by the SPV Group, to set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the SPV Group's activities.

Management has overall responsibility for the establishment and oversight of the SPV Group's risk management framework.

(A) Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises two types of risk: interest rate risk and currency risk. Financial instruments affected by market risk include borrowings, bank deposits, investments in short-term mutual funds, and derivative financial instruments.

The sensitivity analysis in the following sections relate to the position as at 31 March 2019, 31 March 2018 and 31 March 2017.

The sensitivity analysis have been prepared on the basis that the amount of net debt, the ratio of fixed to floating interest rates of the debt and derivatives and the proportion of financial instruments in foreign currencies are all constant as at 31 March 2019, 31 March 2018 and 31 March 2017.

The following assumption has been made in calculating the sensitivity analyses:

- The sensitivity of the relevant statement of profit or loss item is the effect of the assumed changes in respective market risks. This is based on the financial assets and financial liabilities held at 31 March 2019, 31 March 2018 and 31 March 2017.

Interest rate risk

Interest rate risk is the risk that the fair value or the future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The SPV Group's exposure to the risk of changes in market interest rate primarily relates to the SPV Group's long term debt obligations with floating interest rates.

As infrastructure development and construction business is capital intensive, the SPV Group is exposed to interest rate risks. The SPV Group is exposed to the interest rate fluctuation in both domestic and foreign currency borrowing. To manage this, the SPV Group enters into interest rate swaps, in which it agrees to exchange, at specified intervals, the difference between fixed and variable rate interest amounts calculated by reference to an agreed-upon notional principal amount.

Interest rate sensitivity

The following table demonstrates the sensitivity to a reasonably possible change in the interest rates on that portion of loans and borrowings affected. With all the other variables held constant, the SPV Group's loss before tax is affected through the impact on floating rate borrowings, as follows:

Particulars	Increase/Decrease in Basis Points	(Rs. in million)	
		Effect on profit before tax / pre-tax equity [(increase)/(decrease)]	Effect on capital expenditure [(increase)/decrease]*
31 March 2019			
Base Rate	+50	(3.89)	(29.21)
Base Rate	-50	3.89	29.21
31 March 2018			
Base Rate	+50	(13.77)	(49.41)
Base Rate	-50	13.77	49.41
31 March 2017			
Base Rate	+50	(142.06)	(25.77)
Base Rate	-50	142.06	25.77

*Pertains to finance cost capitalised as part of property, plant and equipments.

Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. The SPV Group's exposure to the risk of changes in foreign exchange rates relates primarily to the SPV Group's foreign currency borrowings. This foreign currency risk is mitigated by using foreign currency forward contracts and swaps. Even though these are hedging instruments, the SPV Group has not applied hedge accounting for the purpose of preparation of the special purpose combined financial statements.

At 31 March 2019, 31 March 2018 and 31 March 2017, the SPV Group has hedged its foreign currency liability in respect of borrowings aggregating to Rs. 2,453.19 million as at 31 March 2019; Rs. 2,440.62 million as at 31 March 2018 and Rs 2,604.14 millions as at 31 March 2017.

Foreign currency sensitivity

The following tables demonstrate the sensitivity to a reasonably possible change in USD exchange rates, with all other variables held constant. The impact on the SPV Group's loss before tax is due to changes in the fair value of monetary assets and liabilities. With all the other variables held constant, the SPV Group's loss before tax is affected through the impact on change of foreign currency rate as follows:

	Change in USD rate	(Rs. in million)	
		Effect on profit before tax	
31 March 2019	+5%	-	
	-5%	-	
31 March 2018	+5%	-	
	-5%	-	
31 March 2017	+5%	(7.26)	
	-5%	7.26	

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**PROJECTIONS OF REVENUE FROM OPERATIONS AND CASH FLOW FROM OPERATING
ACTIVITIES**

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Report of auditors on projections of revenue from operations and cash flow from operating activities and underlying assumptions

To
The Board of Directors
Sterlite Investment Managers Limited
Maker Maxity, 5 North Avenue, Level 5,
Bandra Kurla Complex, Bandra East,
Mumbai MH 400051

We have examined the accompanying Statement of projections of revenue from operations and cash flow from operating activities and the underlying assumptions of the InvIT Group consisting of India Grid Trust ("IndiGrid"), Bhopal Dhule Transmission Company Limited ("BDTCL"), Jabalpur Transmission Company Limited ("JTCL"), Maheshwaram Transmission Limited ("MTL"), RAPP Transmission Company Limited ("RTCL"), Purulia & Kharagpur Transmission Company Limited ("PKTCL"), Patran Transmission Company Limited ("PTCL"), Odisha Generation Phase II Transmission Limited ("OGPTL") and NRSS XXIX Transmission Limited ("NRSS") (BDTCL, JTCL, MTL, RTCL, PKTCL, PTCL, OGPTL and NRSS are individually referred to as "Project SPVs"), for the years ending March 31, 2020, March 31, 2021 and March 31, 2022 along with the basis of preparation and other explanatory information and the significant assumptions (Statement of projections of revenue from operations and cash flow from operating activities along with the related assumptions for the InvIT Group and each of the Project SPVs are hereinafter referred to as the "Projection Information"), annexed to this report for the purpose of inclusion in the Preliminary Placement Document and the Placement Document, prepared by Sterlite Investment Managers Limited (the "Investment Manager") in connection with the proposed Preferential Issue of units of IndiGrid (the "Offering"). BDTCL, JTCL, MTL, RTCL, PKTCL and PTCL are subsidiaries of IndiGrid whereas OGPTL and NRSS are subsidiaries of Sterlite Power Grid Ventures Limited (the "Sponsor") which are proposed to be transferred from the Sponsor to IndiGrid.

The preparation and presentation of the Projection Information, including the underlying assumptions, in accordance with the requirements of the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014 issued by the Securities and Exchange Board of India ("SEBI") on September 26, 2014, as amended and any circulars issued thereunder (the "InvIT Regulations"), is the responsibility of the Investment Manager.

The Projection Information has been prepared by the Investment Manager for inclusion in the Preliminary Placement Document and the the Placement Document using a set of assumptions that include hypothetical assumptions about future events and management's actions that are not necessarily expected to occur, as set out in Note III to the Projection Information and has been approved by the Board of Directors of the Investment Manager. Consequently, users are cautioned that the Projection Information may not be appropriate for purposes other than that described above.

We have examined the Projection Information taking into consideration:

- (a) the terms of our engagement agreed with you vide our engagement letter dated November 21, 2018 requesting us to carry out work on the Projection Information, proposed to be included in the Offering; and
- (b) Standard on Assurance Engagement 3400, "The Examination of Prospective Financial Information", issued by the Institute of Chartered Accountants of India.

We have examined the evidence supporting the assumptions and other information in the Projection Information on test basis. Our responsibility is to examine the evidence supporting the assumptions (excluding the hypothetical assumptions) and other information in the Projection Information. Our responsibility does not include verification of the accuracy of the projections. Therefore, we do not vouch for the accuracy of the Projection Information.

Based on our examination of the evidence supporting the assumptions, nothing has come to our attention which causes us to believe that these assumptions do not provide a reasonable basis for the Projection Information. Further, in our opinion, the Projection Information, read with the Basis of Preparation and notes therein, is properly prepared on the basis of the assumptions as set out in Note III to the Projection Information and is consistent with the accounting policies for recognition and measurement used for preparation of the historical Consolidated Financial Statements of IndiGrid for the year ended March 31, 2019 as required by the InvIT Regulations and included in the the Preliminary Placement Document and the Placement Document. The Consolidated Financial Statements of IndiGrid for the year ended March 31, 2019 are prepared in accordance with Indian Accounting Standards as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 prescribed under Section 133 of the Companies Act, 2013.

Events and circumstances frequently do not occur as expected. Even if the events anticipated under the hypothetical assumptions described above occur, actual results are still likely to be different from the Projection Information since other anticipated events frequently do not occur as expected and the variation may be material. The actual results may therefore differ materially from those forecasted and projected. For the reasons set out above, we do not express any opinion as to the possibility of achievement of the Projection Information.

This report is required by InvIT Regulations requiring the independent auditor to issue a report on the Projection Information and is issued for the sole purpose of the Offering in accordance with Indian InvIT Regulations. Our work has not been carried out in accordance with auditing or other standards and practices generally accepted in jurisdictions outside India, including in the United States of America, and accordingly should not be relied upon as if it had been carried out in accordance with those standards and practices. US securities regulations do not require profit forecasts to be reported on by a third party. This report should not be relied upon by prospective investors in the United States of America, including persons who are Qualified Institutional Buyers as defined under Rule 144A under the United States Securities Act of 1933 participating in the Offering. We accept no responsibility and deny any liability to any person who seeks to rely on this report and who may seek to make a claim in connection with any offering of securities on the basis that they had acted in reliance on such information under the protections afforded by United States of America law and regulation.

We have no responsibility to update our report for events and circumstances occurring after the date of the report.

This report is intended solely for your information and for inclusion in the Preliminary Placement Document and the Placement Document and is not to be used, referred to or distributed for any other purpose.

For S R B C & CO LLP
Chartered Accountants
Firm registration number: 324982E/E300003

per Aryn Jassani
Partner
Membership Number: 046447

Place: Mumbai
Date: April 30, 2019

India Grid Trust**Statement of Projections of Revenue from Operations and Cash Flow from Operating Activities****A) For the year ending 31 March 2020**

(Rs. in million)

Particulars	BDTCL	JTCL	MTL	RTCL	PKTCL	PTCL	NRSS*	OGPTL*	IndiGrid	IndiGrid Combined
Revenue from operations	2,606.85	1,517.17	574.40	454.71	748.07	298.28	5,020.42	1,248.52	-	12,468.42
Cash flow from operating activities	2,339.34	1,571.45	511.59	418.68	693.64	261.65	4,747.25	1,212.65	(24.44)	11,731.81

*Refer Note II in the accompanying notes

B) For the year ending 31 March 2021

(Rs. in million)

Particulars	BDTCL	JTCL	MTL	RTCL	PKTCL	PTCL	NRSS	OGPTL	IndiGrid	IndiGrid Combined
Revenue from operations	2,609.52	1,517.28	574.89	454.73	748.13	316.42	5,019.87	1,658.19	-	12,899.04
Cash flow from operating activities	2,339.49	1,375.49	517.10	414.79	685.52	279.98	4,726.88	1,573.89	(25.84)	11,887.29

C) For the year ending 31 March 2022

(Rs. in million)

Particulars	BDTCL	JTCL	MTL	RTCL	PKTCL	PTCL	NRSS	OGPTL	IndiGrid	IndiGrid Combined
Revenue from operations	2,612.22	1,517.38	575.41	454.77	748.18	316.81	5,019.26	1,620.82	-	12,864.86
Cash flow from operating activities	2,332.30	1,371.54	514.95	412.85	682.67	283.47	4,716.37	1,534.25	(27.33)	11,821.07

The accompanying notes form an integral part of the above Statement

**For and on behalf of the Board of Directors of
Sterlite Investment Managers Limited
(as Investment Manager of India Grid Trust)**

Harsh Shah

CEO & Whole Time Director

Place: Mumbai

Date: April 30, 2019

India Grid Trust

Notes to the Statement of projections of revenue from operations and cash flow from operating activities

I. General information

India Grid Trust ("IndiGrid" or the "InvIT") is a trust constituted by "The Indenture of Trust" dated October 21, 2016, registered under the Registration Act, 1908 and under the Securities Exchange Board of India (Infrastructure Investment Trust) Regulations, 2014. IndiGrid was settled by Sterlite Power Grid Ventures Limited (the "Sponsor"). The Trustee to IndiGrid is Axis Trustee Services Limited (the "Trustee"). The Investment manager for IndiGrid is Sterlite Investment Managers Limited (the "Investment Manager" or the "Management"). Sterlite Power Grid Ventures Limited is the Project Manager for the projects owned by IndiGrid.

India Grid Trust ("IndiGrid") currently owns the following project entities:

1. Bhopal Dhule Transmission Company Limited ("BDTCL")
2. Jabalpur Transmission Company Limited ("JTCL")
3. Maheshwaram Transmission Limited ("MTL")
4. RAPP Transmission Company Limited ("RTCL")
5. Purulia & Kharagpur Transmission Company Limited ("PKTCL")
6. Patran Transmission Company Limited ("PTCL")

Further, IndiGrid is proposing to acquire the following project entities from the Sponsor:

1. NRSS XXIX Transmission Limited ("NRSS")
2. Odisha Generation Phase II Transmission Limited ("OGPTL")

BDTCL, JTCL, MTL, RTCL, PKTCL, PTCL, NRSS and OGPTL are individually referred to as "Project SPVs" and collectively as "InvIT Group".

Sterlite Grid 1 Limited ("SGL1") is a wholly owned subsidiary of IndiGrid and is an intermediate holding company for BDTCL, JTCL, PKTCL, RTCL and MTL.

Sterlite Grid 2 Limited ("SGL2") and Sterlite Grid 3 Limited ("SGL3") are subsidiaries of the Sponsor and intermediate holding companies for NRSS and OGPTL respectively. SGL2 and SGL3 are also proposed to be transferred from the Sponsor to IndiGrid.

II. Basis of preparation of projections of revenue from operations and cash flow from operating activities

The projections of revenue from operations and cash flow from operating activities of the InvIT Group and of BDTCL, JTCL, PKTCL, RTCL, MTL, PTCL, NRSS and OGPTL ("Projections") for the years ending March 31, 2020, March 31, 2021 and March 31, 2022 ("Projection period") have been prepared by the Investment Manager solely for inclusion in the Preliminary Placement Document and the Placement Document in connection with the proposed Preferential Issue of Units of the InvIT in accordance with the requirements of the SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended and SEBI Circular dated June 5, 2018 read with the guidance on projections contained in SEBI Circular dated October 20, 2016 and accordingly include projects that are owned by IndiGrid and those proposed to be acquired by IndiGrid. Therefore, the use of the Projections may not be appropriate and should not be used or relied upon for any purpose other than that described above.

The Projections are prepared based on the accounting policies for recognition and measurement used for preparation of the historical Consolidated Financial Statements of the InvIT as required by the SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended and any circulars issued thereunder (the "InvIT Regulations"), which are prepared in accordance with Indian Accounting Standards (Ind AS) and/or any addendum thereto as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 as amended, prescribed under the InvIT Regulations.

Though the aforesaid Projections are prepared under the Ind-AS framework, they do not provide for all the detailed disclosures as required under Ind-AS.

India Grid Trust

Notes to the Statement of projections of revenue from operations and cash flow from operating activities

Cash flow from Operating activities for the InvIT Group and the Project SPVs have been calculated using the direct method under Ind AS 7 - Statement of Cash Flows and is computed by deducting the operating expenses and income taxes from revenue from operations and adjusted for working capital changes and non-cash expenses (if any). Cash flow from operating activities do not include any items pertaining to financing or investing nature.

The Projections have been prepared and disclosed in INR millions, unless otherwise specifically mentioned.

The Projections contain forecasts and projections that relate to future events, which are, by their nature, subject to significant risks and uncertainties. The future events referred to involve risks, uncertainties and other factors which may cause the actual results or performance to be materially different from the Projections.

For OGPTL for the year ending March 31, 2020, the figures in Projections have been considered from June 30, 2019 instead of April 1, 2019 considering the expected date of transfer of the project to IndiGrid. However, for NRSS, the figures have been considered from April 1, 2019 because of the proposed arrangement with the Sponsor where all revenues and net income/losses on NRSS project from April 1, 2019 till the actual date of transfer will be on the account of IndiGrid.

The cash outflows in respect of expenses on the Preferential Issue of units by IndiGrid have not been considered in the Projections, those not being of an operating nature.

III. Significant assumptions for the Projections

The Projections have been prepared based on the significant assumptions summarized below. These are Investment Manager's best estimate assumptions and have been prepared by the Investment Manager solely for inclusion in the Preliminary Placement Document and the Placement Document in connection with the proposed Preferential Issue of Units of the InvIT in accordance with the requirements of the InvIT Regulations. The Investment Manager considers the assumptions to be appropriate and reasonable as at the date of the Projections i.e. April 30, 2019. However, the investors should consider these assumptions as well as the Projections and make their own assessment of the future performance of IndiGrid.

1. Revenue from Operations:

Revenue from operations of the InvIT Group and of each of the Project SPVs consists of tariff income. Revenue projections do not include any other income (operating or otherwise).

Key variables for projections of revenue are non-escalable tariff, escalable component of tariff, the annual escalation rate, annual availability, incentives, penalties, rebates and surcharges. Each of these variables are explained below:

i. Non-Escalable tariff:

The non-escalable tariff for BDTCL, JTCL, PKTCL, RTCL, MTL, PTCL, NRSS and OGPTL has been considered based on tariff approved by the Central Electricity Regulatory Commission (CERC) for the respective projects.

Non-Escalable tariff considered for the Projections is as follows:

Project SPVs	Year ending March 31, 2020 (INR million)	Year ending March 31, 2021 (INR million)	Year ending March 31, 2022 (INR million)
BDTCL	2,431.35	2,428.56	2,425.48
JTCL	1,431.71	1,429.64	1,427.44
MTL	548.18	548.18	548.18
RTCL	433.10	432.70	432.29

India Grid Trust

Notes to the Statement of projections of revenue from operations and cash flow from operating activities

PKTCL	712.51	711.87	711.18
PTCL	282.73	299.95	299.95
NRSS	4,812.86*	4,809.44	4,805.80
OGPTL	1,195.84*	1,587.20	1,549.91

* Refer Note II.

The revenue projections as above cover only a period of 3 years. For non-escalable tariff revenues for periods beyond FY 2021-22, CERC Tariff Orders for BDTCL, JTCL, MTL, RTCL, PKTCL, PTCL, NRSS and OGPTL should be referred.

ii. Escalable component of tariff and the annual escalation rate:

The base escalable tariff for BDTCL, JTCL, PKTCL, RTCL, MTL, PTCL, NRSS and OGPTL has been considered based on CERC Tariff Orders. The actual annual escalation rates published by CERC have been used to adjust the base escalable tariff from the bid closure date till September 30, 2018 and post that an annual escalation rate of 5.73% has been considered for calculation of the escalable component of tariff which is the compounded annual inflation rate based on the inflation rates published by CERC applicable from April 2011 to September 2018.

Escalable component of tariff considered for the Projections is as follows:

Project SPVs	Year ending March 31, 2020 (INR million)	Year ending March 31,2021 (INR million)	Year ending March 31,2022 (INR million)
BDTCL	93.91	99.29	104.98
JTCL	37.98	40.15	42.45
MTL	8.25	8.72	9.22
RTCL	7.38	7.80	8.25
PKTCL	12.15	12.85	13.58
PTCL	6.22	6.57	6.95
NRSS	50.42*	53.31	56.37
OGPTL	13.60*	19.09	20.19

* Refer Note II.

iii. Annual Availability:

The Annual availability for BDTCL, JTCL, PKTCL, RTCL, MTL, PTCL, NRSS and OGPTL projects has been considered as 99.75%. This is based on the historical average annual availability figures for these projects since the dates of commencement of their commercial operations and based on average annual availability figures of past 5 years for Power Grid Corporation of India Limited ("PGCIL") which owns a significant proportion of the transmission projects in India (as published in its Annual Report for FY 2017-18).

iv. Incentives, penalties, rebates and surcharge:

As per the terms of the respective Transmission Services Agreements (TSAs), BDTCL, JTCL, PKTCL, RTCL, MTL, PTCL, NRSS and OGPTL are eligible for incentive payments in case the annual availability is more than 98%. Incentive percentage is calculated as (Actual Availability% minus 98%) multiplied by 2. The incentive percentage is required to be applied to total revenue (non-escalable and escalable) to arrive at the amount of incentive. For the Projections, incentives have been computed considering availability of 99.75% for BDTCL, JTCL, PKTCL, RTCL, MTL, PTCL, NRSS and OGPTL over the Projection Period. Alternatively, if the availability is less than 95%, penalties are levied.

India Grid Trust

Notes to the Statement of projections of revenue from operations and cash flow from operating activities

Further, in case the customers make the payment of tariff charges within 1 day of receipt of invoice, rebate of 2% of tariff is payable, whereas if the payment is made within 30 days, rebate of 1% is payable to customers. If the payment is made post 60 days, then surcharge of 1.25% per month is payable by the customers. For the Projections, rebate (net of surcharge) of 0.26% of annual tariff revenue has been considered for BDTCL, JTCL, PKTCL, RTCL, MTL, PTCL, NRSS and OGPTL based on average rebate as % of annual tariff for these projects for last three years.

2. Operating Expenses (in Project SPVs)

The operating expenses include routine/periodic maintenance, insurance, other operating expenses, Project Manager fees and Investment Manager fees. These costs are projected based on the base year expenses for the Project SPVs and projected annual increase based on inflation rates and/or based on agreements with the service providers.

Based on the above, the total operating expenses considered in the Projections are as follows:

Project SPVs	Year ending March 31, 2020 (INR million)	Year ending March 31, 2021 (INR million)	Year ending March 31, 2022 (INR million)
BDTCL	190.98	199.61	208.74
JTCL	98.44	102.00	105.77
MTL	40.28	40.58	45.05
RTCL	26.74	28.45	30.30
PKTCL	41.37	43.87	46.58
PTCL	22.76	23.71	24.71
NRSS	167.18*	175.80	185.09
OGPTL	39.01*	54.52	57.50

* Refer Note II.

Operating expenses comprise of the following:

i. Operation and Maintenance (O&M) expenses:

O&M expenses considered in the Projections are based on currently existing O&M contracts and O&M expenses currently being incurred in the Project SPVs as adjusted for inflation of 5.73% in line with the inflation rate considered for tariff revenue.

ii. Insurance:

Insurance expenses considered in the Projections are based on premiums allocated to the Project SPVs based on gross block of transmission assets of each Project SPV. The insurance policies are currently being taken by the Sponsor annually for the entire operational project portfolio of the Sponsor. The Investment Manager does not foresee any increase in the insurance cost over the projection period of 3 years, hence the cost has been kept constant over the Projection period. If there are failures/damages to the transmission infrastructure for which claims are made, the insurance premiums may change significantly. This cannot be estimated due to the short operational performance history of the transmission projects.

iii. Other operating expenses:

These mainly include legal/regulatory charges and professional fees. These expenses have been considered in the Projections based on the management's expectations as to the extent to which these are recurring in nature as adjusted with inflation rate as above.

India Grid Trust

Notes to the Statement of projections of revenue from operations and cash flow from operating activities

iv. Project Manager Fees:

The Project Manager Fees is considered based on the Project Implementation and Management Agreement dated November 10, 2016, as amended. The Project Manager fee is 10% of the gross expenditure incurred by each Project SPV in relation to the operation and maintenance costs, per annum plus goods and service tax at 18%. The gross expenditure does not include depreciation and finance costs. The fee will be payable every six months. The Project Manager fees is paid out of the cash flows of the Project SPVs.

The Project manager fee (including taxes assumed to be non-creditable) considered is as follows:

Project SPVs	Year ending March 31, 2020 (INR million)	Year ending March 31, 2021 (INR million)	Year ending March 31, 2022 (INR million)
BDTCL	22.54	23.55	24.63
JTCL	11.62	12.04	12.48
MTL	4.75	5.02	5.32
RTCL	3.16	3.36	3.58
PKTCL	4.88	5.18	5.50
PTCL	2.69	2.80	2.92
NRSS	19.73*	20.74	21.84
OGPTL	4.60*	6.43	6.78

* Refer Note II.

v. Investment Manager Fee

Investment manager fee has been considered based on the Investment Management Agreement (“IMA”) dated November 10, 2016, as amended. The Investment manager fee is 1.75% of difference between revenue from operations and operating expenses (other than fees of the Investment Manager) of each Project SPV per annum plus goods and service tax at 18%. For this purpose, operating expenses will not include depreciation, finance cost and income tax expense. The fee will be payable every six months. The Investment Manager fees is paid out of the cash flows of the Project SPVs. The Investment manager fee (including taxes assumed to be non-creditable) considered is as follows:

Project SPVs	Year ending March 31, 2020 (INR million)	Year ending March 31, 2021 (INR million)	Year ending March 31, 2022 (INR million)
BDTCL	49.42	49.28	49.12
JTCL	29.06	28.98	28.89
MTL	10.93	10.89	10.84
RTCL	8.77	8.73	8.69
PKTCL	14.49	14.44	14.37
PTCL	5.63	5.99	5.97
NRSS	99.81*	99.60	99.37
OGPTL	24.88*	32.98	32.14

* Refer Note II.

India Grid Trust

Notes to the Statement of projections of revenue from operations and cash flow from operating activities

3. Operating Expenses (at InvIT level)

Operating expenses at InvIT level comprise of the following:

i. Trustee Fee

The Trustee fee of Rs. 2.36 million, Rs. 2.50 million and Rs. 2.64 million plus goods and service tax at 18% has been considered for the financial years ending March 31, 2020, March 31, 2021 and March 31, 2022 respectively. This is based on the expected fee to be charged by the Trustee under the Trust deed.

ii. Other expenses

Other expenses for the InvIT include audit fees, valuer's fees, legal/professional fees and other miscellaneous expenses and are primarily estimated based on the quotes (to the extent available) and Project SPV Management's experience and best judgment of Investment Manager. Other expense of Rs. 22.08 million, Rs. 23.35 million and Rs. 24.69 million have been considered for the financial years ending March 31, 2020, 2021 and 2022 respectively.

4. Income Taxes

For Project SPVs:

Income taxes for Project SPVs have been computed at income tax rates applicable to the Project SPVs for FY 2019-20 which are expected to apply for the Projection Period. For the computation of income tax for Project SPVs, following assumptions have been considered by the Management:

- a) Finance costs in Project SPVs owned by IndiGrid have been considered based on the following borrowings as at March 31, 2019 and the respective repayment schedules for the next 3 years and applicable interest rates:

Project SPVs	External Debt (INR million)	Loan from IndiGrid (INR million)
BDTCL	9,346.84	8,659.98
JTCL	Nil	16,450.70
MTL	Nil	3,780.15
RTCL	Nil	2,347.65
PKTCL	Nil	3,987.65
PTCL	Nil	1,585.12

Finance costs in NRSS and OGPTL have been considered based on the following loans which the Management believes would be provided by IndiGrid post acquisition:

Project SPVs	External Debt (INR million)	Loan from IndiGrid (INR million)
NRSS	Nil	26,500
OGPTL	Nil	10,900

The interest rates on external debt (domestic and foreign) are considered in the range of 6.71% p.a. to 7.85% p.a. and on loans from IndiGrid at 15% p.a.

The above assumptions in 4(a) are hypothetical assumptions and may change due to changes in capital structure, interest rate, type of instruments used, etc.

India Grid Trust

Notes to the Statement of projections of revenue from operations and cash flow from operating activities

b) Assumptions in respect of depreciation in Project SPVs:

Depreciation for income tax purpose has been considered at the applicable rates of depreciation under the Income Tax Act for FY 2019-20 which are expected to apply for the Projection Period.

For InvIT

The InvIT will receive interest income from Project SPVs which is exempt under Income Tax Act, 1961. Other than above, the InvIT is expected to have only interest income on fixed deposits and dividend income on liquid mutual funds. Hence no cash flow on account of income tax pertaining to operating activities has been considered for the InvIT over the Projection Period.

5. Changes in Working Capital

For Project SPVs:

For the computation of changes in working capital, the receivables period is assumed as 90 days of tariff revenues based on the historical data and Management estimates. Further, operating expenses payable period has been assumed as 110 days based on the historical data and Management estimates (except for Project Manager and Investment Manager fees which are payable every six months as per the respective agreements with Project Manager and Investment Manager).

For InvIT:

Changes in working capital for the InvIT has been considered as nil during the Projection Period.

6. Other Assumptions

The Investment Manager has made the following additional assumptions in preparing the Projections:

- i. SGL1, SGL2 and SGL3 being only intermediate holding companies of the Project SPVs, no revenue from operations or cash flow from operating activities have been assumed for these entities over the Projection period. Operating expenses at SGL1, SGL2 and SGL3 are not expected to be material and no impact of the same has been considered in the Projections;
- ii. The current portfolio of Project SPVs and NRSS and OGPTL which are proposed to be acquired from the Sponsor, is assumed to remain unchanged throughout the Projection period;
- iii. No further assets are assumed to be acquired during the Projection period;
- iv. No further capital is assumed to be raised during the Projection period;
- v. It is assumed that there will be no material change in taxation legislations or other applicable legislations during the Projection period.
- vi. The Projections have been prepared using Ind AS standards and interpretations that are effective for the Ind AS financial statements for the year ended March 31, 2019. The Projections do not take into account the impact of any new Ind AS standard or interpretation not effective as at March 31, 2019. Ind AS standards or interpretations issued but not effective or not issued as at March 31, 2019 which may become effective during the Projections period may have an impact on the Projections and to that extent the actual figures may vary from the Projections;
- vii. No gain/loss has been considered on account of changes in foreign exchange rates and derivative instruments;
- viii. The Projections are based on assumptions and are subject to a number of factors. Investors should be aware that future events cannot be predicted with any certainty and there may be deviations from the figures projected in the Projections.

DECLARATION

The Investment Manager declares and certifies that all relevant provisions of the InvIT Regulations, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) have been complied with and no statement made in this Preliminary Placement Document is contrary to the provisions of the InvIT Regulations, the SCRA, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Investment Manager further certifies that all the statements and disclosures in this Preliminary Placement Document are material, true, correct, not misleading and adequate in order to enable the Bidders to make a well informed decision.

For Sterlite Investment Managers Limited*

**(formerly known as Sterlite Infraventures Limited)*

Shashikant H. Bhojani
Independent Director

Date: April 30, 2019
Place: Mumbai

DECLARATION

The Investment Manager declares and certifies that all relevant provisions of the InvIT Regulations, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) have been complied with and no statement made in this Preliminary Placement Document is contrary to the provisions of the InvIT Regulations, the SCRA, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Investment Manager further certifies that all the statements and disclosures in this Preliminary Placement Document are material, true, correct, not misleading and adequate in order to enable the Bidders to make a well informed decision.

For Sterlite Investment Managers Limited*

**(formerly known as Sterlite Infraventures Limited)*

Rahul D. Asthana
Independent Director

Date: April 30, 2019
Place: Mumbai

DECLARATION

The Investment Manager declares and certifies that all relevant provisions of the InvIT Regulations, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) have been complied with and no statement made in this Preliminary Placement Document is contrary to the provisions of the InvIT Regulations, the SCRA, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Investment Manager further certifies that all the statements and disclosures in this Preliminary Placement Document are material, true, correct, not misleading and adequate in order to enable the Bidders to make a well informed decision.

For Sterlite Investment Managers Limited*

**(formerly known as Sterlite Infraventures Limited)*

Tarun Kataria
Independent Director

Date: April 30, 2019

Place: Mumbai

DECLARATION

The Investment Manager declares and certifies that all relevant provisions of the InvIT Regulations, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) have been complied with and no statement made in this Preliminary Placement Document is contrary to the provisions of the InvIT Regulations, the SCRA, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Investment Manager further certifies that all the statements and disclosures in this Preliminary Placement Document are material, true, correct, not misleading and adequate in order to enable the Bidders to make a well informed decision.

For Sterlite Investment Managers Limited*

**(formerly known as Sterlite Infraventures Limited)*

Kuldip K. Kaura
Non-Executive Director

Date: April 30, 2019
Place: Mumbai

DECLARATION

The Investment Manager declares and certifies that all relevant provisions of the InvIT Regulations, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) have been complied with and no statement made in this Preliminary Placement Document is contrary to the provisions of the InvIT Regulations, the SCRA, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Investment Manager further certifies that all the statements and disclosures in this Preliminary Placement Document are material, true, correct, not misleading and adequate in order to enable the Bidders to make a well informed decision.

For Sterlite Investment Managers Limited*

**(formerly known as Sterlite Infraventures Limited)*

Pratik Agarwal
Non-Executive Director

Date: April 30, 2019
Place: Mumbai

DECLARATION

The Investment Manager declares and certifies that all relevant provisions of the InvIT Regulations, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) have been complied with and no statement made in this Preliminary Placement Document is contrary to the provisions of the InvIT Regulations, the SCRA, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Investment Manager further certifies that all the statements and disclosures in this Preliminary Placement Document are material, true, correct, not misleading and adequate in order to enable the Bidders to make a well informed decision.

For Sterlite Investment Managers Limited*

**(formerly known as Sterlite Infraventures Limited)*

Harsh Shah

Executive Director and Chief Executive Officer

Date: April 30, 2019

Place: Mumbai

DECLARATION

The Trustee declares and certifies that all relevant provisions of the InvIT Regulations, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) have been complied with and no statement made in this Preliminary Placement Document is contrary to the provisions of the InvIT Regulations, the SCRA, the SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Trustee further certifies that all the statements and disclosures in this Preliminary Placement Document are material, true, correct, not misleading and adequate in order to enable the Bidders to make a well informed decision.

For Axis Trustee Services Limited

Krishna Kumari
Authorised Signatory

Date: April 30, 2019
Place: Mumbai

ANNEXURE A

VALUATION REPORT

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Strictly Private and Confidential

HARIBHAKTI & CO. LLP

Chartered Accountants

Valuation as per SEBI (Infrastructure Investment Trusts) Regulations, 2014 as amended

SPV: Northern Region Strengthening Scheme XXIX Transmission Limited (“NRSS”)

Valuation Date: 31st March 2019

Date: 27th April 2019

CFAS/2019-20/9

Sterlite Investment Managers Limited

Maker Maxity, 5th North Avenue,
Level 5, Bandra Kurla Complex,
Bandra (East), Mumbai – 400051.

India Grid Trust

(Axis Trustee Services Limited acting on behalf of the Trust)

F-1, Mira Corporate Suits,
1&2, Mathura Road, Ishwar Nagar,
New Delhi – 110065.

Sub: Financial Valuation as per SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended ("the SEBI InvIT Regulations")

Dear Sirs/Madams,

We, Haribhakti & Co. LLP, Chartered Accountants ("H&Co."), have been appointed vide letter dated 2nd May 2018, as an independent valuer, as defined under the SEBI InvIT Regulations, by Sterlite Investment Managers Limited ("the Investment Manager" or "SIML"), acting as the investment manager for India Grid Trust ("the Trust") and Axis Trustee Services Limited ("the Trustee") acting as the trustee for the Trust mentioned above, for the purpose of the financial valuation of the Special Purpose Vehicle - Northern Region Strengthening Scheme XXIX Transmission Limited ("NRSS" or "the SPV") of Sterlite Power Grid Ventures Limited ("SPGVL" or "the Sponsor"). The SPV to be valued is proposed to be acquired by the Trust, SIML is acting as the investment manager and SPGVL as the sponsor to the Trust within the meaning of the SEBI InvIT Regulations.

We have relied on explanations and information provided by the Investment Manager. Although we have reviewed such data for consistency, we have not independently investigated or otherwise verified the data provided. We have no present or planned future interest in the Trust, the SPV or the Investment Manager except to the extent of our appointment as an independent valuer and the fee for our Valuation Report ("Report") which is not contingent upon the values reported herein. Our valuation analysis should not be construed as investment advice specifically, we do not express any opinion on the suitability or otherwise of entering into any financial or other transaction with the Trust.

We enclose our Report providing our opinion on the fair operating enterprise value of the SPV on a going concern basis as at 31st March 2019 ("Valuation Date"). Enterprise Value ("EV") is described as the total value of the equity in a business plus the value of its debt and debt related liabilities, minus any cash or cash equivalents to meet those liabilities. The attached Report details the valuation methodologies used, calculations performed and the conclusion reached with respect to this valuation.



We believe that our analysis must be considered as a whole. Selecting portions of our analysis or the factors we considered, without considering all factors and analysis together could create a misleading view of the process underlying the valuation conclusions. Valuation exercise is a complex process and is not necessarily susceptible to partial analysis or summary description. Any attempt to do so could lead to undue emphasis on any particular factor or analysis.

Our valuation and our valuation conclusion are included herein and our Report complies with the SEBI InvIT Regulations and guidelines, circular or notification issued by the Securities and Exchange Board of India ("SEBI") there under.

Please note that all comments in our Report must be read in conjunction with the caveats to the Report, which are contained in Section 2 of this Report. This letter, the Report and the summary of valuation included herein can be provided to the Trust's advisors and may be made available for the inspection to the public as a material document and with the SEBI, the stock exchanges and any other regulatory and supervisory authority, as may be required.

We draw your attention to the limitation of liability clauses in Section 2 of the Report.

This letter should be read in conjunction with the attached Report.

Yours faithfully,

For **Haribhakti & Co. LLP,**

Chartered Accountants

Firm Registration Number: 103523W



S. Sundararaman

Partner

Membership No. 028423

Place: Chennai

Encl: As above



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Definition, abbreviation & glossary of terms

Abbreviations	Meaning
BDTCL	Bhopal Dhule Transmission Company Limited
BOOM	Build-Own-Operate-Maintain
Capex	Capital Expenditure
CCIL	Clearing Corporation of India Limited
CERC	Central Electricity Regulatory Commission
Ckms	Circuit Kilometres
COD	Commercial Operation Date
DCF	Discounted Cash Flow
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortisation
EV	Enterprise Value
FCFF	Free Cash Flow to the Firm
FY	Financial Year Ended 31 st March
FYP	Five year Plan
H&Co. or We	Haribhakti & Co. LLP, Chartered Accountants
INR	Indian Rupees
ISTS	Inter State Transmission System
IVS	Indian Valuation Standards, 2018
JTCL	Jabalpur Transmission Company Limited
kV	Kilo Volts
LTTC	Long Term Transmission Customer
Mn	Million
NRSS or the SPV	Northern Region Strengthening Scheme XXIX Transmission Limited
NAV	Net Asset Value Method
NCA	Net Current Assets Excluding Cash and Bank Balances
O&M	Operation & Maintenance
PGCIL	Power Grid Corporation of India Limited
PKTCL	Purulia & Kharagpur Transmission Company Limited
PTCL	Patran Transmission Company Limited
RTCL	RAPP Transmission Company Limited
SEBI	Securities and Exchange Board of India
SEBI InvIT Regulations	SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended
SGL 2	Sterite Grid 2 Limited
SIML or Investment Manager	Sterite Investment Managers Limited
SPGVL or the Sponsor	Sterite Power Grid Ventures Limited
SPV	Special Purpose Vehicle
T&D	Transmission & Distribution
the Trust or InvIT	India Grid Trust
the Trustee	Axis Trustee Services Limited
TSA	Transmission Service Agreement
WACC	Weighted Average Cost of Capital



1. Background

The Sponsor

- 1.1. Sterlite Power Grid Ventures Limited ("SPGVL" or "the Sponsor") is engaged into installation and operation of electricity transmission projects.

The Infrastructure Investment Trust

- 1.2. SPGVL is the sponsor for the India Grid Trust ("the Trust"). The Trust was established on 21st October 2016 by SPGVL and is registered with the Securities and Exchange Board of India ("SEBI") pursuant to the SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended ("the SEBI InvIT Regulations"). It is established to own inter-state power transmission assets in India. The units of the Trust are listed on the National Stock Exchange of India Limited and BSE Limited since 6th June 2017.

Investment Manager

- 1.3. Sterlite Investment Managers Limited ("the Investment Manager" or "SIML") has been appointed as the investment manager to the Trust by Axis Trustee Services Limited ("the Trustee") and will be responsible to carry out the duties of such a person as mentioned under SEBI InvIT Regulations.

Target Financial Asset to be Valued

- 1.4. Northern Region Strengthening Scheme XXIX ("NRSS" or "the SPV") is engaged in the business of installation and operation of transmission lines on a Build-Own-Operate and Maintain ("BOOM") basis. The asset is owned 100% by SGL 2, the wholly owned subsidiary of the Sponsor.
- 1.5. NRSS XXIX Transmission Limited project is expected to deliver over 2,000 MW of electricity from Punjab to the Kashmir Valley by strengthening the transmission system in these two states. The Jalandar-Samba 400 kV D/C transmission line was commissioned in June 2016. NRSS XXIX Transmission Limited has commissioned the Samba-Amargarh 400 kV double circuit transmission lines and one 400/220 kV GIS sub-station in September 2018. The SPV would operate and maintain these for a minimum tenure of 35 years.

Proposed Transaction

- 1.6. We understand that the Trust is proposing to acquire NRSS XXIX Transmission Limited from the Sponsor.

Purpose of Valuation

- 1.7. As per regulation 21(8)(a) of the SEBI InvIT Regulations, for any transaction of purchase or sale of infrastructure projects whether directly or through SPVs, for publicly offered InvITs, a full valuation of the specific project shall be undertaken.
- 1.8. In terms of Regulation 2(1)(zv) of the SEBI InvIT Regulations, related party shall be as defined as under the Companies Act, 2013 or under the applicable accounting standards and shall also include: (I) Parties to India Grid Trust; and (II) Promoters, directors, and partners of the Parties to India Grid Trust. Further, related parties also include such persons and entities as defined in terms of the applicable accounting standards, being Indian Accounting Standard ("Ind AS") 24 on "Related Party Disclosures". As per Regulation 2(1)(zk), "Parties to the InvIT" shall include the sponsor(s), investment manager, project manager(s) and the trustee. Accordingly, the Proposed Transaction between the Trust and the Sponsor is a related party transaction.
- 1.9. In this regard, the Investment Manager has appointed us, H&Co to undertake the fair operating enterprise valuation of NRSS as per the SEBI InvIT Regulations as at 31st March 2019.



- 1.10. H&Co. declares that:
- 1.10.1. It is competent to undertake the financial valuation in terms of the SEBI InvIT Regulations;
- 1.10.2. It is independent and has prepared the Report on a fair and unbiased basis;
- 1.10.3. It has valued the SPV based on the valuation standards as specified under sub-regulation 10 of regulation 21 of SEBI InvIT Regulations.
- 1.11. This Report covers all the disclosures required as per the SEBI InvIT Regulations and the valuation of the SPV is impartial, true and fair and in compliance with the SEBI InvIT Regulations.

Scope of Valuation

1.12. **Nature of the Asset to be Valued**

We have been mandated by the Investment Manager to arrive only at the operating EV of the SPV. Enterprise Value ("EV") is described as the total value of the equity in a business plus the value of its debt and debt related liabilities, minus any cash or cash equivalents to meet those liabilities.

1.13. **Valuation Base**

Valuation Base means the indication of the type of value being used in an engagement. In the present case, we have determined the fair value of the SPV at the operating enterprise level. Fair Value Bases defined as under:

Fair Value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the valuation date.

1.14. **Valuation Date**

Valuation Date is the specific date at which the value of the assets to be valued gets estimated or measured. Valuation is time specific and can change with the passage of time due to changes in the condition of the asset to be valued. Accordingly, valuation of an asset as at a particular date can be different from other date(s).

The Valuation Date considered for the fair operating enterprise valuation of the SPV is 31st March 2019 ("Valuation Date"). The attached Report is drawn up by reference to accounting and financial information as on 31st March 2019. We are not aware of any other events having occurred since 31st March 2019 till date of this Report which we deem to be significant for our valuation analysis.

1.15. **Premise of Value**

Premise of Value refers to the conditions and circumstances how an asset is deployed. In the present case, we have determined the fair operating enterprise value of the SPV on a Going Concern Value defined as under:

Going Concern Value

Going concern value is the value of a business enterprise that is expected to continue to operate in the future. The intangible elements of going concern value result from factors such as having a trained work force, an operational plant, the necessary licenses, systems, and procedures in place etc.

- 1.16. This Report covers all the disclosures required as per the SEBI InvIT Regulations and the valuation of the SPV is impartial, true and fair and in compliance with the SEBI InvIT Regulations.



2. Exclusions and Limitations

- 2.1. Our Report is subject to the limitations detailed hereinafter. This Report is to be read in totality, and not in parts, in conjunction with the relevant documents referred to therein.
- 2.2. Valuation analysis and results are specific to the purpose of valuation and is not intended to represent value at any time other than valuation date of 31st March, 2019 ("Valuation Date") mentioned in the Report and as per agreed terms of our engagement. It may not be valid for any other purpose or as at any other date. Also, it may not be valid if done on behalf of any other entity.
- 2.3. This Report, its contents and the results are specific to (i) the purpose of valuation agreed as per the terms of our engagements; (ii) the Valuation Date and (iii) are based on the financial information of NRSS till 31st March 2019. The Investment Manager has represented that the business activities of NRSS have been carried out in normal and ordinary course between 31st March 2019 and the Report Date and that no material changes have occurred in the operations and financial position between 31st March 2019 and the Report date.
- 2.4. The scope of our assignment did not involve us performing audit tests for the purpose of expressing an opinion on the fairness or accuracy of any financial or analytical information that was provided and used by us during the course of our work. The assignment did not involve us to conduct the financial or technical feasibility study. We have not done any independent technical valuation or appraisal or due diligence of the assets or liabilities of the SPV or any of other entity mentioned in this Report and have considered them at the value as disclosed by the SPV in their regulatory filings or in submissions, oral or written, made to us.
- 2.5. In addition, we do not take any responsibility for any changes in the information used by us to arrive at our conclusion as set out herein which may occur subsequent to the date of our Report or by virtue of fact that the details provided to us are incorrect or inaccurate.
- 2.6. We have assumed and relied upon the truth, accuracy and completeness of the information, data and financial terms provided to us or used by us; we have assumed that the same are not misleading and do not assume or accept any liability or responsibility for any independent verification of such information or any independent technical valuation or appraisal of any of the assets, operations or liabilities of SPV or any other entity mentioned in the Report. Nothing has come to our knowledge to indicate that the material provided to us was misstated or incorrect or would not afford reasonable grounds upon which to base our Report.
- 2.7. This Report is intended for the sole use in connection with the purpose as set out above. It can however be relied upon and disclosed in connection with any statutory and regulatory filing in connection with the provision of SEBI InvIT Regulations. However, we will not accept any responsibility to any other party to whom this Report may be shown or who may acquire a copy of the Report, without our written consent.
- 2.8. It is clarified that this Report is not a fairness opinion under any of the stock exchange/ listing regulations. In case of any third party having access to this Report, please note this Report is not a substitute for the third party's own due diligence/ appraisal/ enquiries/ independent advice that the third party should undertake for his purpose.
- 2.9. Further, this Report is necessarily based on financial, economic, monetary, market and other conditions as in effect on, and the information made available to us or used by us up to, the date hereof. Subsequent developments in the aforementioned conditions may affect this Report and the assumptions made in preparing this Report and we shall not be obliged to update, revise or reaffirm this Report if information provided to us changes.



- 2.10. This Report is based on the information received from the sources mentioned in para 3 and discussions with the Investment Manager. We have assumed that no information has been withheld that could have influenced the purpose of our Report.
- 2.11. Valuation is not a precise science and the conclusions arrived at in many cases may be subjective and dependent on the exercise of individual judgment. There is, therefore, no indisputable single value. We have arrived at an indicative operating EV based on our analysis. While we have provided an assessment of the value based on an analysis of information available to us and within the scope of our engagement, others may place a different value on this business.
- 2.12. Any discrepancies in any table / annexure between the total and the sums of the amounts listed are due to rounding-off.
- 2.13. Valuation is based on estimates of future financial performance or opinions, which represent reasonable expectations at a particular point of time, but such information, estimates or opinions are not offered as predictions or as assurances that a particular level of income or profit will be achieved, a particular event will occur or that a particular price will be offered or accepted. Actual results achieved during the period covered by the prospective financial analysis will vary from these estimates and the variations may be material.
- 2.14. We do not carry out any validation procedures or due diligence with respect to the information provided/extracted or carry out any verification of the assets or comment on the achievability and reasonableness of the assumptions underlying the financial forecasts, save for satisfying ourselves to the extent possible that they are consistent with other information provided to us in the course of this engagement.
- 2.15. Our conclusion assumes that the assets and liabilities of the SPV, reflected in their respective latest balance sheets remain intact as of the Report date.
- 2.16. Whilst all reasonable care has been taken to ensure that the factual statements in the Report are accurate, neither ourselves, nor any of our partners, directors, officers or employees shall in any way be liable or responsible either directly or indirectly for the contents stated herein. Accordingly, we make no representation or warranty, express or implied, in respect of the completeness, authenticity or accuracy of such factual statements. We expressly disclaim any and all liabilities, which may arise based upon the information used in this Report. We are not liable to any third party in relation to the issue of this Report.
- 2.17. The scope of our work has been limited both in terms of the areas of the business and operations which we have reviewed and the extent to which we have reviewed them. There may be matters, other than those noted in this Report, which might be relevant in the context of the transaction and which a wider scope might uncover.
- 2.18. For the present valuation exercise, we have also relied on information available in public domain; however the accuracy and timelines of the same has not been independently verified by us.
- 2.19. In the particular circumstances of this case, our liability (in contract or under statute or otherwise) for any economic loss or damage arising out of or in connection with this engagement, however the loss or damage caused, shall be limited to the amount of fees actually received by us, as laid out in the engagement letter, for such valuation work.
- 2.20. In rendering this Report, we have not provided any legal, regulatory, tax, accounting or actuarial advice and accordingly we do not assume any responsibility or liability in respect thereof.
- 2.21. This Report does not address the relative merits of investing in InvIT as compared with any other alternative business transaction, or other alternatives, or whether or not such alternatives could be achieved or are available.



- 2.22. We are not advisors with respect to legal tax and regulatory matters for the proposed transaction. No investigation of the SPV's claim to title of assets has been made for the purpose of this Report and the SPV's claim to such rights have been assumed to be valid. No consideration has been given to liens or encumbrances against the assets, beyond the loans disclosed in the accounts. Therefore, no responsibility is assumed for matters of a legal nature.
- 2.23. We have no present or planned future interest in the Trustee, Investment Manager or the SPV and the fee for this Report is not contingent upon the values reported herein. Our valuation analysis should not be construed as investment advice; specifically, we do not express any opinion on the suitability or otherwise of entering into any financial or other transaction with the Investment Manager or the SPV.
- 2.24. We have submitted the draft valuation report to the Trust and Investment Manager for confirmation of accuracy of factual data used in our analysis and to prevent any error or inaccuracy in the final valuation report.
- 2.25. Limitation of Liabilities**
- 2.25.1. It is agreed that, having regard to the H&Co.'s interest in limiting the personal liability and exposure to litigation of its personnel, the Sponsor, the Investment Manager and the Trust will not bring any claim in respect of any damage against any of the H&Co.'s personnel personally.
- 2.25.2. In no circumstances H&Co. shall be responsible for any consequential, special, direct, indirect, punitive or incidental loss, damages or expenses (including loss of profits, data, business, opportunity cost, goodwill or indemnification) in connection with the performance of the services whether such damages are based on breach of contract, tort, strict liability, breach of warranty, negligence, or otherwise) even if the Investment Manager had contemplated and communicated to H&Co. the likelihood of such damages. Any decision to act upon the deliverables is to be made by the Investment Manager and no communication by H&Co. should be treated as an invitation or inducement to engage the Investment Manager to act upon the deliverable.
- 2.25.3. It is clarified that the SIML and Trustee will be solely responsible for any delays, additional costs, or other liabilities caused by or associated with any deficiencies in their responsibilities, misrepresentations, incorrect and incomplete information including information provided to determine the assumptions.
- 2.25.4. H&Co. will not be liable if any loss arises due to the provision of false, misleading or incomplete information or documentation by SIML or the Trustee.

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3. Sources of Information

For the purpose of undertaking this valuation exercise, we have relied on the following sources of information provided by the Investment Manager:

- 3.1. Audited financial statements of NRSS for the Financial Year ("FY") ended 31st March 2018 and 31st March 2017;
- 3.2. Provisional Profit & Loss Account and Balance Sheet for the financial year ended 31st March 2019.
- 3.3. Projected Profit & Loss Account and Working Capital requirements of NRSS from 1st April 2019 to 1st September 2053.
- 3.4. Details of brought forward losses (as per Income Tax Act, 1961) as at 31st March 2019.
- 3.5. Details of Written Down Value (as per Income Tax Act, 1961) of assets as at 31st March 2019.
- 3.6. Details of projected Repairs and Capital Expenditure ("Capex") as represented by the Investment Manager.
- 3.7. As on 31st March 2019, SPGVL holds 100% equity stake in NRSS through Sterlite Grid Limited 2 ("SGL 2"). As represented to us by the Investment Manager, there are no changes in the shareholding pattern from 31st March 2019 to the date of issuance of this Report.
- 3.8. Transmission Service Agreement ("TSA") of NRSS dated 2nd January 2014 with Long Term Transmission Customers ("LTTCS") and Tariff Adoption Order ("TAO") dated 10th December 2014 issued by Central Electricity Regulatory Commission ("CERC").
- 3.9. Physical inspection of the SPV on 31st May 2018.
- 3.10. Draft Technical Due Diligence Report specific to NRSS, have been noted by us. We have relied only upon the technical life of transmission lines of NRSS and historical operational availability of assets set forth in the technical report.
- 3.11. Management Representation Letter by Investment Manager dated 26th April 2019.

4. Procedures adopted for current valuation exercise

- 4.1. We have performed the valuation analysis, to the extent applicable, in accordance with Indian Valuation Standards, 2018 ("IVS") issued by the Institute of Chartered Accountants of India read with sub-regulation 10 of regulation 21 of SEBI InvIT Regulations.
- 4.2. In connection with this analysis, we have adopted the following procedures to carry out the valuation analysis:
 - 4.2.1. Requested and received financial and qualitative information relating to the SPV;
 - 4.2.2. Obtained and analyzed data available in public domain, as considered relevant by us;
 - 4.2.3. Discussions with the Investment Manager on:
 - Understanding of the businesses of the SPV – business and fundamental factors that affect its earning-generating capacity including strengths, weaknesses, opportunities and threats analysis and historical and expected financial performance;
 - 4.2.4. Undertook industry analysis:
 - Research publicly available market data including economic factors and industry trends that may impact the valuation using proprietary database subscribed by us;
 - 4.2.5. Analysis of other publicly available information



- 4.2.6. Selection of valuation approach and valuation methodology/(ies), in accordance with IVS, as considered appropriate and relevant by us.
- 4.2.7. Determination of fair operating EV of the SPV.

5. Overview of the InvIT and the SPV

The Trust

- 5.1. The Trust is registered with the SEBI pursuant to the SEBI InvIT Regulations. The Trust was established on 21st October 2016 by SPGVL/ the Sponsor to own inter-state power transmission assets in India. The units of the trust are listed on the National Stock Exchange (NSE) of India Limited and Bombay Stock Exchange (BSE) of India Limited since 6th June 2017.
- 5.2. The Trust had acquired two revenue generating projects, Bhopal Dhule Transmission Company Limited ("BDTCL") and Jabalpur Transmission Company Limited ("JTCL") from its Sponsor on 30th May 2017. On 15th February 2018, the Trust acquired three additional revenue generating projects from its Sponsor, namely, Maheshwaram Transmission Limited ("MTL"), Purulia Kharagpur Transmission Company Limited ("PKTCL") and RAPP Transmission Limited ("RTCL"). Further, the Trust had signed definitive agreements on 19th February 2018 to acquire Patran Transmission Company Limited ("PTCL") from Techno Electric & Engineering Company Limited
- 5.3. The Trust, pursuant to the 'Right of First Offer' deed has a 'right of first offer' to acquire eight projects of the Sponsor out of the three are acquired and five can still be acquired pursuant to 'Right of First Offer'.
- 5.4. Following is the financial summary of the projects which the Trust had acquired BDTCL, JTCL, MTL, RTCL and PKTCL from the Sponsor and PTCL from Techno Electric & Engineering Company Limited:

Asset Name	Enterprise Value (INR Mn)						Acquisition Value
	30-Sep-18	31-Mar-18	30-Sep-17	31-Mar-17	31-Mar-16	31-Mar-15	
BDTCL	19,694	20,319	21,431	21,541	21,812	20,113	37,020*
JTCL	14,937	15,431	15,988	16,125	19,407**	14,295	
MTL	5,423	5,564	5,218		NA		4,697
RTCL	4,084	4,054	3,935		NA		3,542
PKTCL	6,481	6,618	6,512		NA		5,861
PTCL	2,401			NA			2,320

*Consolidated Purchase Price paid by the Trust for the acquisition at the time of Initial Public Offer

**For JTCL, the Investment Manager had previously projected the incremental revenue to be at 40% of the non-escalable revenue charges during the valuation exercise of 31st March 2016, however the same was subsequently reduced to 9.8903% of non-escalable charges during the valuation exercise of 31st March 2017 as per the CERC order dated 8th May 2017.

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NRSS or the SPV:

5.5. Summary of details are as follows:

Parameters	Details
Project Cost	INR 28,082 Mn
Total Length	830 ckms/ 415 kms
TSA Agreement Date	2 nd January 2014
Scheduled COD as per TSA	4 th October 2018
Expiry Date	35 years from Actual COD
Actual COD as represented by Management	
- Jalandar Samba Line	24 th June 2016
- Samba Amargarh Line	2 nd September 2018
Shareholding as on 31 st March 2019	100% by SPGVL through SGL 2

Source: Investment Manager

- 5.6. The NRSS project was awarded by the Ministry of Power on 2nd January 2014 for a 35 years period from the scheduled commercial operation date on a BOOM basis.
- 5.7. The NRSS XXIX Transmission Limited project is expected to deliver over 2,000 MW of electricity from Punjab to the Kashmir Valley by strengthening the transmission system in these two states. The Jalandar-Samba 400 kV D/C transmission line was commissioned in June 2016. NRSS XXIX Transmission Limited commissioned the other two 400 kV double circuit transmission lines and one 400/220 kV GIS sub-station in September 2018. The SPV would operate and maintain these for a minimum tenure of 35 years.
- 5.8. The project consists of the following transmission lines and line bays and is being implemented on contract basis:

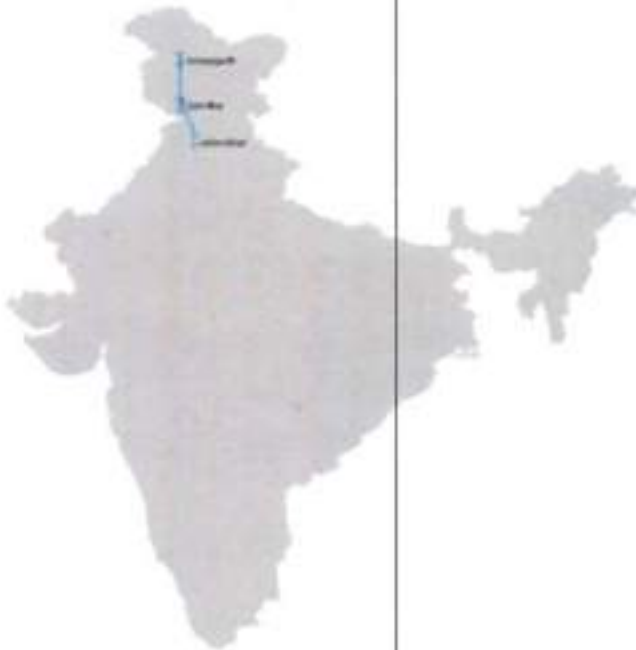
Transmission line / Sub-Station	Location	Route length (kms)	Specifications	Commission date	Contribution to total tariff
Jalandar - Samba	Punjab, J&K	135	400 kV D/C line	24 th June 2016	22%
Samba Amargarh	J&K	280	Two 400 kV D/C, One 400/220 kV GIS sub-station	2 nd September 2018	78%

Source: Investment Manager

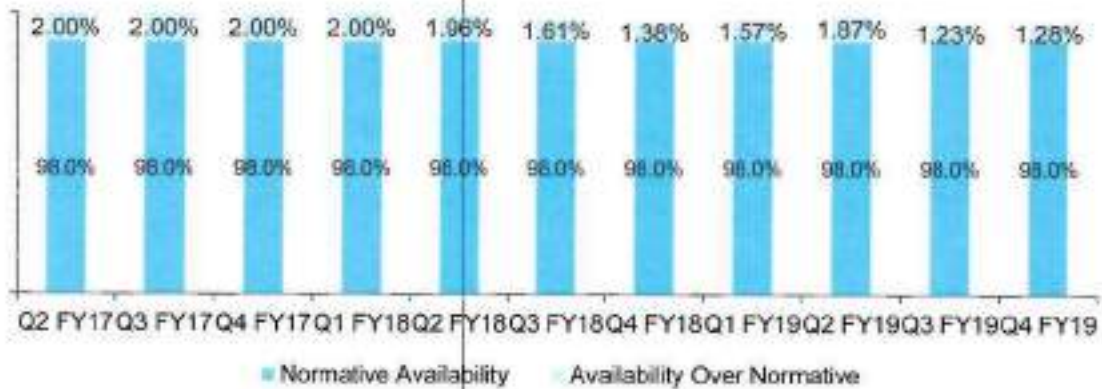
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5.9. Following is the map showing area covered by the SPV (not drawn to scale):



5.10. Operating Efficiency history of the SPV:



Source: Investment Manager

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5.11. Pictures of the SPV:6. Overview of the Industry6.1. **Introduction:**

- 6.1.1. India is the third largest producer and third largest consumer of electricity in the world, with the installed power capacity reaching 356.1 GW as of March 2019. The country also has the fifth largest installed capacity in the world.
- 6.1.2. Per capita electricity consumption in the country grew at a CAGR of 4.96 per cent, during FY11-FY18, reaching 1,149 KWh in FY18.

6.2. **Demand and Supply**

- 6.2.1. Demand: India continues to be a power deficient country even after an increasing trend in demand in the past. It is expected that energy requirement will continue to grow at healthy CAGR of 7.5% to 8% over FY 17 to FY 21. The primary growth drivers for rapid expansion in India's energy demand include investments in industrial and infrastructure development, rising per capita energy consumption levels etc.

Supply: India has seen a robust growth in the installed power generation capacity in the past four years. The installed power generation capacity has grown at a CAGR of ~9.08% from ~243 GW in FY 14 to ~ 347.22 GW as of December 2018 (Source: IBEF)

6.3. **India's economic outlook**

- 6.3.1. According to World Bank, India has retained its position as the fastest-growing economy in the world in 2015, after overtaking China in the previous year. Based on its estimates, India will continue to occupy the top slot among major economies with a growth rate of



7.7% to 7.8% until 2019. India's growth rate is significantly higher than the world average of around 4% and is also higher than other developing economies, such as China, Brazil, Indonesia and sub-Saharan African nations.

- 6.3.2. Power is one of the key sectors attracting FDI inflows into India.
- 6.3.3. From April 2000 to June 2018, India recorded FDI of US\$ 6.8 billion in non-conventional energy sector. New and renewable energy sector witnessed maximum power generation capacity addition, since 2000.
- 6.3.4. Cumulative FDI inflows into the sector from April 2000–December 2018 were US\$ 14.22 billion.
- 6.3.5. The ongoing liberalization of India's FDI regime has also led to a surge in investments, especially after the launch of the 'Make in India' campaign in October 2014. The FDI inflow has doubled to \$ 44.8 billion in fiscal 2018 from \$ 22 billion in around 2014. Reduced macroeconomic vulnerability, coupled with improved government spending in infrastructure sectors, has enhanced India's Global Competitive Index (GCI) ranking to 58 in 2017-18 from 71 in 2014-15.

6.4. Power transmission network in India

- 6.4.1. The transmission segment plays a key role in transmitting power continuously from the generation plants to various distribution entities. Transmission and sub-transmission systems supply power to the distribution system, which, in turn, supplies power to end consumers. In India, the Transmission and Distribution ("T&D") system is a three-tier structure comprising distribution networks, state grids and regional grids.
- 6.4.2. The distribution networks and state grids are primarily owned and operated by the respective State Transmission utilities or state governments (through state electricity departments). Most inter-state and inter-regional transmission links are owned and operated by Power Grid Corporation of India Limited ("PGCIL"), which facilitates the transfer of power from a surplus region to the ones with deficit.
- 6.4.3. The government's focus on providing electricity to rural areas has led to the T&D system being extended to remote villages. The total length of transmission lines in the country has grown at a slow rate of 6% CAGR during FY 11 and FY 17. The total transmission network has increased from 4,07,569 Ckms in FY 11 to around 6,04,193 Ckms in FY 18.
- 6.4.4. As on January 2019 approx. 7.2% of total transmission network is owned by private players which show cases the need of more private sector participation in this space. India has been underinvested as far as transmission is concerned, however, recently government has been encouraging investments in transmission with approximately projects worth INR 30,000 crores being awarded in last 2 years.
- 6.4.5. PGCIL has spent around INR 0.9 trillion over 2013-16.
- 6.4.6. Of the total capacity-addition projects in transmission during the 12th FYP, about 42% can be attributed to the state sector. The share of private sector in transmission line and substation additions since the beginning of 12th FYP is 14% and 7%, respectively, as the majority of high-capacity, long-distance transmission projects were executed by PGCIL and state transmission utilities during this period.
- 6.4.7. In order to strengthen the power system and ensure free flow of power, significant investments would be required in the T&D segment. Moreover, commissioning of additional generation capacity, rising penetration of renewable energy, regional demand-



supply mismatches, upgradation of existing lines, rising cross border power trading would necessitate huge investments in transmission sector in India.

- 6.4.8. Thus, going forward, the share of power sector investments are expected to veer towards the T&D segment. Moreover, strong government focus on the T&D segment will also support investments. CRISIL Research expects the transmission segment share in total power sector investments to rise sharply to 33% over 2017-21 from only 20% over 2012-16. Thus, we expect transmission segments investments to increase 1.5 times to INR 3.1 trillion over 2017-21 as compared to the previous 5 year period.

Source: CRISIL Opportunities in Power Transmission in India – March 2019 and IBEF report on Power sector in India- January 2019 and Central Electricity Authority Data as mentioned in PGCIL and Adani Transmission Limited Annual Report 2017-18.

7. Valuation Approach

- 7.1. The present valuation exercise is being undertaken in order to derive the operating EV of the SPV.
- 7.2. The valuation exercise involves selecting a method suitable for the purpose of valuation, by exercise of judgment by the valuers, based on the facts and circumstances as applicable to the business of the company to be valued.
- 7.3. There are three generally accepted approaches to valuation:
- "Cost" approach
 - "Market" approach
 - "Income" approach

7.4. Cost Approach

The cost approach values the underlying assets of the business to determine the business value. This valuation method carries more weight with respect to holding companies than operating companies. Also, asset value approaches are more relevant to the extent that a significant portion of the assets are of a nature that could be liquidated readily if so desired.

Net Asset Value ("NAV")

The NAV Method under Cost Approach considers the assets and liabilities, including intangible assets and contingent liabilities. The Net Assets, after reducing the dues to the preference shareholders, if any, represent the value of a company.

The NAV Method is appropriate in a case where the main strength of the business is its asset backing rather than its capacity or potential to earn profits. This valuation approach is also used in case where the firm is to be liquidated i.e. it does not meet the "going concern" criteria.

As an indicator of the total value of the entity, the net asset value method has the disadvantage of only considering the status of the business at one point in time.

Additionally, net asset value does not properly take into account the earning capacity of the business or any intangible assets that have no historical cost. In many respects, NAV represents the minimum benchmark value of an operating business.



7.5. Market Approach

Under the Market approach, the valuation is based on the market value of the company in case of listed companies and comparable companies trading or transaction multiples for unlisted companies. The Market approach generally reflects the investors' perception about the true worth of the company.

Comparable Companies Multiples ("CCM") Method

The value is determined on the basis of multiples derived from valuations of comparable companies, as manifest in the stock market valuations of listed companies. This valuation is based on the principle that market valuations, taking place between informed buyers and informed sellers, incorporate all factors relevant to valuation. Relevant multiples need to be chosen carefully and adjusted for differences between the circumstances.

Comparable Transactions Multiples ("CTM") Method

Under the CTM Method, the value is determined on the basis of multiples derived from valuations of similar transactions in the industry. Relevant multiples need to be chosen carefully and adjusted for differences between the circumstances. Few of such multiples are EV / Earnings before Interest, Taxes, Depreciation & Amortization ("EBITDA") multiple and EV / Revenue multiple.

Market Price Method

Under this method, the market price of an equity share of the company as quoted on a recognized stock exchange is normally considered as the fair value of the equity shares of that company where such quotations are arising from the shares being regularly and freely traded. The market value generally reflects the investors' perception about the true worth of the company.

7.6. Income Approach

The income approach is widely used for valuation under "Going Concern" basis. It focuses on the income generated by the company in the past as well as its future earning capability. The Discounted Cash Flow Method under the income approach seeks to arrive at a valuation based on the strength of future cash flows.

Discounted Cash Flow ("DCF") Method

Under DCF Method value of a company can be assessed using the Free Cash Flow to Firm Method ("FCFF") or Free Cash Flow to Equity Method ("FCFE"). Under the DCF method, the business is valued by discounting its free cash flows for the explicit forecast period and the perpetuity value thereafter. The free cash flows represent the cash available for distribution to both, the owners and creditors of the business. The free cash flows in the explicit period and those in perpetuity are discounted by the Weighted Average Cost of Capital ("WACC"). The WACC, based on an optimal vis-à-vis actual capital structure, is an appropriate rate of discount to calculate the present value of the future cash flows as it considers equity-debt risk by incorporating debt-equity ratio of the firm.

The perpetuity (terminal) value is calculated based on the business' potential for further growth beyond the explicit forecast period. The "constant growth model" is applied, which implies an expected constant level of growth for perpetuity in the cash flows over the last year of the forecast period.



The discounting factor (rate of discounting the future cash flows) reflects not only the time value of money, but also the risk associated with the business' future operations. The Business/EV (aggregate of the present value of explicit period and terminal period cash flows) so derived, is further reduced by the value of debt, if any, (net of cash and cash equivalents) to arrive at value to the owners of the business.

7.7. Conclusion on Valuation Approach

It is pertinent to note that the valuation of any company or its assets is inherently imprecise and is subject to certain uncertainties and contingencies, all of which are difficult to predict and are beyond our control. In performing our analysis, we made numerous assumptions with respect to industry performance and general business and economic conditions, many of which are beyond the control of the SPV. In addition, this valuation will fluctuate with changes in prevailing market conditions, and prospects, financial and otherwise, of the SPV, and other factors which generally influence the valuation of companies and their assets.

Accordingly, we have summarized the application of valuation method for the current valuation exercise as under:

Cost Approach

The existing book value of operating EV of the SPV comprising of its Net fixed assets and operating working capital (Trade receivable and Trade payable) is INR 28,524 Mn as at 31st March 2019.

In the present case, since the SPV has entered into TSA, the revenue of SPV is pre-determined for the life of the project. In such scenario, the true worth of the business is reflected in its future earning capacity rather than the cost of the project. Accordingly, since the NAV does not capture the future earning potential of the businesses, we have not considered the cost approach for the current valuation exercise.

Market Approach

The present valuation exercise is to undertake a fair operating EV of the SPV engaged in the power transmission business for a specific tenure. Further, the tariff revenue expenses are very specific to the SPV depending on the nature of their geographical location, stage of project, terms of profitability. In the absence of any exactly comparable listed company with characteristics and parameters similar to that of the SPV, we have not considered CCM method in the present case. In the absence of adequate details about the Comparable Transactions, we were unable to apply the CTM method. Currently, the equity shares of the SPV are not listed on any recognized stock exchange of India. Hence, we are unable to apply market price method.

Income Approach

The SPV is operating as BOOM model based project. The cash inflows of the projects are defined for 35 years under the TSA. Hence, the growth potential of the SPV and the true worth of its business would be reflected in its future earnings potential and therefore DCF Method under the Income approach has been considered as an appropriate method for the present valuation exercise.



8. Valuation of the SPV

We have estimated the value of SPV using the DCF Method. While carrying out this engagement, we have relied extensively on the information made available to us by the Investment Manager. We have considered projected financial statement of the SPV as provided by the Investment Manager.

Valuation

8.1. The key assumptions of the projections provided to us by the Investment Manager are:

Key Assumption

8.1.1. **Transmission Revenue:** The transmission revenue of the SPV comprises of non escalable transmission revenue and escalable transmission revenue as provided in the TSA read with TAO dated 10th December 2014 for the life of the project.

- **Non Escalable Transmission Revenue:** The Non Escalable Transmission revenue remains fixed for the entire life of the project. We have corroborated the revenue considered in the financial projections with the respective TSA read with TAO dated 10th December 2014 and documents provided to us by the Investment Manager.
- **Escalable Transmission Revenue:** Escalable Transmission revenue is the revenue component where the revenue is duly escalated based on the rationale as provided in the respective TSA read with TAO dated 10th December 2014 and documents provided to us by the Investment Manager. The escalation is to mainly compensate for the inflation factor.

8.1.2. **Incentives:** As provided in the respective TSA, if the annual availability exceeds 98%, the SPV shall be entitled to an annual incentive as provided in TSA. Provided no incentives shall be payable above the availability of 99.75%. Based on the past track record of the asset and the general industry standard, the annual availability is estimated to be above 98% in which case the SPV shall be entitled to the incentives as provided in the TSA.

8.1.3. **Penalty:** If the annual availability in a contract year falls below 95%, the SPV shall be liable for an annual penalty as provided in the TSA. Based on our analysis in Para 8.1.2. in the present case it is assumed that the annual availability will not fall below 95% and hence penalty is not considered in the financial projections.

8.1.4. **Expenses:** Expenses are estimated by the Investment Manager for the projected period based on the escalation rate as determined for the SPV. We have relied on the projections provided.

- **Operations & Maintenance ("O&M"):** O&M expenditure is estimated by the Investment Manager for the projected period based on the escalation rate as determined for the SPV. The Investment Manager has projected expenses to be incurred for the O&M of the SPV including, but not limited to, transmission line maintenance expenses, rates and taxes, legal and professional fees and other general and administration expenses. We have relied on the projections provided by Investment Manager on the operating and maintenance expenses for the projected period.
- **Insurance Expenses:** We understand from the Investment Manager that the insurance expenses of the SPV will not escalate for the projected period. We have relied on the projections provided by the Investment Manager on the insurance expenses for the projected period.



- 8.1.5. **Depreciation:** The book depreciation has been calculated as provided by the Investment Manager. For calculating depreciation as per the Income Tax Act, 1961, we have considered depreciation rate as specified in the Income Tax Act, 1961 and WDV as provided by the Investment Manager.
- 8.1.6. **Capex:** As represented by the Investment Manager, the SPV is not expected to incur any Capex in the projected period.
- 8.1.7. **Tax Incentive:** The SPV is eligible for tax holiday under section 80IA of the Income Tax Act, 1961 for JS line. Such tax holiday shall be available for any 10 consecutive years out of 15 years beginning from the date of COD.
- 8.1.8. **Working Capital:** The Investment Manager has envisaged the working capital requirement of the SPV for the projected period. The operating working capital assumptions for the projections as provided by the Investment Manager comprises of trade receivables and trade payables to the extent realizable as considered appropriate by the Investment Manager.
- 8.2. **Impact of Ongoing Material Litigation on Valuation**
- 8.2.1. As represented by Investment Manager, there are no ongoing material litigations that will affect the valuation exercise. In addition, we understand the litigations are likely to be an indemnified event under the definitive documentation.
- 8.3. **Calculation of Weighted Average Cost of Capital for the SPV**
- 8.3.1. **Cost of Equity:**
- Cost of Equity (CoE) is a discounting factor to calculate the returns expected by the equity holders depending on the perceived level of risk associated with the business and the industry in which the business operates.
- For this purpose, we have used the Capital Asset Pricing Model (CAPM), which is a commonly used model to determine the appropriate cost of equity for the SPV.
- $$K(e) = R_f + (R_p \times \text{Beta}) + \text{CSRP}$$
- Wherein:
- K(e) = cost of equity
- R_f = risk free rate
- R_p = risk premium i.e. market risk premium over and above risk free rate
- Beta = a measure of the sensitivity of assets to returns of the overall market
- CSRP = Company Specific Risk Premium (In general, an additional company-specific risk premium will be added to the cost of equity calculated pursuant to CAPM).
- For our valuation exercise, we have arrived at adjusted cost of equity of 12.24%.
- 8.3.2. **Risk Free Rate:**
- We have applied a risk free rate of return of 7.43% on the basis of the relevant zero coupon yield curve as on 29th March 2019 for government securities having a maturity period of 10 years, as quoted on the website of Clearing Corporation of India Limited ("CCIL").



8.3.3. Risk Premium:

Risk premium is a measure of premium that investors require for investing in equity markets rather than bond or debt markets. A risk premium is calculated as follows:

Risk premium = Equity market return – Risk free rate

Wherein:

Equity market return = the average historical market return is estimated at 15.00%.

Risk free rate = 7.43% as explained in para 8.3.2.

Hence, risk premium is derived as 7.57%.

8.3.4. Beta:

Beta is a measure of the sensitivity of a company's stock price to the movements of the overall market index. Normally, we would take a relevant number from a quoted stock and the market on which it trades. In the present case, we find it appropriate to consider the beta of companies in similar business/ industry to that of the SPV.

We have further unlevered that beta based on debt-equity of the respective company using the following formula:

Unlevered Beta = Levered Beta / [1 + (Debt / Equity) *(1-T)]

Further we have re-levered it based on debt-equity of the industry standard using the following formula:

Re-levered Beta = Unlevered Beta * [1 + (Debt / Equity) *(1-T)]

For our valuation exercise, re-levered beta has been estimated as 0.63.

8.3.5. Cost of Debt:

The calculation of Cost of Debt post-tax can be defined as follows:

$K(d) = K(d) \text{ pre tax} * (1 - T)$

Wherein:

K(d) = Cost of debt

T = tax rate as applicable

In present valuation exercise, we have considered debt:equity at 70:30 based on industry standards. We understand that NRSS has made a recent issue of Non-Convertible Debentures bearing a coupon rate of 9.57% p.a. However, we understand from the Investment Manager that going forward estimated cost of debt after refinancing is expected to be 8.92% p.a. Accordingly, for current valuation exercise, pre tax cost of debt has been considered as 8.92% p.a.

8.3.6. Weighted Average Cost of Capital (WACC):

The discount rate, or the WACC, is the weighted average of the expected return on equity and the cost of debt. The weight of each factor is determined based on the company's optimal capital structure.

Formula for calculation of WACC:

$WACC = [K(d) * Debt / (Debt + Equity)] + [K(e) * (1 - Debt / (Debt + Equity))]$

8.3.7. Accordingly, as per above, we have arrived the WACC of 8.12% for NRSS. (Refer appendix I)



8.4. We understand from the representation of the Investment Manager that the SPV will generate cash flow even after the expiry of concession period of 35 years as the project is on BOOM model and the ownership will remain with the SPV even after the expiry of 35 years. Accordingly, we have considered Terminal Value after the expiry of 35 years.

8.5. Valuation of NRSS

8.5.1. We have relied on the projected financials of NRSS as provided by the Investment Manager for the period from 1st April 2019 to 1st September 2053.

8.5.2. WACC arrived at for the purpose of valuation is 8.12% (Refer Appendix I).

8.5.3. For the terminal period, we have considered 0% constant growth rate for FCFF.

8.5.4. As on Valuation Date, we have discounted the free cash flows of NRSS using the WACC of 8.12% to arrive at the operating EV by aggregating the present value of cash flows for explicit period and terminal period at INR 41,626 Mn (Refer Appendix II)

9. Valuation Conclusion

9.1. The current valuation has been carried out based on the discussed valuation methodology explained herein earlier. Further, various qualitative factors, the business dynamics and growth potential of the business, having regard to information base, management perceptions, key underlying assumptions and limitations were given due consideration.

9.2. We have been represented by the Investment Manager that there is no potential devolvement on account of the contingent liability as of valuation date; hence no impact has of contingent liability has been factored in to arrive at operating EV of the SPV.

9.3. Based on the above analysis the operating EV as on the Valuation Date of the SPV is INR 41,626 Mn (Appendix II).

9.4. The fair operating Enterprise Value of the SPV is estimated using DCF method. The valuation requires Investment Manager to make certain assumptions about the model inputs including forecast cash flows, discount rate, and credit risk.

9.5. Valuation is based on estimates of future financial performance or opinions, which represent reasonable expectations at a particular point of time, but such information, estimates or opinions are not offered as predictions or as assurances that a particular level of income or profit will be achieved, a particular event will occur or that a particular price will be offered or accepted. Actual results achieved during the period covered by the prospective financial analysis will vary from these estimates and the variations may be material.

9.6. Accordingly, we have conducted sensitivity analysis on the following model inputs:

WACC	Decrease by 0.50%	Fair Value	Increase by 0.50%
Implied WACC	7.62%	8.12%	8.62%
Operating EV (in INR Mn)	43,626	41,626	39,821
Total Expenses	Decrease by 20%	Fair Value	Increase by 20%
Operating EV (in INR Mn)	42,201	41,626	41,082



10. Additional Procedures to be complied with in accordance with InvIT regulations
Scope of Work

10.1. The Schedule V of the SEBI InvIT Regulations prescribes the minimum set of mandatory disclosures to be made in the valuation report. In this reference, the minimum disclosures in valuation report may include following information as well, so as to provide the investors with the adequate information about the valuation and other aspects of the underlying assets of the InvIT. The additional set of disclosures, as prescribed under Schedule V of InvIT Regulations, to be made in the valuation report of NRSS are as follows:

- List of one-time sanctions/approvals which are obtained or pending;
- List of up to date/overdue periodic clearances;
- Statement of assets included;
- Estimates of already carried as well as proposed major repairs and improvements along with estimated time of completion;
- Revenue pendencies including local authority taxes associated with InvIT asset and compounding charges, if any;
- On-going and closed material litigations including tax disputes in relation to the assets, if any;
- Vulnerability to natural or induced hazards that may not have been covered in town planning/ building control.

Limitations

- 10.2. This Report is based on the information provided by the Investment Manager. The exercise has been restricted and kept limited to and based entirely on the documents, records, files, registers and information provided to us. We have not verified the information independently with any other external source.
- 10.3. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as original, and the conformity of the copies or extracts submitted to us with that of the original documents.
- 10.4. We have assumed that the documents submitted to us by the Investment Manager in connection with any particular issue are the only documents related to such issue.
- 10.5. We have reviewed the documents and records from the limited perspective of examining issues noted in the scope of work and we do not express any opinion as to the legal or technical implications of the same.
- 10.6. Analysis of Additional Set of Disclosures for NRSS

A. List of one-time sanctions/approvals which are obtained or pending: [To be Confirmed]

As informed by the Investment Manager, there have been no additional sanctions/ approvals obtained by NRSS between the period 1st January 2019 to 31st March 2019. Further, we were informed that there were no applications for which approval is pending. The list of sanctions/ approvals obtained by the Company as on 31st March 2019 is provided in Appendix III.



B. List of up to date/ overdue periodic clearances;

We have included the periodic clearances obtained by NRSS in Appendix III.

C. Statement of assets included;

As at 31st March 2019, details of the asset of the SPV are as follows:

Asset Type	Gross Block	Depreciation	Net Block	INR Million
				% of asset depreciated
Transmission Lines	28,070.0	690.9	27,379.1	2%
Other Assets	12.2	5.8	6.4	47%
TOTAL	28,082.2	696.7	27,385.5	

Source: Provisional Financials of 31st March 2019

D. Estimates of already carried as well as proposed major repairs and improvements along with estimated time of completion;

We noted in the provisional financial statements that NRSS has incurred INR 26.55 million during the year ended 31st March 2019 for the maintenance charges of Transmission Lines. Based on the confirmation provided by Investment Manager we expect an increase of c.4.08% per annum in the cost of operation and maintenance expenses to be incurred in the future period.

Investment Manager has informed us that there are no maintenance charges which has been deferred to the upcoming year as the maintenance activities are carried out regularly. We have been informed that overhaul maintenance are regularly carried out by NRSS in order to maintain the working condition of the assets.

E. Revenue pendencies including local authority taxes associated with InvIT asset and compounding charges, if any;

Investment Manager has informed us that there are no dues including local authority taxes pending to be payable to the Government authorities with respect to InvIT assets.

F. On-going and closed material litigations including tax disputes in relation to the assets, if any;

As informed by the Investment Manager, the status of ongoing litigations above INR 0.5 million is updated in Appendix IV. Investment Manager has informed us that it expects majority of the cases to be settled in favour of NRSS and accordingly no outflow is expected against the litigations.

G. Vulnerability to natural or induced hazards that may not have been covered in town planning/ building control;

Investment Manager has confirmed to us that there are no such natural or induced hazards which have not been considered in town planning/ building control.

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Appendix I – Weighted Average Cost of Capital (WACC)

Particulars	%	Remarks
Market Return	15.00%	Market Return has been considered based on the long term average returns earned by an equity investor in India.
Risk Free Rate	7.43%	Risk Free Rate has been considered based on zero coupon yield curve as at 29th March 2019 of Government Securities having maturity period of 10 years, as quoted on CCIL's website.
Market Risk Premium	7.57%	Market Premium = Market Return – Risk Free Rate
Beta (relevered)	0.63	Beta has been considered based on the beta of companies
Cost of Equity	12.24%	$K_e = R_f + \beta \times (R_m - R_f) + \text{CSRP}$
Pre-tax Cost of Debt	8.92%	As represented by the Investment Manager
Effective tax rate of SPV	28.73%	Average tax rate for the life of the project has been considered
Post-tax Cost of Debt	6.36%	Effective cost of debt. $K_d = \text{Pre tax } K_d \times (1 - \text{Effective Tax Rate})$
Debt/(Debt+Equity)	70.00%	The debt – equity ratio computed as $[D/(D+E)]$ is considered as 70% as per industry standard.
WACC	8.12%	$WACC = [K_e \times (1 - D/(D+E))] + [K_d \times (1 - t) \times (D/(D+E))]$



Appendix II – Valuation of NRSS as on 31st March 2019

WACC											INR Mn
FY	Revenue	EBITDA	EBITDA Margin	Capex	Changes in NCA	Taxation	FCFF	Cash Accrual Factor	Discounting Factor	PV of Cash Flows	
FY20	5,021	4,838	96%	-	84	878	3,876	0.50	0.96	3,727	
FY21	5,020	4,830	96%	-	0	877	3,954	1.50	0.89	3,517	
FY22	5,020	4,822	96%	-	(1)	875	3,948	2.50	0.82	3,248	
FY23	5,019	4,813	96%	-	(1)	873	3,941	3.50	0.76	2,999	
FY24	5,016	4,804	96%	-	(2)	871	3,935	4.50	0.70	2,769	
FY25	5,017	4,795	96%	-	(0)	869	3,926	5.50	0.65	2,555	
FY26	5,017	4,785	95%	-	(1)	867	3,919	6.50	0.60	2,359	
FY27	5,016	4,774	95%	-	(1)	865	3,911	7.50	0.56	2,177	
FY28	5,015	4,764	95%	-	(2)	862	3,903	8.50	0.51	2,010	
FY29	5,014	4,752	95%	-	(0)	860	3,893	9.50	0.48	1,854	
FY30	5,012	4,740	95%	-	(1)	857	3,884	10.50	0.44	1,711	
FY31	4,684	4,401	94%	-	(82)	784	3,698	11.50	0.41	1,507	
FY32	4,682	4,388	94%	-	(2)	781	3,608	12.50	0.38	1,360	
FY33	3,527	3,220	91%	-	(285)	530	2,976	13.50	0.35	1,037	
FY34	3,525	3,206	91%	-	(1)	527	2,681	14.50	0.32	864	
FY35	3,523	3,191	91%	-	(2)	546	2,647	15.50	0.30	789	
FY36	3,521	3,175	90%	-	(2)	1,040	2,137	16.50	0.28	589	
FY37	3,518	3,159	90%	-	(1)	1,045	2,115	17.50	0.26	539	
FY38	3,516	3,141	89%	-	(2)	1,048	2,095	18.50	0.24	494	
FY39	3,513	3,123	89%	-	(2)	1,049	2,076	19.50	0.22	453	
FY40	3,510	3,105	88%	-	(3)	1,049	2,058	20.50	0.20	415	
FY41	3,507	3,085	88%	-	(2)	1,047	2,039	21.50	0.19	391	
FY42	3,503	3,064	87%	-	(2)	1,045	2,022	22.50	0.17	349	
FY43	3,499	3,042	87%	-	(2)	1,041	2,004	23.50	0.16	320	
FY44	3,495	3,019	86%	-	(3)	1,038	1,986	24.50	0.15	293	
FY45	3,491	2,995	86%	-	(2)	1,031	1,967	25.50	0.14	269	
FY46	3,486	2,970	85%	-	(3)	1,024	1,949	26.50	0.13	246	
FY47	3,480	2,944	85%	-	(3)	1,017	1,930	27.50	0.12	225	
FY48	3,475	2,916	84%	-	(4)	1,009	1,911	28.50	0.11	206	
FY49	3,468	2,887	83%	-	(3)	1,001	1,890	29.50	0.10	189	
FY50	3,461	2,857	83%	-	(4)	991	1,869	30.50	0.09	173	
FY51	3,454	2,825	82%	-	(4)	981	1,847	31.50	0.09	158	
FY52	3,446	2,791	81%	-	(5)	970	1,825	32.50	0.08	144	
FY53	3,437	2,762	80%	-	(3)	961	1,805	33.50	0.07	132	
FY54*	1,447	1,153	80%	-	(4)	399	757	34.21	0.07	52	
TV	3,430	2,733	80%	-	-	955	1,778	34.21	0.07	123	
Present Value of Explicit Period Cash Flows										40,111	
Present Value of Terminal Year Cash Flow										1,515	
Operating Enterprise Value										41,626	

* for the period ended 1st September 2053



Appendix III – Summary of Approvals & Licenses (1/4)

Sr. No.	Approvals	Date of issue	Validity (in years)	Issuing Authority
1	Company Related Registrations Certificate of Incorporation Certificate for Commencement of Business Transmission License	26-07-2013 18-10-2013 14-11-2014	Valid Valid 25	Registrar of Companies Registrar of Companies Central Electricity Regulatory Commission
2	Power Line Clearance (Crossing Proposal) 400 KV S/C Jalandhar-Amritsar, 400 KV D/C Jalandhar - Moga LILO, 400 KV D/C Chamera - Jalandhar LILO, 400 KV D/C Chamera - Jalandhar, 800 KV S/C Krishnagar - Moga ckt-11, 400 KV D/C Benala - Amritsar Transmission Lines by proposed 400 KV D/C Jalandhar - Samba Line. Overhead crossing of 800 KV KMTL-1 by 400KV Jalandhar-Samba TL, Underneath crossing of 400KV D/C Jalandhar - Samba Line with existing 400 KV D/C Kurushetra - Jalandhar 400 KV power line over 132 KV D/C Peltan Magam & 220 KV Zainakote - Amargraha Transmission Line 400 KV, D/C Transmission Line between location No. 38 & 40 of 132 KV - Bem Joulain Transmission Line Electrical clearance between span 179-180 existing line of 220KV D/C Bishnah - Hiranagar Transmission Line 400KV D/C Jalandhar-samba-Amargraha Transmission Line 400KV D/C Samba-Amargraha Transmission Line Overhead power line crossing of 400 KV S/C Uti-11-Waapora TL by 400 KV Samba - Amargraha TL	04-06-2015 06-07-2015 29-07-2015 06-05-2017 17-02-2016 11-03-2016 15-01-2016 10-02-2016 04-04-2017	Valid Valid Valid Valid Valid Valid Valid Valid Valid	Power Grid Corporation Of India Ltd Power Grid Corporation Of India Ltd Power Grid Corporation Of India Ltd J&K Power Development Department Power Development Department (Jammu & Kashmir) Power Development Department (Jammu & Kashmir) Power Development Department (Jammu & Kashmir) Power Development Department (Jammu & Kashmir) Power Grid Corporation Of India Ltd
3	Transmission Service Agreement Transmission Service Agreement between NRSS & Long Term Transmission Customers Transmission Service Agreement between NRSS & Power Grid Corporation of India Ltd	02-01-2014 22-12-2015	35 Valid	Central Electricity Regulatory Commission Central Electricity Regulatory Commission

Source: Investment Manager



Appendix III – Summary of Approvals & Licenses (2/4)

Sr. No.	Approvals	Date of Issue	Validity (in years)	Issuing Authority
4	River Crossing 400 KV Double circuit Jalandhar-Samba Transmission Line	11-05-2015	Valid	Executive Engineer, Gurdaspur Division A. B. D. N
5	Forest Clearance 400 KV D/C Samba-Amargrah Transmission Line passing through Kathau, Jammu, Retal, Nowshera, Rajouri, Poonch, shopian & Pir-panjal Forest Divisions 400 KV substation Jalandhar to Samba under Forest division and Districts Gurdaspur, Jalandhar and Pathankot, Punjab.	16-09-2015 28-09-2015	Valid Valid	Department of Forest, Environment & Ecology Department of Forest, Environment & Ecology
6	Railway Clearance 400 KV electric overhead transmission crossing line between Telegraph post No. 5818 and telegraph post No. 5910 and between Ghagwal and Samba Railway station on PKT-JAT section. 400 KV electric overhead transmission crossing line between Telegraph post No. 7618-B and telegraph post No. 7619 and between Gurdaspur and Dinanagar Railway station on AST-PKT section. 400 KV electric overhead transmission crossing line between KM No. 6100 and KM No. 6011 and between Ghagwal and Samba Railway station on PKT-JAT section.	25-02-2016 25-02-2016 06-09-2016	Valid Valid Valid	Northern Railways Northern Railways Northern Railways
7	Aviation/Defence Clearance NOC for 400KV D/C Jalandhar - Samba Transmission Line Application for NOC for 400kv D/C LILO of Uri-Wagooa Transmission Line NOC for 400kv D/C LILO of Uri-Wagooa Transmission Line NOC for construction of 400KV D/C Samba to Amargrah Transmission line NOC of height clearance for construction of 400KV D/C Jalandhar to Samba Transmission line	22-02-2016 08-01-2018 15-02-2018	Valid In process In process 7	Air Force Station Adampur Airport Authority of India Airport Authority of India Group Captain, Defence Airport Authority of India

Source: Investment Manager



Appendix III – Summary of Approvals & Licenses (3/4)

Sr. No.	Approvals	Date of Issue	Validity (in years)	Issuing Authority
8	Road Crossing NOC for crossing proposal of NH-15 at Km. 26.108 for laying of 400KV DVC Jalandhar-Samba Transmission Line NOC for crossing proposal of NH-01 at Km. 384+440 for laying of 400KV DVC Jalandhar-Samba Transmission Line NOC for crossing proposal of NH-01 at Km. 395+204 for laying of 400KV DVC Jalandhar-Samba Transmission Line Road crossing proposal 400KV DVC Line near Karhama	20-02-2016 20-02-2016 20-02-2016	Valid Valid Valid	Ministry of Road Transport and Highways Ministry of Road Transport and Highways Ministry of Road Transport and Highways
	NOC for road crossing proposal 400KV DVC line near Karhama Crossing of Transmission Line over Jammu - RS Pura Road	14-02-2017 27-05-2017	Valid Valid	Office of the Suprintending Engineer, PWD (R&B) Circle Baramulla/ Kupwara Office of Chief Engineer PW (R&B) Department, KMR Office of Chief Engineer PW (R&B) Department, Jammu
9	Power Telecommunication Coordination Committee (PTCC) Clearances 400 KV DVC Jalandhar-Samba Transmission Line 400 KV DVC LLO- Uri-Wagooora Line 400 KV DVC Samba Amargraha Transmission Line 400 KV DVC Jalandhar-Samba Transmission Line LLO of both circuit of Uri-Wagooora 400 KV DVC Line at Amargraha Substation.	12-02-2016 23-03-2018 03-11-2018 14-02-2017 04-10-2018	Valid Valid Valid Valid Valid	PTCC, Government of India PTCC, Government of India PTCC, Government of India PTCC, Government of India PTCC, Government of India
10	Energisation Clearances Approval under regulation 43 of CEA Regulations 2010 for energisation 400/220 kv GIS Sub Station. Approval under regulation 43 of CEA Regulations 2010 for energisation 400KV DVC Jalandhar-Samba Line. Approval under regulation 43 of CEA Regulations 2010 for energisation LLO of both circuits of Uri-Wagooora 400 kv DVC line at 400/220 kv GIS at Amargraha, Srinagar. Approval under regulation 43 of CEA Regulations 2010 for energisation 400KV DVC Samba-Amargraha Line.	09-03-2018 17-06-2016 09-03-2018 20-08-2018	2 2 2 2	Central Electricity Authority Central Electricity Authority Central Electricity Authority Central Electricity Authority

Source: Investment Manager



Appendix III – Summary of Approvals & Licenses (4/4)

Sr. No.	Approvals	Date of Issue	Validity (in years)	Issuing Authority
11	<p>Approval under Electricity Act, 2003</p> <p>Approval from GOI under section 164 of Electricity Act, 2003</p> <p>Approval u/s 66 of the Electricity Act, 2003 for laying overhead transmission line.</p> <p>Approval from CERC under section 17(3)</p>	<p>17-09-2015</p> <p>15-05-2013</p> <p>08-01-2018</p>	<p>25</p> <p>Valid</p> <p>Valid</p>	<p>Central electricity Authority</p> <p>Ministry of Power</p> <p>Central Electricity Regulatory Commission</p>
12	<p>Approval for adoption of Tariff</p> <p>Approval for adoption of Tariff</p> <p>Revised approval for adoption of Tariff</p>	<p>10-12-2014</p> <p>12-06-2017</p>	<p>Valid</p> <p>Valid</p>	<p>Central Electricity Regulatory Commission</p> <p>Central Electricity Regulatory Commission</p>
13	<p>Trial run certificate</p> <p>400 KV Jalandhar-Samba lines I & II (Interim Charing)</p> <p>400 KV Jalandhar-Samba lines I & II</p> <p>400/220 KV, 315 MVA-1 (3X105 MVA), along with associated 400 KV bay, 403(main) & 220 KV bay 203 at Amargarth,</p> <p>400/220 KV, 315 MVA-2 (3X105 MVA) along with associated 400 KV bay 405(main) & 220 KV bay 205 at Amargarth.</p> <p>220 KV bay no 202 at Zeinkote-Amargarth at Amargarth,</p> <p>220 KV bay no 208 at Delins-Amargarth at Amargarth.</p>	<p>02-06-2016</p> <p>28-12-2016</p> <p>03-07-2018</p>	<p>Valid</p> <p>Valid</p> <p>Valid</p>	<p>Power System Operation Corporation Limited</p> <p>Power System Operation Corporation Limited</p> <p>Power System Operation Corporation Limited</p>
	<p>400 KV, 3-Ph MVAR Bus Reactor-1 along with associated 400 KV bay 415(main) & 414(1e) at Amargarth.</p> <p>400 KV, 3-Ph 63 MVAR Bus Reactor-2 at Amargarth.</p> <p>400 KV U/I(NHPC)-Amargarth-1 and associated bays 410(main) & 411(1e) at Amargarth,</p> <p>400 KV Amargarth-Wagooal(PG)-1 and associated bays 403(main) & 406(1e) at Amargarth.</p>	<p>04-07-2018</p> <p>22-05-2018</p>	<p>Valid</p> <p>Valid</p>	<p>Power System Operation Corporation Limited</p> <p>Power System Operation Corporation Limited</p>
	<p>400 KV Amargarth-Samba (PG)-1 along with 50 MVAR Non-switchable line reactors at Amargarth end and associated bays 401(main) & 402(1e) at Amargarth end.</p>	<p>20-09-2018</p>	<p>Valid</p>	<p>Power System Operation Corporation Limited</p>

Source: Investment Manager



Appendix IV – Summary of Ongoing Litigations (1/2)

Matter	Pending Before	Details of the case	Amount Involved (INR Million)	Amount Deposited (INR Million)
Appeal against the suit and order restraining erection of towers	Court of the Ld. Sub Judge, Rajouri	Background of the case: Shaibir Ahmed had filed a suit for restraining the Secretary PDD (J&K) & others (Defendants) from installing the Electric towers. Interim order was passed. The defendants have filed the preliminary objections against which the plaintiff has replied. Current Status: The Matter was disposed off from the Court of Sub Judge, Rajouri on 24 October 2017. Appeal has been filed in the court of Ld. District Judge by the petitioner but no stay order passed in favour of appellant. Court has appointed PDD as commissioner to furnish report pertaining to height of conductor. Commissioner report is awaited.	0.5	
Suit for compensation	Honourable Court of District Judge at Budgam	Background of the case: Ghulam Mohammad Lane (Plaintiff) filed the plaint on the ground that MRSS without adopting due course of law, plaintiff without his consent and without acquiring the land under the Land Acquisition Act, is trying to construct the tower on his land which he owns jointly with his brothers and sisters equally. Plaintiff is claiming that compensation is being released only in name of one of his brothers and not in his name however, his name also appears in the revenue record. Written submissions were filed on 6 June 2017. INR 0.64 million has already been deposited as per the decided rate under the PNC sheet. There is no further implication expected by MRSS. Current Status: Appearance caused on 6 June 2017. No stay order passed by the court. Fresh summons are issued to defendants. Next date of hearing was 16 April 2019.	0.64	0.64
Suit for restraining order and compensation	High Court of J&K at Srinagar	Background of the case: Ghulam Mohammad Lane (Petitioner) along with several others filed a writ petition in the High Court of Srinagar claiming that the entire process of land acquisition for installation of towers and laying of transmission lines by the respondents is illegal and that the land of the petitioners has lost its commercial value due to construction of the transmission lines. The petitioners have prayed the Court to direct respondents to pay fair compensation to the petitioners, settle and rehabilitate the petitioners and bring the petitioners and their family members under insurance cover. Current Status: Writ petition has been filed. Pending to be listed.	1.2*	

Source: Investment Manager



Appendix IV – Summary of Ongoing Litigations (2/2)

Matter	Pending Before	Details of the case	Amount Involved (INR Million)	Amount Deposited (INR Million)
Damage due to Acquisition of agricultural land.	High Court of Jammu & Kashmir	<p>Background of the case: About Majid (Petitioner) is the owner of the land has filed the suit for forcible and unlawful acquisition of his agricultural land. He demands to find out alternative non-agricultural and non cultivated land for the construction of tower.</p> <p>Current Status: Out of court settlement has reached with the owner and work has started over the location. They will be filing the reply to this effect before the court. The matter was listed for hearing on 3 February 2017 but did not come for hearing and was adjourned. The matter is to be listed for further hearing.</p>	0.55	
Suit for compensation	Sub-Judge, Soprian	<p>Background of the case: Owner is claiming that his land is coming in between the corridor at village Watred and no compensation has been given to him. Further, ground clearance of transmission line is not enough.</p> <p>Current Status: Written Statements filed. Pending for report of commissioner - PDD. No stay order as on date. The matter is currently pending</p>	1*	
Damage due to Acquisition of forest land and suit for compensation	Jammu & Kashmir Human Rights Commission, Srinagar	<p>Background of the case: The complainant has alleged that 40,000 forest trees and other fruit and non fruit bearing trees have been cut in last two years. people have been put to several health hazards. People living near to line have not been compensated adequately and have been put to risk of several health issues. he has also given one list of people who have not been compensated property. In his prayer, he is asking for status report from different departments, especially, forest dept and why FAC is giving directions for cutting of trees every year. People nearer to line must be compensated adequately and rehabilitated at some other places.</p> <p>Current Status: Reply filed. Matter adjourned to 22 March 2019.</p>	2.5*	
TDS Default	Income Tax Authority	As per the screenshot provided from the TRACES (tdscpc.gov.in) website, an amount of INR 0.6 million is outstanding as TDS Default for FY 18-19.	0.6	

Source: Investment Manager

* As per the estimates provided by the Investment Manager

Note: There were 14 cases which were below materiality level of INR 0.5 million as per the Investment Manager, hence not included in the above summary



Strictly Private and Confidential

HARIBHAKTI & CO. LLP

Chartered Accountants

Valuation as per SEBI (Infrastructure Investment Trusts) Regulations, 2014 as amended

SPV: Odisha Generation Phase – II Transmission Limited (“OGPTL”)

Valuation Date: 31st March 2019

Date: 27th April 2019

CFAS/2019-20/8

Sterlite Investment Managers Limited

Maker Maxity, 5th North Avenue,
Level 5, Bandra Kurla Complex,
Bandra (East), Mumbai – 400051.

India Grid Trust

(Axis Trustee Services Limited acting on behalf of the Trust)

F-1, Mira Corporate Suits,
1&2, Mathura Road, Ishwar Nagar,
New Delhi – 110065.

Sub: Financial Valuation as per SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended ("the SEBI InvIT Regulations")

Dear Sirs/Madams,

We, Haribhakti & Co. LLP, Chartered Accountants ("H&Co."), have been appointed vide letter dated 21st September 2018, as an independent valuer, as defined under the SEBI InvIT Regulations, by Sterlite Investment Managers Limited ("the Investment Manager" or "SIML"), acting as the investment manager for India Grid Trust ("the Trust") and Axis Trustee Services Limited ("the Trustee") acting as the trustee for the Trust mentioned above, for the purpose of the financial valuation of the Special Purpose Vehicle – Odisha Generation Phase - II Transmission Limited ("OGPTL" or "the SPV") of Sterlite Power Grid Ventures Limited ("SPGVL" or "the Sponsor"). The SPV to be valued is proposed to be acquired by the Trust, SIML is acting as the investment manager and SPGVL as the sponsor to the Trust within the meaning of the SEBI InvIT Regulations.

We have relied on explanations and information provided by the Investment Manager. Although we have reviewed such data for consistency, we have not independently investigated or otherwise verified the data provided. We have no present or planned future interest in the Trust, the SPV or the Investment Manager except to the extent of our appointment as an independent valuer and the fee for our Valuation Report ("Report") which is not contingent upon the values reported herein. Our valuation analysis should not be construed as investment advice specifically, we do not express any opinion on the suitability or otherwise of entering into any financial or other transaction with the Trust.

We enclose our Report providing our opinion on the fair operating enterprise value of the SPV on a going concern basis as at 31st March 2019 ("Valuation Date"). Enterprise Value ("EV") is described as the total value of the equity in a business plus the value of its debt and debt related liabilities, minus any cash or cash equivalents to meet those liabilities. The attached Report details the valuation methodologies used, calculations performed and the conclusion reached with respect to this valuation.



We believe that our analysis must be considered as a whole. Selecting portions of our analysis or the factors we considered, without considering all factors and analysis together could create a misleading view of the process underlying the valuation conclusions. Valuation exercise is a complex process and is not necessarily susceptible to partial analysis or summary description. Any attempt to do so could lead to undue emphasis on any particular factor or analysis.

Our valuation and our valuation conclusion are included herein and our Report complies with the SEBI InvIT Regulations and guidelines, circular or notification issued by Securities and Exchange Board of India ("SEBI") there under.

Please note that all comments in our Report must be read in conjunction with the caveats to the Report, which are contained in Section 2 of this Report. This letter, the Report and the summary of valuation included herein can be provided to Trust's advisors and may be made available for the inspection to the public as a material document and with the SEBI, the stock exchanges and any other regulatory and supervisory authority, as may be required.

We draw your attention to the limitation of liability clauses in Section 2 of the Report.

This letter should be read in conjunction with the attached Report.

Yours faithfully,

For **Haribhakti & Co. LLP,**

Chartered Accountants

Firm Registration Number: 103523W



S. Sundararaman

Partner

Membership No. 028423

Place: Chennai

Encl: As above

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Definition, abbreviation & glossary of terms

Abbreviations	Meaning
BDTCL	Bhopal Dhule Transmission Company Limited
BOOM	Build-Own-Operate-Maintain
Capex	Capital Expenditure
CCIL	Clearing Corporation of India Limited
CERC	Central Electricity Regulatory Commission
Ckms	Circuit Kilometres
COD	Commercial Operation Date
DCF	Discounted Cash Flow
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortisation
EV	Enterprise Value
FCFF	Free Cash Flow to the Firm
FY	Financial Year Ended 31 st March
FYP	Five year Plan
H&Co. or We	Haribhakti & Co. LLP, Chartered Accountants
INR	Indian Rupees
ISTS	Inter State Transmission System
IVS	Indian Valuation Standards, 2018
JTCL	Jabalpur Transmission Company Limited
kV	Kilo Volts
LTTCs	Long Term Transmission Customers
Mn	Million
NAV	Net Asset Value Method
NCA	Net Current Assets Excluding Cash and Bank Balances
O&M	Operation & Maintenance
OGPTL or the SPV	Odisha Generation Phase – II Transmission Limited
PGCIL	Power Grid Corporation of India Limited
PKTCL	Purulia & Kharagpur Transmission Company Limited
PTCL	Patran Transmission Company Limited
RTCL	RAPP Transmission Company Limited
SEBI	Securities and Exchange Board of India
SEBI InvIT Regulations	SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended
SGL 3	Sterlite Grid 3 Limited
SIML or Investment Manager	Sterlite Investment Managers Limited
SPGVL or the Sponsor	Sterlite Power Grid Ventures Limited
SPV	Special Purpose Vehicle
T&D	Transmission & Distribution
the Trust or InvIT	India Grid Trust
the Trustee	Axis Trustee Services Limited
TSA	Transmission Service Agreement
WACC	Weighted Average Cost of Capital



1. Background

The Sponsor

- 1.1. Sterlite Power Grid Ventures Limited ("SPGVL" or "the Sponsor") is engaged into installation and operation of electricity transmission projects.

The Infrastructure Investment Trust

- 1.2. SPGVL is the sponsor for the India Grid Trust ("the Trust"). The Trust was established on 21st October 2016 by SPGVL and is registered with Securities and Exchange Board of India ("SEBI") pursuant to the SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended ("the SEBI InvIT Regulations"). It is established to own inter-state power transmission assets in India. The units of the Trust are listed on the National Stock Exchange of India Limited and BSE Limited since 6th June 2017.

Investment Manager

- 1.3. Sterlite Investment Managers Limited ("the Investment Manager" or "SIML") has been appointed as the investment manager to the Trust by Axis Trustee Services Limited ("the Trustee") and will be responsible to carry out the duties of such a person as mentioned under SEBI InvIT Regulations.

Target Financial Asset to be Valued

- 1.4. Odisha Generation Phase – II Transmission Limited ("OGPTL" or "the SPV") is engaged in the business of installation and operation of transmission lines on a Build-Own-Operate and Maintain ("BOOM") basis. The asset is owned 100% by SGL 3, the wholly owned subsidiary of the Sponsor.
- 1.5. OGPTL is incorporated for providing grid connectivity for Common Transmission System for Phase – II Generation projects in Odisha and Immediate Evacuation System for Odisha Power Generation Corporation (OPGC). The 400 kV D/C transmission line of approximately 51 kms from OPGC to Jharsuguda was commissioned in August 2017 and 765 kV D/C transmission line of approximately 304 kms from Jharsuguda to Raipur by April 2019. The SPV would operate and maintain these for a minimum tenure of 35 years.

Proposed Transaction

- 1.6. We understand that the Trust is proposing to acquire Odisha Generation Phase – II Transmission Limited from the Sponsor.

Purpose of Valuation

- 1.7. As per regulation 21(B)(a) of the SEBI InvIT Regulations, for any transaction of purchase or sale of infrastructure projects whether directly or through SPVs, for publicly offered InvITs, a full valuation of the specific project shall be undertaken.
- 1.8. In terms of Regulation 2(1)(zv) of the SEBI InvIT Regulations, Related Party shall be as defined as under the Companies Act, 2013 or under the applicable accounting standards and shall also include: (I) Parties to InvIT; and (II) Promoters, directors, and partners of the Parties to InvIT. Further, related parties also include such persons and entities as defined in terms of the applicable accounting standards, being Indian Accounting Standard ("Ind AS") 24 on "Related Party Disclosures". As per Regulation 2(1)(zk), "Parties to the InvIT" shall include the sponsor(s), investment manager, project manager(s) and the trustee. Accordingly, the Proposed Transaction between the Trust and the Sponsor is a related party transaction.
- 1.9. In this regard, the Investment Manager has appointed us, H&Co. to undertake the fair operating enterprise valuation of OGPTL as per the SEBI InvIT Regulations as at 31st March 2019.

- 1.10. H&Co. declares that:
- 1.10.1. It is competent to undertake the financial valuation in terms of the SEBI InvIT Regulations;
- 1.10.2. It is independent and has prepared the Report on a fair and unbiased basis;
- 1.10.3. It has valued the SPV based on the valuation standards as specified under sub-regulation 10 of regulation 21 of SEBI InvIT Regulations.
- 1.11. This Report covers all the disclosures required as per the SEBI InvIT Regulations and the valuation of the SPV is impartial, true and fair and in compliance with the SEBI InvIT Regulations.

Scope of Valuation

1.12. **Nature of the Asset to be Valued**

We have been mandated by the Investment Manager to arrive only at the operating EV of the SPV. Enterprise Value ("EV") is described as the total value of the equity in a business plus the value of its debt and debt related liabilities, minus any cash or cash equivalents to meet those liabilities.

1.13. **Valuation Base**

Valuation Base means the indication of the type of value being used in an engagement. In the present case, we have determined the fair value of the SPV at the operating enterprise level. Fair Value Bases defined as under:

Fair Value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the valuation date.

1.14. **Valuation Date**

Valuation Date is the specific date at which the value of the assets to be valued gets estimated or measured. Valuation is time specific and can change with the passage of time due to changes in the condition of the asset to be valued. Accordingly, valuation of an asset as at a particular date can be different from other date(s).

The Valuation Date considered for the fair operating enterprise valuation of the SPV is 31st March 2019 ("Valuation Date"). The attached Report is drawn up by reference to accounting and financial information as on 31st March 2019. We are not aware of any other events having occurred since 31st March 2019 till date of this Report which we deem to be significant for our valuation analysis.

1.15. **Premise of Value**

Premise of Value refers to the conditions and circumstances how an asset is deployed. In the present case, we have determined the fair operating enterprise value of the SPV on a Going Concern Value defined as under:

Going Concern Value

Going concern value is the value of a business enterprise that is expected to continue to operate in the future. The intangible elements of going concern value result from factors such as having a trained work force, an operational plant, the necessary licenses, systems, and procedures in place etc.



2. Exclusions and Limitations

- 2.1. Our Report is subject to the limitations detailed hereinafter. This Report is to be read in totality, and not in parts, in conjunction with the relevant documents referred to therein.
- 2.2. Valuation analysis and results are specific to the purpose of valuation and is not intended to represent value at any time other than valuation date of 31st March 2019 ("Valuation Date") mentioned in the Report and as per agreed terms of our engagement. It may not be valid for any other purpose or as at any other date. Also, it may not be valid if done on behalf of any other entity.
- 2.3. This Report, its contents and the results are specific to (i) the purpose of valuation agreed as per the terms of our engagements; (ii) the Valuation Date and (iii) are based on the financial information of OGPTL till 31st March 2019. The Investment Manager has represented that the business activities of OGPTL have been carried out in normal and ordinary course between 31st March 2019 and the Report Date and that no material changes have occurred in the operations and financial position between 31st March 2019 and the Report date.
- 2.4. The scope of our assignment did not involve us performing audit tests for the purpose of expressing an opinion on the fairness or accuracy of any financial or analytical information that was provided and used by us during the course of our work. The assignment did not involve us to conduct the financial or technical feasibility study. We have not done any independent technical valuation or appraisal or due diligence of the assets or liabilities of the SPV or any of other entity mentioned in this Report and have considered them at the value as disclosed by the SPV in their regulatory filings or in submissions, oral or written, made to us.
- 2.5. In addition, we do not take any responsibility for any changes in the information used by us to arrive at our conclusion as set out herein which may occur subsequent to the date of our Report or by virtue of fact that the details provided to us are incorrect or inaccurate.
- 2.6. We have assumed and relied upon the truth, accuracy and completeness of the information, data and financial terms provided to us or used by us; we have assumed that the same are not misleading and do not assume or accept any liability or responsibility for any independent verification of such information or any independent technical valuation or appraisal of any of the assets, operations or liabilities of SPV or any other entity mentioned in the Report. Nothing has come to our knowledge to indicate that the material provided to us was misstated or incorrect or would not afford reasonable grounds upon which to base our Report.
- 2.7. This Report is intended for the sole use in connection with the purpose as set out above. It can however be relied upon and disclosed in connection with any statutory and regulatory filing in connection with the provision of SEBI InvIT Regulations. However, we will not accept any responsibility to any other party to whom this Report may be shown or who may acquire a copy of the Report, without our written consent.
- 2.8. It is clarified that this Report is not a fairness opinion under any of the stock exchange/ listing regulations. In case of any third party having access to this Report, please note this Report is not a substitute for the third party's own due diligence/ appraisal/ enquiries/ independent advice that the third party should undertake for his purpose.
- 2.9. Further, this Report is necessarily based on financial, economic, monetary, market and other conditions as in effect on, and the information made available to us or used by us up to, the date hereof. Subsequent developments in the aforementioned conditions may affect this Report and the assumptions made in preparing this Report and we shall not be obliged to update, revise or reaffirm this Report if information provided to us changes.



- 2.10. This Report is based on the information received from the sources mentioned in para 3 and discussions with the Investment Manager. We have assumed that no information has been withheld that could have influenced the purpose of our report.
- 2.11. Valuation is not a precise science and the conclusions arrived at in many cases may be subjective and dependent on the exercise of individual judgment. There is, therefore, no indisputable single value. We have arrived at an indicative operating EV based on our analysis. While we have provided an assessment of the value based on an analysis of information available to us and within the scope of our engagement, others may place a different value on this business.
- 2.12. Any discrepancies in any table / annexure between the total and the sums of the amounts listed are due to rounding-off.
- 2.13. Valuation is based on estimates of future financial performance or opinions, which represent reasonable expectations at a particular point of time, but such information, estimates or opinions are not offered as predictions or as assurances that a particular level of income or profit will be achieved, a particular event will occur or that a particular price will be offered or accepted. Actual results achieved during the period covered by the prospective financial analysis will vary from these estimates and the variations may be material.
- 2.14. We do not carry out any validation procedures or due diligence with respect to the information provided/extracted or carry out any verification of the assets or comment on the achievability and reasonableness of the assumptions underlying the financial forecasts, save for satisfying ourselves to the extent possible that they are consistent with other information provided to us in the course of this engagement.
- 2.15. Our conclusion assumes that the assets and liabilities of the SPV, reflected in their respective latest balance sheets remain intact as of the Report date.
- 2.16. Whilst all reasonable care has been taken to ensure that the factual statements in the Report are accurate, neither ourselves, nor any of our partners, directors, officers or employees shall in any way be liable or responsible either directly or indirectly for the contents stated herein. Accordingly, we make no representation or warranty, express or implied, in respect of the completeness, authenticity or accuracy of such factual statements. We expressly disclaim any and all liabilities, which may arise based upon the information used in this Report. We are not liable to any third party in relation to the issue of this Report.
- 2.17. The scope of our work has been limited both in terms of the areas of the business and operations which we have reviewed and the extent to which we have reviewed them. There may be matters, other than those noted in this Report, which might be relevant in the context of the transaction and which a wider scope might uncover.
- 2.18. For the present valuation exercise, we have also relied on information available in public domain; however the accuracy and timelines of the same has not been independently verified by us.
- 2.19. In the particular circumstances of this case, our liability (in contract or under statute or otherwise) for any economic loss or damage arising out of or in connection with this engagement, however the loss or damage caused, shall be limited to the amount of fees actually received by us from the Investment Manager, as laid out in the engagement letter, for such valuation work.
- 2.20. In rendering this Report, we have not provided any legal, regulatory, tax, accounting or actuarial advice and accordingly we do not assume any responsibility or liability in respect thereof.
- 2.21. This Report does not address the relative merits of investing in InvIT as compared with any other alternative business transaction, or other alternatives, or whether or not such alternatives could be achieved or are available.



- 2.22. We are not advisors with respect to legal tax and regulatory matters for the proposed transaction. No investigation of the SPV's claim to title of assets has been made for the purpose of this Report and the SPV's claim to such rights have been assumed to be valid. No consideration has been given to liens or encumbrances against the assets, beyond the loans disclosed in the accounts. Therefore, no responsibility is assumed for matters of a legal nature.
- 2.23. We have no present or planned future interest in the Trustee, Investment Manager or the SPV and the fee for this Report is not contingent upon the values reported herein. Our valuation analysis should not be construed as investment advice; specifically, we do not express any opinion on the suitability or otherwise of entering into any financial or other transaction with the Investment Manager or the SPV.
- 2.24. We have submitted the draft valuation report to the Investment Manager for confirmation of accuracy of factual data used in our analysis and to prevent any error or inaccuracy in the final valuation report.

2.25. Limitation of Liabilities

- 2.25.1. It is agreed that, having regard to the H&Co.'s interest in limiting the personal liability and exposure to litigation of its personnel, the Sponsor, the Investment Manager and the Trust will not bring any claim in respect of any damage against any of the H&Co.'s personnel personally.
- 2.25.2. In no circumstances H&Co. shall be responsible for any consequential, special, direct, indirect, punitive or incidental loss, damages or expenses (including loss of profits, data, business, opportunity cost, goodwill or indemnification) in connection with the performance of the services whether such damages are based on breach of contract, tort, strict liability, breach of warranty, negligence, or otherwise) even if the Investment Manager had contemplated and communicated to H&Co. the likelihood of such damages. Any decision to act upon the deliverables is to be made by the Investment Manager and no communication by H&Co. should be treated as an invitation or inducement to engage the Investment Manager to act upon the deliverable.
- 2.25.3. It is clarified that the SIML and Trustee will be solely responsible for any delays, additional costs, or other liabilities caused by or associated with any deficiencies in their responsibilities, misrepresentations, incorrect and incomplete information including information provided to determine the assumptions.
- 2.25.4. H&Co. will not be liable if any loss arises due to the provision of false, misleading or incomplete information or documentation by SIML or the Trustee.

3. Sources of Information

For the purpose of undertaking this valuation exercise, we have relied on the following sources of information provided by the Investment Manager:

- 3.1. Audited financial statements of OGPTL for the Financial Year ("FY") ended 31st March 2018 and 31st March 2017;
- 3.2. Provisional Profit & Loss Account and Balance Sheet for the Financial Year ended 31st March 2019.
- 3.3. Projected Profit & Loss Account and Working Capital requirements of OGPTL from 1st April 2019 to 5th April 2054.
- 3.4. Details of brought forward losses (as per Income Tax Act, 1961) as at 31st March 2019;



- 3.5. Details of Written Down Value (as per Income Tax Act, 1961) of assets as at 31st March 2019;
- 3.6. Details of projected Repairs and Capital Expenditure ("Capex") as represented by the Investment Manager.
- 3.7. As on 31st March 2019, SPGVL holds 100% equity stake in OGPTL through Sterlite Grid Limited 3 ("SGL3"). As represented to us by the Investment Manager, there are no changes in the shareholding pattern from 31st March 2019 to the date of issuance of this Report.
- 3.8. Transmission Service Agreement ("TSA") of OGPTL dated 20th November 2015 with Long Term Transmission Customers ("LTTCS") and Tariff adoption order dated 31st May 2016 issued by Central Electricity Regulatory Commission, New Delhi ("CERC").
- 3.9. Physical inspection of the SPV was conducted on 28th December 2018.
- 3.10. Draft Technical Due Diligence Report specific to OGPTL, have been noted by us. We have relied only upon the technical life of transmission lines of OGPTL and historical operational availability of assets set forth in the technical report.
- 3.11. Management Representation Letter by Investment Manager dated 26th April 2019.

4. Procedures adopted for current valuation exercise

- 4.1. We have performed the valuation analysis, to the extent applicable, in accordance with Indian Valuation Standards, 2018 ("IVS") issued by the Institute of Chartered Accountants of India read with sub-regulation 10 of regulation 21 of SEBI InvIT Regulations.
- 4.2. In connection with this analysis, we have adopted the following procedures to carry out the valuation analysis:
- 4.2.1. Requested and received financial and qualitative information relating to the SPV;
- 4.2.2. Obtained and analyzed data available in public domain, as considered relevant by us;
- 4.2.3. Discussions with the Investment Manager on:
- Understanding of the businesses of the SPV – business and fundamental factors that affect its earning-generating capacity including strengths, weaknesses, opportunities and threats analysis and historical and expected financial performance;
- 4.2.4. Undertook industry analysis:
- Research publicly available market data including economic factors and industry trends that may impact the valuation
- 4.2.5. Analysis of other publicly available information
- 4.2.6. Selection of valuation approach and valuation methodology/(ies), in accordance with IVS, as considered appropriate and relevant by us.
- 4.2.7. Determination of fair operating EV of the SPV.

5. Overview of the InvIT and the SPV

The Trust

- 5.1. The Trust is registered with the SEBI pursuant to the SEBI InvIT Regulations. The Trust was established on 21st October 2016 by SPGVL/ the Sponsor to own inter-state power transmission



assets in India. The units of the trust are listed on the National Stock Exchange of India Limited and BSE Limited since 6th June 2017.

- 5.2. The Trust had acquired two revenue generating projects, Bhopal Dhule Transmission Company Limited ("BDTCL") and Jabalpur Transmission Company Limited ("JTCL") from its Sponsor on 30th May 2017. On 15th February 2018, the Trust acquired three additional revenue generating projects from its Sponsor, namely, Maheshwaram Transmission Limited ("MTL"), Purulia Kharagpur Transmission Company Limited ("PKTCL") and RAPP Transmission Limited ("RTCL"). Further, the Trust had signed definitive agreements on 19th February 2018 to acquire Patran Transmission Company Limited ("PTCL") from Techno Electric & Engineering Company Limited.
- 5.3. The Trust, pursuant to the 'Right of First Offer' deed has a 'right of first offer' to acquire eight projects of the Sponsor out of the same three are acquired and five can still be acquired pursuant to 'Right of First Offer'.

Asset Name	Enterprise Value (INR Mn)						Acquisition Value
	30-Sep-18	31-Mar-18	30-Sep-17	31-Mar-17	31-Mar-16	31-Mar-15	
BDTCL	19,694	20,319	21,431	21,541	21,812	20,113	37,020*
JTCL	14,937	15,431	15,988	16,125	19,407**	14,295	
MTL	5,423	5,564	5,218	NA			4,697
RTCL	4,084	4,054	3,935	NA			3,542
PKTCL	6,481	6,618	6,512	NA			5,861
PTCL	2,401	NA					2,320

*Consolidated Purchase Price paid by the Trust for the acquisition at the time of Initial Public Offer

**For JTCL, the Investment Manager had previously projected the incremental revenue to be at 40% of the non escalable revenue charges during the valuation exercise of 31st March 2018, however the same was subsequently reduced to 9.8903% of non escalable charges during the valuation exercise of 31st March 2017 as per the CERC order dated 8th May 2017.

OGPTL or the SPV

- 5.4. Summary of details are as follows:

Parameters	Details
Project Cost	INR 12,200 Mn
Total Length	710 ckms/355 kms
TSA Agreement	20 th November 2015
Scheduled COD as per TSA	08 th August 2019
Project COD as represented by Management	
Line I - Jharsuguda to Raipur	6 th April 2019
Line II - OPGC to Raipur	30 th August 2017
Expiry Date	35 years from Project COD
Line I - Jharsuguda to Raipur	5 th April 2054
Line II - OPGC to Raipur	29 th August 2052
Shareholding as on 31 st March 2019	100% by SPGVL through SGL3

Source: Investment Manager

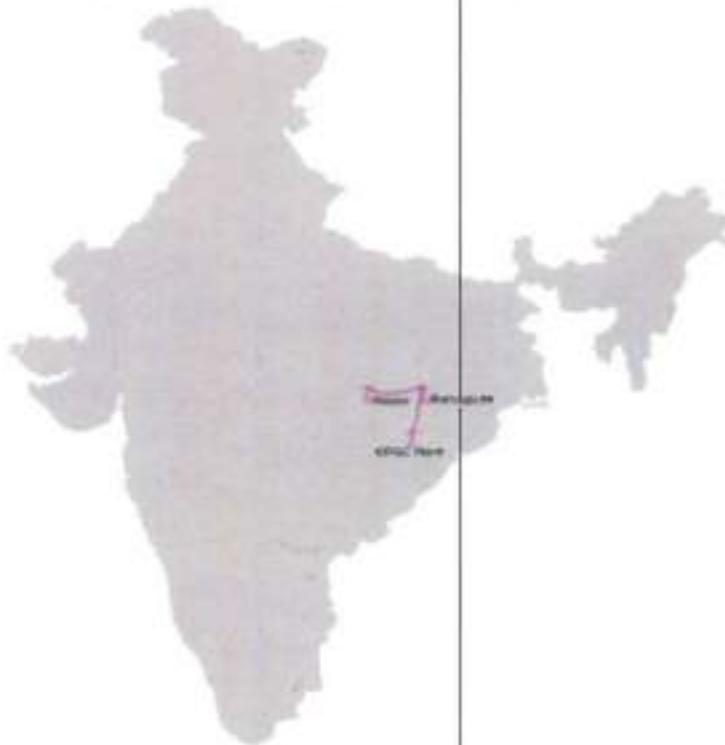


- 5.5. The OGPTL project was awarded to SGL 3 by the Ministry of Power on 19th January 2011 for a 35 years period from the scheduled commercial operation date on a BOOM basis.
- 5.6. The OGPTL project is a part of Common Transmission System for Phase – II Generation Projects and Immediate Evacuation System for OPGC Projects in Odisha. The transmission lines will be part of the interstate transmission network providing additional evacuation up to 5,000 MW of electricity from Odisha-based plants that are seeking better access to power-consuming centers. The OPGC – Jharsuguda 400 kV D/C transmission line was commissioned in August 2017 and Jharsuguda – Raipur 765 kV D/C transmission line in April 2019. The SPV would operate and maintain these for a minimum tenure of 35 years.
- 5.7. The project consists of the following transmission lines and line bays and is being implemented on contract basis:

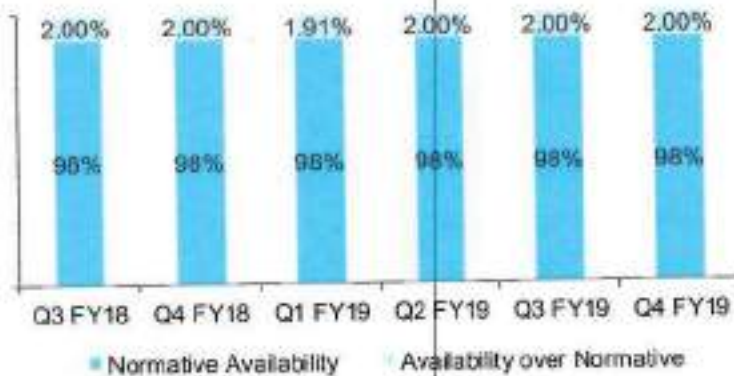
Transmission Line / Sub-Station	Location	Route Length (kms)	Specifications	Commission Date	Contribution to Total Tariff
Jharsuguda - Raipur	Odisha	304	765 kV D/C	8 th April 2019	94%
OPGC – Jharsuguda	Odisha	51	400 kV D/C	30 th August 2017	6%

Source: Investment Manager

- 5.8. Following is the map showing area covered by the SPV (not drawn to scale).



5.9. **Operating Efficiency history of the SPV:**



Source: Investment Manager.

5.10. **Pictures of the SPV:**



6. **Overview of the Industry**

6.1. **Introduction:**

- 6.1.1. India is the third largest producer and third largest consumer of electricity in the world, with the installed power capacity reaching 356.1 GW as of March 2019. The country also has the fifth largest installed capacity in the world.
- 6.1.2. Per capita electricity consumption in the country grew at a CAGR of 4.96 per cent during FY11-FY18, reaching 1,149 KWh in FY18.



6.2. Demand and Supply

- 6.2.1. Demand: India continues to be a power deficient country even after an increasing trend in demand in the past. It is expected that energy requirement will continue to grow at healthy CAGR of 7.5% to 8% over FY 17 to FY 21. The primary growth drivers for rapid expansion in India's energy demand include investments in industrial and infrastructure development, rising per capita energy consumption levels etc.
- 6.2.2. Supply: India has seen a robust growth in the installed power generation capacity in the past four years. The installed power generation capacity has grown at a CAGR of ~9.08% from ~243 GW in FY 14 to ~347.22 GW as of December 2018 (Source: IBEF).

India's economic outlook

- 6.2.3. According to World Bank, India has retained its position as the fastest-growing economy in the world in 2015, after overtaking China in the previous year. Based on its estimates, India will continue to occupy the top slot among major economies with a growth rate of 7.7% to 7.8% until 2019. India's growth rate is significantly higher than the world average of around 4% and is also higher than other developing economies, such as China, Brazil, Indonesia and sub-Saharan African nations.
- 6.2.4. Power is one of the key sectors attracting FDI inflows into India.
- 6.2.5. From April 2000 to June 2018, India recorded FDI of US\$ 6.8 billion in non-conventional energy sector. New and renewable energy sector witnessed maximum power generation capacity addition, since 2000.
- 6.2.6. Cumulative FDI inflows into the sector from April 2000–December 2018 were US\$ 14.22 billion.
- 6.2.7. The ongoing liberalization of India's FDI regime has also led to a surge in investments, especially after the launch of the 'Make in India' campaign in October 2014. The FDI inflow has doubled to \$ 44.8 billion in fiscal 2018 from \$ 22 billion in around 2014. Reduced macroeconomic vulnerability, coupled with improved government spending in infrastructure sectors, has enhanced India's Global Competitive Index (GCI) ranking to 58 in 2017-18 from 71 in 2014-15.

6.3. Power transmission network in India

- 6.3.1. The transmission segment plays a key role in transmitting power continuously from the generation plants to various distribution entities. Transmission and sub-transmission systems supply power to the distribution system, which, in turn, supplies power to end consumers. In India, the Transmission and Distribution ("T&D") system is a three-tier structure comprising distribution networks, state grids and regional grids.
- 6.3.2. The distribution networks and state grids are primarily owned and operated by the respective State Transmission utilities or state governments (through state electricity departments). Most inter-state and inter-regional transmission links are owned and operated by Power Grid Corporation of India Limited ("PGCIL"), which facilitates the transfer of power from a surplus region to the ones with deficit.
- 6.3.3. The government's focus on providing electricity to rural areas has led to the T&D system being extended to remote villages. The total length of transmission lines in the country has grown at a slow rate of 6% CAGR during FY 11 and FY 17. The total transmission network has increased from 4,07,569 Ckms in FY 11 to around 6,04,193 Ckms in FY 18.



- 6.3.4. As on January 2019 approx, 7.2% of total transmission network is owned by private players which show cases the need of more private sector participation in this space. India has been underinvested as far as transmission is concerned, however, recently government has been encouraging investments in transmission with approximately projects worth INR 30,000 crores being awarded in last 2 years.
- 6.3.5. PGCIL has spent around INR 0.9 trillion over 2013-16.
- 6.3.6. Of the total capacity-addition projects in transmission during the 12th FYP, about 42% can be attributed to the state sector. The share of private sector in transmission line and substation additions since the beginning of 12th FYP is 14% and 7%, respectively, as the majority of high-capacity, long-distance transmission projects were executed by PGCIL and state transmission utilities during this period.
- 6.3.7. In order to strengthen the power system and ensure free flow of power, significant investments would be required in the T&D segment. Moreover, commissioning of additional generation capacity, rising penetration of renewable energy, regional demand-supply mismatches, upgradation of existing lines, rising cross border power trading would necessitate huge investments in transmission sector in India.
- 6.3.8. Thus, going forward, the share of power sector investments are expected to veer towards the T&D segment. Moreover, strong government focus on the T&D segment will also support investments. CRISIL Research expects the transmission segment share in total power sector investments to rise sharply to 33% over 2017-21 from only 20% over 2012-16. Thus, we expect transmission segments investments to increase 1.5 times to INR 3.1 trillion over 2017-21 as compared to the previous 5 year period.

Source: CRISIL Opportunities in Power Transmission in India – March 2019 and IBEF report on Power sector in India- January 2019 and Central Electricity Authority Data as mentioned in PGCIL and Adani Transmission Limited Annual Report 2017-18.

7. Valuation Approach

- 7.1. The present valuation exercise is being undertaken in order to derive the operating EV of the SPV.
- 7.2. The valuation exercise involves selecting a method suitable for the purpose of valuation, by exercise of judgment by the valuers, based on the facts and circumstances as applicable to the business of the company to be valued.
- 7.3. There are three generally accepted approaches to valuation:
- "Cost" approach
 - "Market" approach
 - "Income" approach

7.4. Cost Approach

The cost approach values the underlying assets of the business to determine the business value. This valuation method carries more weight with respect to holding companies than operating companies. Also, asset value approaches are more relevant to the extent that a significant portion of the assets are of a nature that could be liquidated readily if so desired.



Net Asset Value ("NAV")

The NAV Method under Cost Approach considers the assets and liabilities, including intangible assets and contingent liabilities. The Net Assets, after reducing the dues to the preference shareholders, if any, represent the value of a company.

The NAV Method is appropriate in a case where the main strength of the business is its asset backing rather than its capacity or potential to earn profits. This valuation approach is also used in case where the firm is to be liquidated i.e. it does not meet the "going concern" criteria.

As an indicator of the total value of the entity, the net asset value method has the disadvantage of only considering the status of the business at one point in time.

Additionally, net asset value does not properly take into account the earning capacity of the business or any intangible assets that have no historical cost. In many respects, NAV represents the minimum benchmark value of an operating business.

7.5. Market Approach

Under the Market approach, the valuation is based on the market value of the company in case of listed companies and comparable companies trading or transaction multiples for unlisted companies. The Market approach generally reflects the investors' perception about the true worth of the company.

Comparable Companies Multiples ("CCM") Method

The value is determined on the basis of multiples derived from valuations of comparable companies, as manifest in the stock market valuations of listed companies. This valuation is based on the principle that market valuations, taking place between informed buyers and informed sellers, incorporate all factors relevant to valuation. Relevant multiples need to be chosen carefully and adjusted for differences between the circumstances.

Comparable Transactions Multiples ("CTM") Method

Under the CTM Method, the value is determined on the basis of multiples derived from valuations of similar transactions in the industry. Relevant multiples need to be chosen carefully and adjusted for differences between the circumstances. Few of such multiples are EV / Earnings before Interest, Taxes, Depreciation & Amortization ("EBITDA") multiple and EV / Revenue multiple.

Market Price Method

Under this method, the market price of an equity share of the company as quoted on a recognized stock exchange is normally considered as the fair value of the equity shares of that company where such quotations are arising from the shares being regularly and freely traded. The market value generally reflects the investors' perception about the true worth of the company.

7.6. Income Approach

The income approach is widely used for valuation under "Going Concern" basis. It focuses on the income generated by the company in the past as well as its future earning capability. The Discounted Cash Flow Method under the income approach seeks to arrive at a valuation based on the strength of future cash flows.



Discounted Cash Flow ("DCF") Method

Under DCF Method value of a company can be assessed using the Free Cash Flow to Firm Method ("FCFF") or Free Cash Flow to Equity Method ("FCFE"). Under the DCF method, the business is valued by discounting its free cash flows for the explicit forecast period and the perpetuity value thereafter. The free cash flows represent the cash available for distribution to both, the owners and creditors of the business. The free cash flows in the explicit period and those in perpetuity are discounted by the Weighted Average Cost of Capital ("WACC"). The WACC, based on an optimal vis-à-vis actual capital structure, is an appropriate rate of discount to calculate the present value of the future cash flows as it considers equity-debt risk by incorporating debt-equity ratio of the firm.

The perpetuity (terminal) value is calculated based on the business' potential for further growth beyond the explicit forecast period. The "constant growth model" is applied, which implies an expected constant level of growth for perpetuity in the cash flows over the last year of the forecast period.

The discounting factor (rate of discounting the future cash flows) reflects not only the time value of money, but also the risk associated with the business' future operations. The Business/EV (aggregate of the present value of explicit period and terminal period cash flows) so derived, is further reduced by the value of debt, if any, (net of cash and cash equivalents) to arrive at value to the owners of the business.

7.7. Conclusion on Valuation Approach

It is pertinent to note that the valuation of any company or its assets is inherently imprecise and is subject to certain uncertainties and contingencies, all of which are difficult to predict and are beyond our control. In performing our analysis, we made numerous assumptions with respect to industry performance and general business and economic conditions, many of which are beyond the control of the SPV. In addition, this valuation will fluctuate with changes in prevailing market conditions, and prospects, financial and otherwise, of the SPV, and other factors which generally influence the valuation of companies and their assets.

Accordingly, we have summarized the application of valuation method for the current valuation exercise as under:

Cost Approach

The existing book value of operating EV of the SPV comprising of its Net fixed assets, Capital work in progress and operating working capital (Trade receivable and Trade payable) is INR 12,189 Mn as at 31st March 2019.

In the present case, since the SPV has entered into TSA, the revenue of SPV is pre-determined for the life of the project. In such scenario, the true worth of the business is reflected in its future earning capacity rather than the cost of the project. Accordingly, since the NAV does not capture the future earning potential of the businesses, we have not considered the cost approach for the current valuation exercise.

Market Approach

The present valuation exercise is to undertake a fair operating EV of the SPV engaged in the power transmission business for a specific tenure. Further, the tariff revenue expenses are very specific to the SPV depending on the nature of their geographical location, stage of project, terms of profitability. In the absence of any exactly comparable listed companies with characteristics and



parameters similar to that of the SPV, we have not considered CCM method in the present case. In the absence of adequate details about the Comparable Transactions, we were unable to apply the CTM method. Currently, the equity shares of the SPV are not listed on any recognized stock exchange of India. Hence, we are unable to apply market price method.

Income Approach

The SPV is operating as BOOM model based project. The cash inflows of the projects are defined for 35 years under the TSA. Hence, the growth potential of the SPV and the true worth of its business would be reflected in its future earnings potential and therefore DCF Method under the income approach has been considered as an appropriate method for the present valuation exercise.

8. Valuation of the SPV

We have estimated the value of SPV using the DCF Method. While carrying out this engagement, we have relied extensively on the information made available to us by the Investment Manager. We have considered projected financial statement of the SPV as provided by the Investment Manager.

Valuation

8.1. The key assumptions of the projections provided to us by the Investment Manager are:

Key Assumption

- 8.1.1. **Transmission Revenue:** The transmission revenue of the SPV comprises of non escalable transmission revenue and escalable transmission revenue as provided in the TSA read with Tariff adoption order dated 31st May 2016.
- **Non Escalable Transmission Revenue:** The Non Escalable Transmission revenue remains fixed for the entire life of the project. We have corroborated the revenue considered in the financial projections with the respective TSA read with Tariff adoption order Dated 31st May 2016 and documents provided to us by the Investment Manager.
 - **Escalable Transmission Revenue:** Escalable Transmission revenue is the revenue component where the revenue is duly escalated based on the rationale as provided in the respective TSA read with Tariff adoption order dated 31st May 2016 and documents provided to us by the Investment Manager. The escalation is to mainly compensate for the inflation factor.
- 8.1.2. **Incentives:** As provided in the respective TSA, if the annual availability exceeds 98%, the SPV shall be entitled to an annual incentive as provided in TSA. Provided no incentives shall be payable above the availability of 99.75%. Based on the past track record of the asset and the general industry standard, the annual availability is estimated to above 98% where the SPV shall be entitled to the incentives as provided in the TSA.
- 8.1.3. **Penalty:** If the annual availability in a contract year falls below 95%, the SPV shall be liable for an annual penalty as provided in the TSA. Based on our analysis in Para 8.1.2 in the present case it is assumed that the annual availability will not fall below 95% and hence penalty is not considered in the financial projections.



- 8.1.4. **Expenses:** Expenses are estimated by the Investment Manager for the projected period based on the escalation rate as determined for the SPV. We have relied on the projections provided.
- **Operations & Maintenance ("O&M"):** O&M expenditure is estimated by the Investment Manager for the projected period based on the escalation rate as determined for the SPV. The Investment Manager has projected expenses to be incurred for the O&M of the SPV including, but not limited to, transmission line maintenance expenses, rates and taxes, legal and professional fees and other general and administration expenses. We have relied on the projections provided by Investment Manager on the operations and maintenance expenses for the projected period.
 - **Insurance Expenses:** We understand from the Investment Manager that the insurance expenses of the SPV will not escalate for the projected period. We have relied on the projections provided by the Investment Manager on the insurance expenses for the projected period.
- 8.1.5. **Depreciation:** The book depreciation has been provided by the Investment Manager. For calculating depreciation as per the Income Tax Act, 1961 for the projected period, we have considered depreciation rate as specified in the Income Tax Act, 1961 and WDV as provided by the Investment Manager.
- 8.1.6. **Capex:** As represented by the Investment Manager, the SPV is not expected to incur any Capex in the projected period.
- 8.1.7. **Tax Incentive:** The SPV is not eligible for tax holiday under section 80IA of the Income Tax Act, 1961 as represented by the Investment Manager.
- 8.1.8. **Working Capital:** The Investment Manager has envisaged the working capital requirement of the SPV for the projected period. The operating working capital assumptions for the projections as provided by the Investment Manager comprises of trade receivables and trade payables to the extent realizable as considered appropriate by the Investment Manager.

8.2. Impact of Ongoing Material Litigation on Valuation

- 8.2.1. As represented by Investment Manager, there are no ongoing material litigations that will affect the valuation exercise. In addition, we understand the litigations are likely to be an indemnified event under the definitive documentation.

8.3. Calculation of Weighted Average Cost of Capital for the SPV

8.3.1. Cost of Equity:

Cost of Equity (CoE) is a discounting factor to calculate the returns expected by the equity holders depending on the perceived level of risk associated with the business and the industry in which the business operates.

For this purpose, we have used the Capital Asset Pricing Model (CAPM), which is a commonly used model to determine the appropriate cost of equity for the SPV.

$$K(e) = R_f + (R_p \times \text{Beta}) + \text{CSRP}$$

Wherein:

K(e) = cost of equity



Rf = risk free rate

Rp = risk premium i.e. market risk premium over and above risk free rate

Beta = a measure of the sensitivity of assets to returns of the overall market

CSRPM = Company Specific Risk Premium (In general, an additional company-specific risk premium will be added to the cost of equity calculated pursuant to CAPM).

For our valuation exercise, we have arrived at adjusted cost of equity of 12.41%.

8.3.2. Risk Free Rate:

We have applied a risk free rate of return of 7.43% on the basis of the relevant zero coupon yield curve as on 29th March 2019 for government securities having a maturity period of 10 years, as quoted on the website of Clearing Corporation of India Limited ("CCIL").

8.3.3. Risk Premium:

Risk premium is a measure of premium that investors require for investing in equity markets rather than bond or debt markets. A risk premium is calculated as follows:

Risk premium = Equity market return – Risk free rate

Wherein:

Equity market return = the average historical market return is estimated at 15.00%.

Risk free rate = 7.43% as explained in para 8.3.2.

Hence, risk premium is derived as 7.57%.

8.3.4. Beta:

Beta is a measure of the sensitivity of a company's stock price to the movements of the overall market index. Normally, we would take a relevant number from a quoted stock and the market on which it trades. In the present case, we find it appropriate to consider the beta of companies in similar business/ industry to that of the SPV.

We have further unlevered that beta based on debt-equity of the respective company using the following formula:

Unlevered Beta = Levered Beta / [1 + (Debt / Equity) * (1-T)]

Further we have re-levered it based on debt-equity of the industry standard using the following formula:

Re-levered Beta = Unlevered Beta * [1 + (Debt / Equity) * (1-T)]

For our valuation exercise, re-levered beta has been estimated as 0.66.

8.3.5. Cost of Debt:

The calculation of Cost of Debt post-tax can be defined as follows:

$K(d) = K(d) \text{ pre-tax} * (1 - T)$

Wherein:

K(d) = Cost of debt

T = Tax rate as applicable

In present valuation exercise, we have considered debt:equity at 70:30 based on industry standards. We understand that OGPTL being under construction asset has outstanding Indian rupee term loan from banks & financial institutions bearing interest at the rate of 11.50% p.a. However, we understand from the Investment Manager that going forward estimated pre-tax cost of debt after refinancing is expected to be 8.92% p.a.



Accordingly, for current valuation exercise, pre tax cost of debt has been considered as 8.92% p.a.

8.3.6. Weighted Average Cost of Capital (WACC):

The discount rate, or the WACC, is the weighted average of the expected return on equity and the cost of debt. The weight of each factor is determined based on the company's optimal capital structure.

Formula for calculation of WACC:

$$WACC = [K(d) * Debt / (Debt + Equity)] + [K(e) * (1 - Debt / (Debt + Equity))]$$

8.3.7. Accordingly, as per above, we have arrived the WACC of 8.42% for OGPTL (Refer appendix I)

8.4. We understand from the representation of the Investment Manager that the SPV will generate cash flow even after the expiry of concession period of 35 years as the project is on BOOM model and the ownership will remain with the SPV even after the expiry of 35 years. Accordingly, we have considered Terminal Value after the expiry of 35 years.

8.5. Valuation of OGPTL

8.5.1. We have relied on the projected financials of OGPTL as provided by the Investment Manager for the period from 1st April 2019 to 5th April 2054.

8.5.2. WACC arrived at for the purpose of valuation is 8.42% (Refer Appendix I).

8.5.3. For the terminal period, we have considered 0% constant growth rate for FCFF.

8.5.4. As on Valuation Date, we have discounted the free cash flows of OGPTL using the WACC of 8.42% to arrive at the operating EV by aggregating the present value of cash flows for explicit period and terminal period at INR 12,840 Mn (Refer Appendix II).

9. Valuation Conclusion

9.1. The current valuation has been carried out based on the discussed valuation methodology explained herein earlier. Further, various qualitative factors, the business dynamics and growth potential of the business, having regard to information base, management perceptions, key underlying assumptions and limitations were given due consideration.

9.2. We have been represented by the Investment Manager that there is no potential devolvement on account of the contingent liability as of Valuation Date; hence no impact of contingent liability has been factored in to arrive at operating EV of the SPV.

9.3. Based on the above analysis the operating EV as on the Valuation Date of the SPV is INR 12,840 Mn (Appendix II).

9.4. The fair operating EV of the SPV is estimated using DCF method. The valuation requires Investment Manager to make certain assumptions about the model inputs including forecast cash flows, discount rate, and credit risk.

9.5. Valuation is based on estimates of future financial performance or opinions, which represent reasonable expectations at a particular point of time, but such information, estimates or opinions are not offered as predictions or as assurances that a particular level of income or profit will be achieved, a particular event will occur or that a particular price will be offered or accepted. Actual results achieved during the period covered by the prospective financial analysis will vary from these estimates and the variations may be material.



9.6. Accordingly, we have conducted sensitivity analysis on the following model inputs:

WACC	Decrease by 0.5%	Fair Value	Increase by 0.5%
Implied WACC	7.92%	8.42%	8.92%
Operating EV (INR Mn)	13,506	12,840	12,241
Total Expenses	Decrease by 20%	Fair Value	Increase by 20%
Operating EV (INR Mn)	13,035	12,840	12,632

10. Additional Procedures to be complied with in accordance with InvIT regulations

Scope of Work

10.1. The Schedule V of the SEBI InvIT Regulations prescribes the minimum set of mandatory disclosures to be made in the valuation report. In this reference, the minimum disclosures in valuation report may include following information as well, so as to provide the investors with the adequate information about the valuation and other aspects of the underlying assets of the InvIT. The additional set of disclosures, as prescribed under Schedule V of InvIT Regulations, to be made in the valuation report of OGPTL are as follows

- List of one-time sanctions/approvals which are obtained or pending;
- List of up to date/overdue periodic clearances;
- Statement of assets included;
- Estimates of already carried as well as proposed major repairs and improvements along with estimated time of completion;
- Revenue pendencies including local authority taxes associated with InvIT asset and compounding charges, if any;
- On-going and closed material litigations including tax disputes in relation to the assets, if any;
- Vulnerability to natural or induced hazards that may not have been covered in town planning/ building control.

Limitations

- 10.2. This Report is based on the information provided by the Investment Manager. The exercise has been restricted and kept limited to and based entirely on the documents, records, files, registers and information provided to us. We have not verified the information independently with any other external source.
- 10.3. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as original, and the conformity of the copies or extracts submitted to us with that of the original documents.
- 10.4. We have assumed that the documents submitted to us by the Investment Manager in connection with any particular issue are the only documents related to such issue.



10.5. We have reviewed the documents and records from the limited perspective of examining issues noted in the scope of work and we do not express any opinion as to the legal or technical implications of the same.

10.6. Analysis of Additional Set of Disclosures for OGPTL.

A. List of one-time sanctions/approvals which are obtained or pending:

As informed by the Investment Manager and information provided to us, we have verified the validity of various sanctions/ approvals obtained by OGPTL. Further, we were informed that there were no applications for which approval is pending. The list of sanctions/ approvals obtained by OGPTL as on 31st March 2019 is provided in Appendix III.

B. List of up to date/ overdue periodic clearances:

We have included the periodic clearances obtained by OGPTL in Appendix III.

C. Statement of assets included:

As at 31st March 2019, details of the asset of the SPV are as follows:

Asset Type	Gross Block	Depreciation	Net Block	INR Million	
				% of asset depreciated	
Transmission Lines	1,171.7	334.7	837.0	29%	
CWIP	11,227.5	0.0	11,227.5	0%	
TOTAL	12,399.2	334.7	12,064.5		

Source: Provisional Financials of 31st March 2019

D. Estimates of already carried as well as proposed major repairs and improvements along with estimated time of completion:

We noted in the provisional financial statements that OGPTL has incurred INR 2.38 million for the period 1st April 2018 to 31st March 2019 for the maintenance charges of Transmission Lines. Based on the confirmation provided by investment manager we expect an increase of 3.33% per annum in the cost of operating expenses to be incurred in the future period.

Investment Manager has informed us that there are no maintenance charges which has been deferred to the upcoming year as the maintenance activities are carried out regularly. We have been informed that overhaul maintenance are regularly carried out by OGPTL in order to maintain the working condition of the assets.

E. Revenue pendencies including local authority taxes associated with InvIT asset and compounding charges, if any:

Investment Manager has informed us that there are no dues including local authority taxes pending to be payable to the Government authorities with respect to InvIT assets.

F. On-going and closed material litigations including tax disputes in relation to the assets, if any:

As informed by the Investment Manager, the status of ongoing litigations is updated in Appendix IV. Investment Manager has informed us that it expects majority of the cases to be settled in favour of OGPTL and accordingly no outflow is expected against the litigations.

G. Vulnerability to natural or induced hazards that may not have been covered in town planning/ building control.

Investment Manager has confirmed to us that there are no such natural or induced hazards which have not been considered in town planning/ building control.



Appendix I – Weighted Average Cost of Capital (WACC)

Particulars	%	Remarks
Market Return	15.00%	Market Return has been considered based on the long term average returns earned by an equity investor in India.
Risk Free Rate	7.43%	Risk Free Rate has been considered based on zero coupon yield curve as at 29th March 2019 of Government Securities having maturity period of 10 years, as quoted on CCIL's website.
Market Risk Premium	7.57%	Market Premium = Market Return – Risk Free Rate
Beta (relevered)	0.66	Beta has been considered based on the beta of companies
Cost of Equity	12.41%	$K_e = R_f + \beta \times (R_m - R_f) + \text{CSRP}$
Pre-tax Cost of Debt	8.92%	As represented by the Investment Manager
Effective tax rate of SPV	24.70%	Average tax rate for the life of the project has been considered
Post-tax Cost of Debt	6.72%	Effective cost of debt. $K_d = \text{Pre tax } K_d \times (1 - \text{Effective Tax Rate})$
Debt/(Debt+Equity)	70.00%	The debt – equity ratio computed as $[D/(D+E)]$ is considered as 70% as per industry standard.
WACC	8.42%	$WACC = [K_e \times (1 - D/(D+E))] + [K_d \times (1-t) \times (D/(D+E))]$



Appendix II – Valuation of OGPTL as on 31st March 2019

WACC		8.42%								
										INR Mn
FY	Revenue	EBITDA	EBITDA Margin	Capex	Changes in NCA	Taxation	FCFF	Cash Accrual Factor	Discounting Factor	PV of Cash Flows
FY 20	1,632	1,559	95%	-	392	265	902	0.50	0.96	866
FY 21	1,652	1,576	95%	-	5	269	1,303	1.50	0.89	1,154
FY 22	1,615	1,536	95%	-	(9)	260	1,286	2.50	0.82	1,050
FY 23	1,578	1,497	95%	-	(9)	252	1,255	3.50	0.75	945
FY 24	1,543	1,459	95%	-	(9)	243	1,225	4.50	0.69	851
FY 25	1,508	1,422	94%	-	(9)	235	1,195	5.50	0.64	766
FY 26	1,474	1,385	94%	-	(9)	227	1,166	6.50	0.59	689
FY 27	1,442	1,349	94%	-	(8)	220	1,138	7.50	0.55	620
FY 28	1,410	1,314	93%	-	(8)	212	1,110	8.50	0.50	558
FY 29	1,379	1,280	93%	-	(8)	205	1,083	9.50	0.46	502
FY 30	1,349	1,247	92%	-	(8)	198	1,057	10.50	0.43	452
FY 31	1,319	1,214	92%	-	(8)	190	1,031	11.50	0.39	407
FY 32	1,291	1,182	92%	-	(7)	184	1,005	12.50	0.36	366
FY 33	1,263	1,151	91%	-	(7)	177	981	13.50	0.34	329
FY 34	1,237	1,121	91%	-	(7)	170	957	14.50	0.31	296
FY 35	1,213	1,092	90%	-	(6)	164	935	15.50	0.29	267
FY 36	1,204	1,080	90%	-	(2)	162	921	16.50	0.26	242
FY 37	1,207	1,078	89%	-	0	161	917	17.50	0.24	223
FY 38	1,209	1,077	89%	-	0	161	915	18.50	0.22	205
FY 39	1,212	1,075	89%	-	0	161	914	19.50	0.21	189
FY 40	1,214	1,073	88%	-	0	160	912	20.50	0.19	174
FY 41	1,217	1,071	88%	-	0	299	772	21.50	0.18	136
FY 42	1,220	1,069	88%	-	0	300	769	22.50	0.16	125
FY 43	1,224	1,068	87%	-	0	301	766	23.50	0.15	114
FY 44	1,227	1,066	87%	-	0	302	763	24.50	0.14	105
FY 45	1,231	1,064	86%	-	0	303	761	25.50	0.13	97
FY 46	1,235	1,062	86%	-	0	303	758	26.50	0.12	89
FY 47	1,239	1,061	86%	-	1	304	756	27.50	0.11	82
FY 48	1,243	1,059	85%	-	1	304	754	28.50	0.10	75
FY 49	1,247	1,057	85%	-	1	304	752	29.50	0.09	69
FY 50	1,252	1,056	84%	-	1	304	751	30.50	0.08	64
FY 51	1,257	1,054	84%	-	1	304	749	31.50	0.08	59
FY 52	1,263	1,053	83%	-	1	304	748	32.50	0.07	54
FY 53	1,268	1,051	83%	-	1	304	746	33.50	0.07	50
FY 54	1,274	1,050	82%	-	1	304	745	34.50	0.06	46
FY 55*	17	14	82%	-	(1)	4	11	35.01	0.06	1
TVG	1,274	1,050	82%	-	-	303	746	35.01	0.06	44
Present Value of Explicit Period Cash Flows										12,318
Present Value of Terminal Year Cash Flows										522
Operating Enterprise Value										12,840

*for the period ended 5th April 2054



Appendix III – OGPTL – Summary of Approvals & Licences (1/7)

Sr. No	Approvals	Date of Issue	Validity (in years)	Issuing Authority
1	Transmission License Transmission License	30-Jun-16	25	Central Electricity Regulatory Commission
2	Forest Clearance FRA- Jharsuguda OGPTL transmission line in Lakhanpur Tehsil and Jharsuguda tehsil FRA- Sundargarh: NOC against forest diversion proposal FRA Revised- Jharsuguda: OGPTL transmission line in Lakhanpur Tehsil and Jharsuguda tehsil OGPTL Raipur Transmission Line in Bematia OGPTL Raipur Transmission Line in Bilaspur OGPTL Raipur Transmission Line in Jantgir District OGPTL Raipur Transmission Line in Kharsia tehsil NOC against forest diversion proposal, Tangarpali NOC against forest diversion proposal, Lehpipara NOC against forest diversion proposal, Hemgir	13-Oct-16 24-Oct-16 02-May-17 20-Jan-17 04-Feb-17 10-Feb-17 27-Apr-17 * 20-Mar-17 03-Mar-17	Valid Valid Valid Valid Valid Valid Valid Valid Valid Valid Valid	District Collector, Jharsuguda (Govt. of Odisha) Ministry of Environment and Forests District Collector, Jharsuguda (Govt. of Odisha) Ministry of Environment and Forests Ministry of Environment and Forests Ministry of Environment, Forests & Climate Changes Ministry of Environment, Forests & Climate Changes Tehsildar, Tangarpali Tehsildar, Lehpipara Tehsildar, Hemgir
3	Power & Telecommunication Coordination Committee ("PTCC") Clearance Approval to the route of Power transmission line of 400 KV D/C Sundargarh - Jharsuguda (OPGC) Approval to the route of Power transmission line of 765KV D/C Raipur - Jharsuguda (For Chattisgarh Portion) Approval to the route of Power transmission line of 765KV D/C Raipur - Jharsuguda (For Odisha Portion)	16-Jun-17 18-Apr-18 05-Sep-17	Valid Valid Valid	Power Telecommunication Co-ordination Committee Power Telecommunication Co-ordination Committee Power Telecommunication Co-ordination Committee
4	Railway Crossing 400 KV Double Circuit over head transmission line of M/s OGPTL Jharsuguda crossing over the railway track in between Malidh - Kechobahal station in Chakradharpur division (Drg No. OGPTL/400/RLY/26-26-REV-01) 400 KV Electrical track crossing at KM 522/7-522/10 in between Jharsuguda & IB Railway Stations (Drg No. OGPTL/400/RLY/38-39)	10-Aug-17 22-Jun-17	Valid Valid	Senior Divisional Electrical Engineer (S.E. Railway) Senior Divisional Electrical Engineer, SEC Railway

Source: Investment manager



Appendix III – OGPTL – Summary of Approvals & Licences (27)

Sr. No	Approvals	Date of Issue	Validity (in years)	Issuing Authority
	400 KV D/C IBTPS - OPGC Jharsuguda (Sundergarh) Transmission Line - Spotting of dead end tower & railway crossing approval in line of the tower between 58/0 & 60/0	06-Dec-18	Valid	Odisha Power Generation Corporation Limited
	785 KV Cover Over head power line crossing in between Hathbandh and Bhatapara stations (Dig No. OGPTL/RLY/38-39 REV-2)	11-Dec-17	Valid	South East Central Railway
	785 KV Cover Over head power line crossing in between Nipeniya Railway and Lafarge Cement plant (DRG no- OGPTL/RLY/58-59).	11-Dec-17	Valid	South East Central Railway
	785 KV Sundergarh - Raipur D/C transmission line of OGPTL over SEC Railway line crossing in between station Kharsia and Jharidhi at AP 96-97	01-May-17	Valid	South East Central Railway
	785 KV Electrical track at AP 102 & AP103 in between Dhananjaygarh & Kharsia railway stations.	24-Mar-17	Valid	South East Central Railway
5	Road Crossing Permission of Overhead crossing over NH-49 near village Budipur Permission of Overhead crossing over NH-49 AP-99 AP-98A reg Permission of Overhead crossing over NH-200 AP-100 AP-101 reg Permission of Overhead crossing over NH-200 AP-105 AP-106 reg OGPTL Highway crossing at AP72-AP73 Power Line crossing with highway at AP80-AP81	20-Jan-17 05-Aug-16 05-Aug-16 05-Aug-16 13-Jul-16 20-Jul-16	Valid Valid Valid Valid Valid Valid	Office of Chief Engineer, National Highways Public works department Public works department Public works department Public works department Chattisgarh Road Development Authority
6	Power Line Crossing Approval for Power line Crossing of 400 KV - Jharsuguda line of OGPTL over IREUL, 400 KV line between tower Loc no:41 and 42 and between Loc no.48.5 at Sundergarh. Approval of proposal for underneath crossing of your 400 KV D/C OPGC-Sundergarh transmission line between Loc no-12/2 and 13/0 under 785KV D/C Jharsuguda(Sundergarh)-Dantipalli of PGCIL at Kenipalli village, Thasi-Tengarpalli, Dist-Sundergarh.	02-Feb-17 25-Jun-17	Valid Valid	Ind-Barath Energy (Utkal) Limited Power Grid Cooperation of India Ltd.

Source: Investment manager



Appendix III – OGPTL – Summary of Approvals & Licences (3/7)

Sr. No	Approvals	Date of Issue	Validity (in years)	Issuing Authority
	Power line crossing proposal -Over crossing by 400 KV D/C OPGC-Sundergarh TL of 400 KV D/C Rourkela-Rajgarh D/C TL -1 and 2.	20-Oct-18	Valid	Power Grid Cooperation of India Ltd.
	Approved profile and detailed survey report of power line crossing over 400 KV OPGC-Jharsuguda D/C of Odisha Generation Phase-II.	24-Oct-16	Valid	Odisha Power Transmission Corporation Ltd.
	Approval of Overhead crossing of 400 KV D/C OPGC Jharsuguda line in between loc no 6 and 7 with existing 220 KV s/c Buthpatel-Korba 3 line.	22-Nov-19	Valid	Power Grid Cooperation of India Ltd.
	EHV Power Line overhead crossing of existing (i) 400 KV DCDS Khedamara-Korba West and Khedamara-Marwa PH Circuit (ii) 220 KV DCSS Khedamara - Bemelara line of CSPTCL by under construction 765 KV D/C Sundergarh (Jharsuguda)-Raipur Transmission line of M/s Odisha Generation Phase II Transmission Ltd.	16-Dec-16	Valid	Chhattisgarh Power Transmission Company Limited
	Overhead Crossing of the following Powergrids Tr Lines: 765 KV D/C Durg-Katra 1&2 765 KV D/C Durg-Champa 1&2 400KV S/c Korba -Bhilai 1 400KV S/c Korba -Bhilai 1 400KV d/c Sipat -Raipur 3	07-Sep-16	Valid	Power Grid Cooperation of India Ltd.
	EHV Power Line overhead crossing of existing (i) 400 KV DCDS Khedamara-Korba West and Khedamara-Marwa PH Circuit (ii) 220 KV DCSS Khedamara - Bemelara line of CSPTCL by under construction 765 KV D/C Sundergarh (Jharsuguda)-Raipur Transmission line of M/s	05-Oct-16	Valid	Chhattisgarh State Power Transmission Company Limited
	EHV Power Line overhead crossing of existing (i) 400 KV Korba-Raita and Raita-Khedamara DCDS line of CSPTCL by under construction 765 KV D/C Sundergarh (Jharsuguda)-Raipur Transmission line of M/s Odisha Generation Phase II Transmission Ltd.	06-Jan-17	Valid	Chhattisgarh State Power Transmission Company Limited
	Provisional Approval of overhead crossing of 765 KV TL line of FGOL by under construction 765KV D/C Sundergarh-Raipur line of M/s OGPTL	28-Oct-16	Valid	Power Grid Cooperation of India Ltd.
	Approval of overhead crossing of existing 132 KV DCDS Simdeh-Bhilai line of CSPTCL by under construction 765KV Raipur-Sundergarh (Jharsuguda) D/C Transmission line of OGPTL	02-Aug-17	Valid	Chhattisgarh State Power Transmission Company Limited
	Approval for overhead crossing of existing 132 KV Simdeh Century Cement line of CSPTL by under construction 765 KV D/C Sundergarh - Raipur Transmission line of OGPTL.	23-Dec-15	Valid	Chhattisgarh State Power Transmission Company Limited

Source: Investment manager



Appendix III – OGPTL – Summary of Approvals & Licences (4/17)

Sr. No.	Approvals	Date of Issue	Validity (in years)	Issuing Authority
	Approval for overhead crossing of existing 132 KV DCDS Singa-Tulasi line of CSPTL by under construction 765 KV D/C Sundargarh - Raipur Transmission line of OGPTL	28-Mar-17	Valid	Chhattisgarh State Power Transmission Company Limited
	EHV Power line overhead crossing of existing 400 KV DCDS Marwa-Rafts line of CSPTCL by under construction 765 KV D/C Sundargarh - Raipur Transmission line of OGPTL	05-Jun-17	Valid	Chhattisgarh State Power Transmission Company Limited
	EHV Power Line overhead crossing of existing 220 KV DCDS Sunela-Bemetara line of CSPTCL by under construction 765 KV D/C Sundargarh(Jharsuguda) - Raipur Transmission line	13-Feb-17	Valid	Chhattisgarh State Power Transmission Company Limited
	EHV Power Line overhead crossing of existing 220 KV DCDS Sunela-Bemetara line of CSPTCL by under construction 765 KV D/C Sundargarh(Jharsuguda) - Raipur Transmission line	16-Dec-17	Valid	Chhattisgarh State Power Transmission Company Limited
	EHV Power Line overhead crossing of existing 220 KV DCDS Korba-Banan-Sumela line of CSPTCL by under construction 765 KV D/C Sundargarh(Jharsuguda) - Raipur Transmission line	28-Mar-17	Valid	Chhattisgarh State Power Transmission Company Limited
	Approval of 765KV Over Head Power line crossing at Km AC 9/10 and AG-9/11 in-between-Bhatapara-Railway-station-and-Ambuja cement plant.	13-Dec-17	Valid	South East Central Railway
	Approval of overhead crossing of existing 132 KV DCDS Bhatapara-Belodebazar line and 132 KV S/C Chitthali-Bhatapara line of CSPTCL by under construction 765 KV Raipur -Sundargarh of OGPTL	28-Mar-17	Valid	Chhattisgarh State Power Transmission Company Limited
	Construction of 765KV D/C Sundargarh-Raipur Transmission Line- Power Line of OGPTL crossing approval neg	21-Jun-16	Valid	Sal Lilagar Power Ltd.
	Approval for overhead crossing of existing 132 KV S/C Anameta-Bharatpura line of CSPTCL by under construction of 765 KVD/C Sundargarh-Raipur Transmission line of OGPTL	21-Oct-16	Valid	Chhattisgarh State Power Transmission Company Limited
	Approval for overhead crossing by 765 HV D/C Sundargarh-Raipur Transmission Line of 400 KV KSK LILD Line 1 and 2 Transmission Line.	02-Jul-16	Valid	KSK Mahanadi Power Company Ltd.
	Approval for overhead crossing of existing 132 KV DCDS Jajapur LILD line of CSPTCL by under construction 765 KV D/C Sundargarh-Raipur Transmission line	06-Oct-16	Valid	Chhattisgarh State Power Transmission Company Limited
	Conditional approval of crossing proposal for CWRTL's KV S/C Raigarh to Champa Transmission Line by OGPTL's 765 KV D/C Sundargarh to Raipur Transmission Line.	04-Nov-16	Valid	Chhattisgarh-WR Transmission Ltd
	Approval towards overhead crossing of 765 KV D/C Sundargarh - Raipur TL of M's OGPTL with 400 KV D/C Line-Champa TL	11-Jul-17	Valid	Power Grid Cooperation of India Ltd.
	Approval of overhead crossing of 765 Kv D/C Jharsuguda - Raipur Transmission Line in between loc no 141 and 42 with existing 765 Kv Korra-Champa Line	05-Jan-17	Valid	Power Grid Cooperation of India Ltd.

Source: Investment manager



Appendix III – OGPTL – Summary of Approvals & Licences (5/7)

Sr. No	Approvals	Date of issue	Validity (in years)	Issuing Authority
	Approval of overhead crossing of existing 132 KV DCDS Champse-Chapley line of CSPTL by under construction 765 KV Raipur-Sundargarh DVC Transmission line of OGPTL.	10-Jul-17	Valid	Chhattisgarh State Power Transmission Company Limited
	Approval of overhead crossing of 765 Kv DVC Jhansuguda - Raipur Transmission Line in between loc no 345 and 346 with 220 Kv Korbe-Budhipadar Line.	29-Apr-17	Valid	Power Grid Cooperation of India Ltd.
	Approval of overhead crossing of 765 Kv DVC Jhansuguda - Raipur Transmission Line in between loc no AP110 and AP111.	12-Jan-17	Valid	Power Grid Cooperation of India Ltd.
	Approval for crossing of proposed 765 KV line over 400KV DCDS Tamar-Raipur line of M/s Jindal Power Ltd. between Loc No. 63 and 64.	06-Oct-16	Valid	Jindal Power
	EHV Power Line overhead crossing of existing 132 KV S/C Genwani - Ghaighoda line of CSPTCL by under construction 765 KV DVC Sundargarh-Raipur Transmission Line.	24-Nov-16	Valid	Chhattisgarh State Power Transmission Company Limited
	Approval of overhead crossing of existing 220 KV DCDS Tamar-Raipur line of CSPTCL by under construction 765 KV Raipur-Sundargarh DVC Transmission line	24-Apr-17	Valid	Chhattisgarh State Power Transmission Company Limited
	Approval for crossing of proposed 765KV line over 220 KV U/C line of M/S JSPL DCP to Purjipatra line Loc-AP-55 and 55/1 village Park-phani, Tamar.	19-Jan-17	Valid	Jindal Power
	Approval of Overhead Line Crossing of JSPL 220 kv/d/c DCP to Purjipatra JSPL Transmission bu OGPTL 765 KV DVC U/C Transmission Line Sundargarh.	12-Jan-17	Valid	Jindal Power
	Provisional Approval of 765 KV Sundargarh - Raipur DVC Transmission Line of OGPTL OVER s.e.c Railway line crossing at chainage 24/200 and 24/250 and in between Lara and Talsipalli coal mine & AP 118-AP 119 of OGPTL.	24-Mar-17	Valid	S.E.C. Railway
	Proposal for Power Line under crossing of 765 KV DVC Jhansuguda-Dhamarygarh Transmission line of POWERGRID BY 765 KV DVC Raipur-Jhansuguda Transmission line of M/s OGPTL.	04-Oct-17	Valid	Power Grid Cooperation of India Ltd.
	Approval for the proposal for crossing of 765KV DVC Sundargarh-Raipur Transmission line of OGPTL over the 400KV DVC Sundargarh-Ind-Barath.Sahajpal TP-S Tr.lines between Loc 3 and Loc 4 at Mahupali Village, Tahasil-Tangarpali in Dist-Sundargarh at AP-141 and 142 of OGPTL.	25-Aug-16	Valid	Ind-Barath Energy (Utkal)Limited
	Approval for power line crossing of 765KV Sundargarh-Raipur DVC Transmission Line of Vedanta Ltd.crossing between tower no 1 and 2 in village Mahupali of Tehasil Tangarpali in District Sundargarh at AP 141 to AP 142 of OGPTL.	22-Aug-16	Valid	Vedanta

Source: Investment Manager



Appendix III – OGPTL – Summary of Approvals & Licences (6/7)

Sr. No	Approvals	Date of Issue	Validity (in years)	Issuing Authority
7	Aviation Clearance NOC for Height Clearance JHAR/EAST/121216/186256/2 NOC for Height Clearance JHAR/EAST/121216/186256/3 NOC for Height Clearance JHAR/EAST/121216/186256/5 NOC for Height Clearance JHAR/EAST/121216/186256/4 NOC for Height Clearance JHAR/EAST/121216/186256/6 NOC for Height Clearance JHAR/EAST/121216/186256/7 NOC for Height Clearance JHAR/EAST/121016/185844 NOC for Height Clearance JHAR/EAST/121016/185844/2 NOC for Height Clearance JHAR/EAST/121016/185844/3 NOC for Height Clearance JHAR/EAST/121316/186287/2 NOC for Height Clearance JHAR/EAST/121316/186287/3 NOC for Height Clearance JHAR/EAST/121316/186287/4 NOC for Height Clearance JHAR/EAST/121316/186287/5 NOC for Height Clearance JHAR/EAST/121316/186287/6 NOC for Height Clearance JHAR/EAST/121316/186287/7 NOC for Height Clearance JHAR/EAST/121016/185844/5	20-Dec-16 20-Dec-16 20-Dec-16 19-Dec-16 19-Dec-16 19-Dec-16 14-Dec-16 14-Dec-16 14-Dec-16 19-Dec-16 19-Dec-16 19-Dec-16 20-Dec-16 20-Dec-16 20-Dec-16 19-Dec-16	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India Airport Authority of India
8	Defence Clearance NOC from aviation angle for construction of Transmission line from Raipur to Sundergarh	10-Mar-17	Valid	Ministry of Defence
9	Transmission Licence order Transmission Licence order	30-Jun-16	Valid	Central Electricity Regulatory Commission
11	Approval for adoption of Tariff Approval for adoption of Tariff (Approval u/s 63 of Electricity Act, 2003)	31-May-16	Valid	Central Electricity Regulatory Commission
12	Trial Operation Approval Trial Operation Approval - 400kv OPGC - Jhansuguda Line Trial Operation Approval - 765kv Raipur - Jhansuguda Line Source: Investment manager	04-Jan-18	Valid In Process	Power System Operation Corporation Limited Power System Operation Corporation Limited



Appendix III – OGPTL – Summary of Approvals & Licences (7/7)

Sr. No	Approvals	Date of Issue	Validity (in years)	Issuing Authority
13	Tree Cutting Permission Division of 30.134 ha of forest land for construction of 400 KV D/C OPGC Ltd, Jharsuguda - Sundargarh transmission line in Jharsuguda and Sundargarh district in Odisha. Division of 30.134 ha of forest land for construction of 400 KV D/C transmission line from OPGC Barhapali IB Thermal Power plant in Jharsuguda District to 765 KV/400 KV PGCIL switchyard at Kenapali in Sundargarh District Division of 71.761 ha of forest land for construction of 765 KV double circuit transmission line from Jharsuguda (Sundargarh) - Raipur Pooling station in Raigarh, Durg, Bilaspur, Jangir Champa and Bemetara districts in the state of chhattisgarh. Division of 95.656 ha of forest land Sundargarh forest division for construction of 765 KV D/C Transmission line from 765 KV/400KV PGCIL switchyard at Kenapali in Sundargarh District, Odisha.	27-Jun-17 08-Jul-17 30-Jan-18 20-Apr-18	Valid Valid Valid Valid	Office of the divisional forest officer, Jharsuguda forest division Office of the divisional forest officer, Jharsuguda forest division Office of the divisional forest officer, Raipur Office of the divisional forest officer, Chhattisgarh
14	Transmission service agreement Transmission service agreement with Power Grid Corporation of India Li Transmission service agreement with Customers	27-Apr-18 20-Nov-15	Valid 35	Central Electricity regulatory Commission (CERC) Central Electricity regulatory Commission (CERC)
15	Energisation Clearance 400 kV D/C OPGC - Jharsuguda Transmission line (length = 51.35 Km)	23-Aug-17		Central Electricity Authority, Ministry of power
16	Approval under Electricity Act, 2003 Approval from GOI under section 164 of Electricity Act, 2003 Approval u/s 68 of the Electricity Act, 2003 for laying overhead transmis Approval u/s 61 of Electricity Act, 2003 Approval u/s 79 of Electricity Act, 2003 Source: Investment manager	08-Mar-17 03-Jun-15 NA In Process	25 Valid NA In Process	Central Electricity Authority Ministry of Power Central Electricity Regulatory Commission Central Electricity Regulatory Commission



Appendix IV – OGPTL – Summary of Ongoing Litigations (1/2)

Matter	Pending Before	Details of the case	Amount Involved (INR Million)	Amount Deposited (INR Million)
Corridor issue	Malikharoda Civil Court	Background of the case: Jeetan Singh has a corridor issue between loc.92/14 and loc.92/15. The petitioner has asked for divergence of line. The petitioner has sought an injunction restraining from laying the transmission wire and tower. Current Status: The Company has filed written statement and offered to pay compensation to the Petitioner. The matter is currently pending.		
Restraining erection of tower	High Court of Chattishgadh at Bilaspur	Background of the case: Raju Singh (Petitioner) the owner of the land has filed the writ petition to restrain the respondent to not install/ place electric tower over the fly ace brick factory of the petitioner. Petitioner states that respondent without acquisition of land, without issuance of notice, have placed tower over the land where bricks industry is being run by the industry. The Petitioner has sought a direction from the High Court for the installation of the electricity tower be stopped. Current Status: The reply is filed. However the hearing date is yet to be scheduled. The matter is pending.	7.17*	
Erection of Towers	High Court of Orissa	Background of the case: Bikash Lekhra and 32 others (Petitioners) have filed application under articles 226 of the Constitution of India to direct the opposite party to immediately remove the illegal installations of high tension electricity towers and transmission lines in Barijakkachhar/ Jamkina Forest without consent of Gram Sabha and its members and allow the Local villagers to exercise their rights, use and access to their community forest to maintain their livelihood . Further, the petition is being filed in the interest of general public of Laphripada and Hemgiri Blocks in the district of Sundargam in the state of Odisha. Current Status: The matter is currently pending.		

Source: Investment manager

* As per the estimates provided by the Investment Manager.



Appendix IV – OGPTL – Summary of Ongoing Litigations (2/2)

Matter	Pending Before	Details of the case	Amount Involved (INR Million)	Amount Deposited (INR Million)
Installation of Transmission lines	High Court of Orissa at Cuttack	<p>Background of the case: Narayan Prasad Das and 2 others (Petitioners) have filed an application under Articles 226 and 227 of Constitution of India, 1950 challenging the installation of Electric Transmission of 400 KV over the ancestral land of the petitioners without issuing any prior notice to them.</p> <p>It was directed that opposite party shall maintain status quo with respect to the suit land till next date. The Opposite Party also filed petition for lifting of the status quo order otherwise they will incur huge loss. Further, petitioner is only entitled to receive compensation against damages in accordance with Sec 10 of Indian Telegraph Act, 1885</p> <p>Current Status: Status quo passed vide WPC no. 14866 of 2017 vacated. Awaiting for final hearing, date of hearing yet to confirmed as High Court strike was there. The matter is currently pending.</p>		
Closed Matters				
Erection of Towers	Additional District Court Bhalapara, Dist- Baloda Bazar	<p>Background of the case: Jeevandas Jogi (Petitioner) have filed suit against Odisha General Phase-II Transmission Limited opposing the construction of Transmission tower on agricultural land of petitioner. Construction of tower has hampered all agricultural activities of the petitioner and the digging done has blocked the entrance to petitioners land. Also, trees under ownership of petitioner are damaged. Petitioner has demanded compensation of INR 5.26 million for loss of land and INR 0.09 million for loss of trees. Landowner never accepted the actual compensation and earlier also went to Dist Court and high court where both courts had rejected his please.</p> <p>Current status - The case has relected the please filed.</p>	5.34	

Source: Investment manager

* As per the estimates provided by the Investment Manager.



ANNEXURE B

TECHNICAL CONSULTANTS' REPORTS

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Indigrid Trust - 2 Nos, 400kV D/C Transmission Line (NRSS XXIX)

Due Diligence Report - NRSS XXIX

Indigrid Trust
Delhi | INDIA

RESTRICTED

31 December 2018

Final

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DUE DILIGENCE REPORT



Our ref.: Document No. P.012509-U-00108-002

Imputation: Project No. P.012509

[RESTRICTED]

Client : «Indigrid Trust»
Project : **NRSS XXIX Transmission Limited**
Subject : Submission of Due Diligence Report
Comments:

Revision No.	Date	Prepared / Revision By	Description
00	2018/12/31	DMA	Final issued for Submission

00	18/12/31	Final	DMA	SDM	SDM	DMA
REV.	YY/MM/DD	STAT.	WRITTEN	VERIFIED	APPROVED	VALIDATED

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1. EXECUTIVE SUMMARY

NRSS XXIX Transmission Limited (hereinafter referred as “NRSS or Project Company”) a subsidiary of Sterlite Grid 2 Limited (SGL 2) has set up 400 kV Transmission Project consisting of 400 kV D/C transmission lines (134.811 km) from Jalandhar to Samba & from Samba to Amargarh (280.22 kms), LILO of Uri – Wagoora line at Amargarh extending 5.84 kms and one nos. 400/220 kV GIS substations (7x105 MVA) at Amargarh (Jammu and Kashmir) on Build, Own, Operate and Maintain (BOOM) basis for 35 years.

Indigrd Trust (SP) has appointed Tractebel Engineering Pvt. Ltd. as Independent Engineer (IE) to undertake Technical Due Diligence study for the above mentioned 400 kV Transmission System Project.

The Project consists of construction of following transmission lines and substations being executed by the Project Company (NRSS):

Table 1.1 - Project Details

S. No.	Scheme/ Transmission Works
A.	Transmission Lines:
i.	LILO of both circuits of Uri – Wagoora 400 kV D/C line at Amargarh (on multi-circuit towers) (5.84 kms) (Phase – 2)
ii.	Jalandhar – Samba 400 kV D/C Twin ACSR Moose (134.811 kms) (Phase – 1)
iii.	Samba – Amargarh 400 kV D/C Twin ACSR Moose routed through Akhnoor/ Rajouri (279.19 kms) (Phase – 2)
B.	Sub-station:
	Establishment of 7x105 MVA (1 ph units), with 400/220 kV GIS substation at Amargarh
	400 kV
	- Line Bays: 6 No.
	- 400/220 kV ICT: 7 x 105 (1-ph Units)
	- ICT bays: 2 no.
	- Line Reactor (50 MVAR): 2 no. (for Amargarh Lines)
	- Bus Reactor (63 MVAR): 2 no.
	- Bus Reactor Bay: 1 no. (Two bus reactors on one bay)
	- Space for line/ICT bays: 4 no.
	- Space for ICT: 1 no.
	220 kV
	- Line Bays: 6 no.
	- ICT bays: 2 no.
	- Space for line/ICT bays: 4 no

The Transmission Service Agreement (TSA) is signed between 24 numbers Long Term Transmission Customers (LTTCs) and NRSS XXIX Transmission Limited (NRSS) vide agreement dated on 02.01.2014 for 35 years. The transmission charges shall be paid by the LTTCs in the proportion of their respective allocated Project Capacity.

The scheduled completion date of the transmission line is 38 months from the effective date (4.08.2014) as per TSA which works out to be 04.10.2017. However, as per the amendment to the RFP documents the revised SCOD is 50 months from the effective date. As per the CERC tariff order dated 10.12.2014 the scheduled completion date of the transmission line is 50 months from the effective date which works out to be 04.10.2018.

The contracts of Supply, Erection and Civil Works are executed separately between NRSS-XXIX Transmission Limited (Owner) and Sterlite Power Grid Ventures Limited (Contractor) on 15th January 2015. As per the EPC Contract, the schedule completion of all the construction and commissioning works is 4th October, 2018.

SPGVL (Contractor) signed multiple sub – contracts for supply, erection and construction of the Transmission System as well as the sub – station. The Project Company appointed an external third party surveyor, M/s MNEC Consultants for conducting a detailed walk – over route survey of the project.

The Jalandhar – Samba Transmission Line is indicated as Phase – 1 of the Project and the Samba – Amargarh as Phase – 2 of the Project. Phase – 2 of the project is divided into four packages.

The Samba to Amargarh line along with the Uri – Wagoora LILO Line is about (280.22 kms) and is divided into four packages as mentioned below:

1. Samba Substation to AP 72 (Package 1) – sub – contracted to M/s. KEC International Ltd. Stretch of 83.93 kms
2. AP 73 to AP 270 (Package 2) – sub – contracted to M/s. TATA Transmission Ltd. Stretch of 84.02 kms
3. AP 271 to AP 393 (Package 3) – sub – contracted to M/s. TATA Transmission Ltd. Stretch of 52.60 kms
4. AP 394 to Amargarh Substation – sub – contracted to M/s. Unitech Transmission Ltd. Stretch of around 59.67 kms

As per the substation construction schedule provided by M/s Alstom, IE noted that the final commissioning was expected by January, 2018. IE notes that ICT 1 & 2 of 400/220 kV rating got charged on 10th May, 2018.

IE Conducted the site visit from 16th to 19th May, 2018 for checking the Phase – 1 & Phase – 2 Transmission Lines and the substation. During the site visit, IE visited the Jalandhar – Samba 400 kV D/C and Samba to Amargarh (via Jammu, Akhnoor, Rajouri, Thana Mandi, Bafliaz, Mugal Road, Pir Panjal ranges, Shopian to Amargarh), Substations at Amargarh as well as Project Office at Srinagar. IE visited the 400/220 kV Jalandhar Substation of PGCIL, to monitor the health of J – S Line.

Project Company has successfully completed the trial run of Phase – 1 and Phase – II of the Project as indicated below–

- 400 kV D/C Twin Moose Conductor Jalandhar – Samba Transmission line Phase-I of the Project, successfully completed the trial – run operation on 24.06.2016/ 18:29 Hours

- 400 kV Amargarh (NRSS XXIX) – Samba (PG) ckt – 1, along with 50 MVAR Non – switchable line reactors at Amargarh (NRSS XXIX) end and associated bays on 1st September, 2018 at 20:15 hrs
- 400 kV Amargarh (NRSS XXIX) – Samba (PG) ckt – 2 along with 50 MVAR Non – switchable line reactors at both the ends and associated bay on 22nd August, 2018 at 22:00 hrs
- 400/220 kV, 315 MVA – 1 & 2 (6X105 MVA) along with associated 400 kV bays and 220 kV bay at Amargarh on 18th May, 2018 at 15:35 hrs
- 400 kV, 3 – Ph 63 MVAR Bus Reactor – 1 with associated 400 kV Bay at Amargarh (NRSS XXIX) on 3rd June, 2018 at 11:15 hrs
- 400 kV, 3 – Ph 63 MVAR Bus Reactor – 2 at Amargarh (NRSS XXIX) on 8th June, 2018 at 16:42 hrs
- 400 kV Uri (NHPC) – Amargarh (NRSS XXIX) ckt – 1 and associated bays at Amargarh (NRSS XXIX) and 400 kV Amargarh (NRSS XXIX) – Wagoora (PG) ckt – 1 and associated bays at Amargarh (NRSS XXIX) {Only LILO portion of 400 kV Uri 1(NHPC) – Wagoora Ckt – 1 at Amargarh (NRSS XXIX)} on 10th April, 2018 at 21:00 hrs
- 400 kV Uri 1(NHPC) – Amargarh (PG) ckt – 2 and associated bays at Amargarh (NRSS XXIX) and 400 kV Amargarh (NRSS XXIX) – Wagoora (PG) ckt – 2 and associated bays at Amargarh (NRSS XXIX) {Only LILO portion of 400 kV Uri 1(NHPC) – Wagoora (PG) Ckt – 2 at Amargarh (NRSS XXIX)}, on 18th March, 2018 at 21:30hrs

The transfer of the J – S Line from the Project Team to the O&M Team has been completed, during September & October, 2016. The Project Company has already finalized the arrangements for O&M of the 400kV J – S Line and substation. The O&M Contract is outsourced for maintenance works of 400kV D/C Jalandhar – Samba Line to M/s. Telegence Powercomm Private Limited. Work order dated 27th July, 2016, was awarded for maintenance works from Jalandhar Substation Gantry to AP 66/4 and AP 67/2 to AP 67/3 (106.604 kms) at Punjab. The effective date of the Contract was 27th July, 2016 and valid till 36 months i.e. Three years from effective date.

Similarly another work order dated 23rd December, 2016 was awarded for Maintenance works from AP 67/0 to AP 67/1 and AP 68/0 to Samba substation Gantry (28.206 kms) at Jammu. The effective date of the Contract was 1st August, 2016 and valid for 36 months i.e. three years from effective date.

As per the specification provided by the Project Company, the Transmission lines and Towers have been designed, installed and tested in accordance with International Standards and Indians Standards. The design has also met statutory requirements such as the Indian Electricity Rules, Indian Factory Act and Indian Electricity Grid Code etc. IE is of the opinion that the final design and specifications of equipment/ systems installed in the Transmission Line are in line with the technical specification and the drawings & documents reviewed and approved by the Project Company and Owner's Engineer.

All the transmission line assets are designed as per IS:802 Part 1 & 2 with a reliability factor of 1.0 which ensures the reliability period of the transmission line for 50 years and for the Substation Equipment for 35 years. As per the TSA, the Term of Applicability of the TSA is 35 years from the Schedule COD of the Project. Hence, IE confirms that the Transmission Assets are technically designed and are reliable as per the TSA.

The life extension of the asset beyond 35 years can be assessed based on the Residual Life Assessment (RLA) results, Load Studies and the Technological advancements after 35 years of Project Operation.

IE found that the requisite Permits and Clearances for Jalandhar to Samba line are obtained. Regarding the Samba to Amargarh section, IE opines that major permits and consents including Transmission License, Approval under section 68 of Electricity Act, 2003, PTCC, Aviation, crossings etc. have been received and are valid as on date. Signing of TSA has also taken place.

2. INTRODUCTION

2.1. Background

NRSS XXIX Transmission Limited (hereinafter referred as “NRSS or Project Company”) a subsidiary of Sterlite Grid 2 Limited (SGL 2) has set up 400 kV Transmission Project consisting of 400 kV D/C Twin Moose Conductor Transmission Lines (134.811 km) from Jalandhar to Samba & from Samba to Amargarh (279.19 kms), LILO of Uri – Wagoora line at Amargarh extending 5.84 km and one nos. 400/220 kV substations (7x105 MVA) at Amargarh (Jammu and Kashmir) on Build, Own, Operate and Maintain (BOOM) basis.

Indigrd Trust (IT) has appointed Tractebel Engineering Pvt. Ltd. as Independent Engineer (IE) to undertake Technical Due Diligence study for the above mentioned 400 kV Transmission System Project.

2.2. Definitions

Project	:	Total of 419.651 kms. 400 kV D/C Twin Transmission Line from Jalandhar to Samba (134.811 KM) & from Samba to Amargarh (279.19 KM), LILO of Uri-Wagoora line at Amargarh (5.84 KM) and one nos. 400/220 kV substations (7x105 MVA) at Amargarh.
Project Company	:	NRSS XXIX Transmission Limited (NRSS)
Client	:	Indigrd Trust (SP)
Independent Engineer	:	Tractebel Engineering Pvt. Ltd. (TEPL)

2.3. Scope of Services

The scope of services of IE has been detailed as follows:

- Assessment of technical terms of the EPC contract including the Technical requirements/specifications (System parameters, EHV equipment rating, Relay & metering, SAS and communication system)
- Insights on the EPC contractor based on general industry experience and review of warranties and guarantees in the contracts
- Commentary on the technology deployed (substation layout drawing, transformers, switchgear, etc)
- Outage/ tripping records since commissioning
- Project Costs
- Construction schedules and if any Penalties levied
- Operation & Maintenance Philosophy and Arrangements
- Review all status of clearances, permits
- Major ROW issues, Court Cases, pending Insurance claim etc.
- Highlight key risks and mitigation thereof.

2.4. Basis of Report

This Due Diligence Report is prepared by IE based on its assessment of work at site during the site visits, discussions with representatives of the Project Company, Contractors, review of the documents/ information provided by the Project Company.

Following Documents are received from the Project Company:

- EPC Contracts
- Sub – Contracts
- Transmission Service Agreement
- Share Purchase Agreement
- Technical Specification
- Route Survey Report
- L 2 schedules
- Tower Schedules
- Project Progress Report
- Updated status of permits and clearances
- Stock/Materials statements
- Tripping & Outage data

2.5. Risk Categories

Based on the detailed review of the technical documents/ information provided, the IE proposes to identify in this Report, issues if any and the associated risks for the NRSS XXIX Transmission Line Project. Accordingly, three Risk Categories have been assigned as indicated in Table 2.1 below:

Table 2.1 - Definition of Risk Categories

Risk Category	Risk Category	Risk type
Risk Category –A	Development Risk	Matters which are dependent on external factors/ agencies and can affect the development/ schedule of the Project.
Risk Category –B	Technology Risk	Matters that are related to technical aspects of the Project which can affect performance/ availability significantly.
Risk Category –C	Operational Risk	Matters related to O&M which can lead to poor performance/ lower availability

Disclaimer

IE has made no search of any public records nor independently validated the information provided by Project Company with any external source, and save for the reviewed documents listed above, IE has not examined any other documents relating to the matters of the Project Company for the purpose of this Report.

IE's findings is strictly limited to the matters stated herein and is not to be read as extending by implication to any other matter. It is given as on the date of writing this Report solely for the benefit of the Lenders and may not be disclosed to or relied upon by anyone else without IE's prior consent, provided that, this opinion may be disclosed to the auditors or any professional advisors of any of the Addressees or to any regulatory authority (as may be required by such regulatory authority) or otherwise pursuant to a court order or legal process.

3. DESCRIPTION OF THE PROJECT

NRSS XXIX Transmission Limited (hereinafter referred as “NRSS or Project Company”) a subsidiary of Sterlite Grid 2 Limited (SGL 2) has set up 400 kV Transmission Project consisting of 400 kV D/C Twin Moose Conductor transmission lines (134.811 km in length) from Jalandhar to Samba & from Samba to Amargarh (279.19 km), LILO of Uri – Wagoora line at Amargarh extending 5.84 km and one nos. 400/220 kV substations (7x105 MVA) at Amargarh (Jammu and Kashmir) on Build, Own, Operate and Maintain (BOOM) basis.

3.1. Background

Presently the power supply to the Kashmir valley is through Kishenpur – Wagoora 400 kV D/C, Kishanpur – Pampore 220 kV D/C and Udhampur – Pampore 132 kV D/C. All the existing and under construction line are rooted through Udhampur – Batote – Banihal – Pir Panjal pass. The common corridor of the transmission line is highly prone to snow storm, landslides and other natural calamities making power supply to the Kashmir valley vulnerable. Further power supply to Jammu and Kashmir is basically through 400/220 kV Kishanpur substation and there is an immediate need for providing an alternate route for transfer of power from Jammu region to Kashmir valley. Further the high load growth anticipated in northern part of Kashmir and to cater to projected loads, a 400/220 kV substation at Amargarh in North Kashmir area is required.

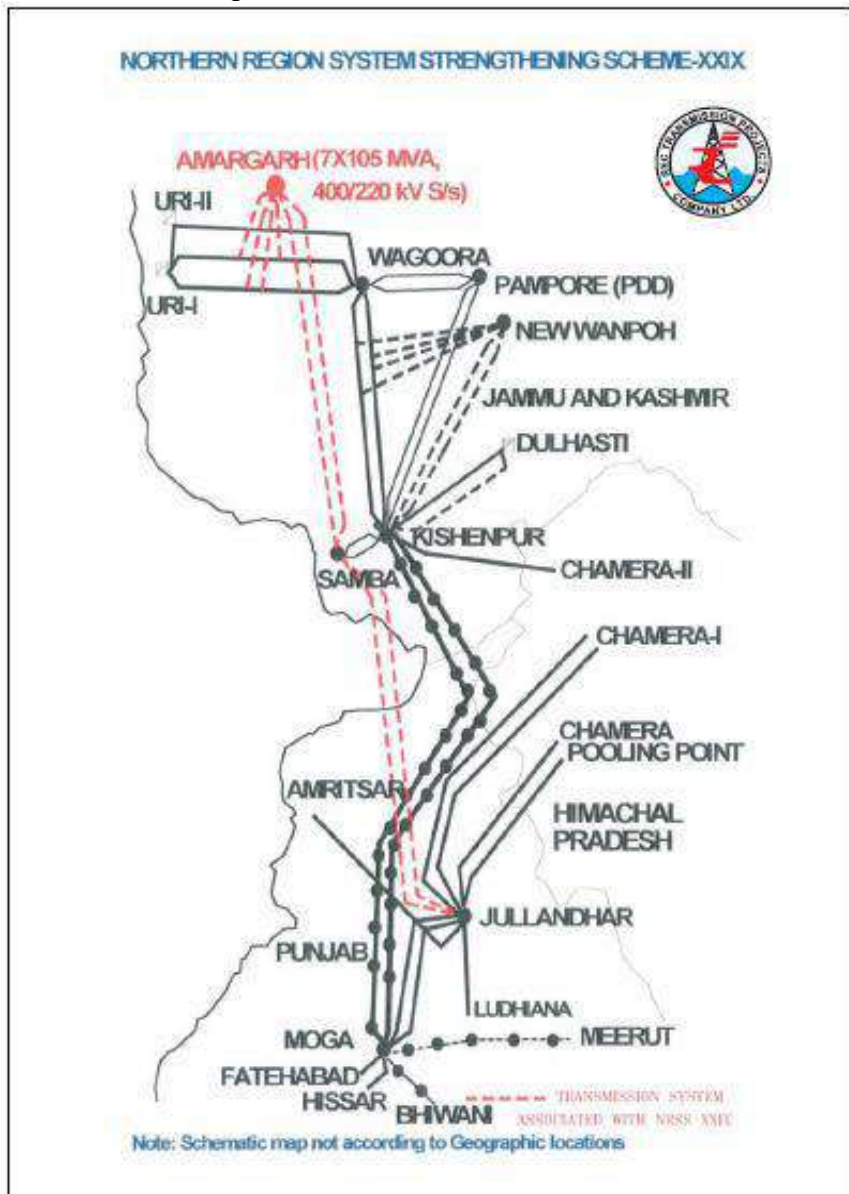
Under the present scheme Establishment of 400/220 kV substation at Amargarh along with Loop in Loop out (LILO) Uri – Wagoora 400 kV D/C has been proposed. The substation shall be further connected to the grid through Jalandhar – Samba – Amargarh 400 kV D/C line. The Samba – Amargarh line is routed via Akhnoor and Rajouri. This would have dual benefit i.e. the line would be constructed through a different corridor which is away from the existing line corridor as well as when the demand in Akhnoor/Rajouri increases new 400 kV substations can be established by LILO of proposed 400 kV Samba – Amargarh line. The Power would be flowing from Jalandhar to Samba, and hence the load built up at the nearing Samba region shall be met.

The Project includes construction of following transmission lines and substations being executed by the Project Company (NRSS):

S. No.	Scheme/ Transmission Works
1.	Transmission Lines:
a)	LILO of both circuits of Uri – Wagoora 400 kV D/C line at Amargarh (on multi-circuit towers)
b)	Jalandhar – Samba 400 kV D/C Twin Moose Conductor
c)	Samba -Amargarh 400 kV D/C twin Moose routed through Akhnoor/ Rajouri
2.	Sub-station:
	Establishment of 7x105 MVA (1 ph units), with 400/220 kV GIS substation at Amargarh:
	<ul style="list-style-type: none">• 400 kV• Line Bays: 6 No.• 400/220 kV ICT: 7 x 105 (1-ph Units)

S. No.	Scheme/ Transmission Works
	<ul style="list-style-type: none"> • ICT bays: 2 no. • Line Reactor (50 MVAR): 2 no. (for Amargarh Lines) • Bus Reactor (63 MVAR): 2 no. • Bus Reactor Bay: 1 no. (Two bus reactors on one bay) • Space for line/ICT bays: 4 no. • Space for ICT: 1 no. • 220 kV • Line Bays: 6 no. • ICT bays: 2 no. • Space for line/ICT bays: 4 no

The schematic diagram of NRSS XXIX is indicated below:



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3.2. Transmission and Sale of Power

NRSS has entered into a Transmission Service Agreement (TSA) with Long Term Transmission Customers (LTTTC) for 35 years. The transmission charges shall be paid by the LTTTCs in the proportion of their allocated Project capacity.

The scheduled completion date of the transmission line was 38 months from the effective date (4.08.2014) as per TSA which works out to be 04.10.2017. However, as per the amendment to the RFP documents the revised SCOD is 50 months from the effective date. As per the CERC tariff order dated 10.12.2014 the scheduled completion date of the transmission line is 50 months from the effective date which works out to be 4th October, 2018.

The List of 24 LTTTCs (entered TSA) is indicated in Table 3.2 below:

Table 3.1 – List of LTTTCs

S. No.	Name of the LTTTC
1.	AD Hydro Power Limited
2.	Haryana Power Purchase Centre
3.	Punjab State Power Corporation Ltd
4.	Himachal Sorang Power Pvt. Limited
5.	Adani Power Limited, Mundra
6.	Jaipur Vidyut Vitran Nigam Limited
7.	Ajmer Vidyut Vitran Nigam Limited
8.	Jodhpur Vidyut Vitran Nigam Limited
9.	Lanco Anpara Power Limited
10.	Lanco Green Power Private Limited
11.	PTC(EVEREST), PTC India Limited
12.	Himachal Pradesh State Electricity Board
13.	Power Development Dept., Govt. of J&K
14.	North Central Railway
15.	Jaiprakash Power Ventures Limited
16.	BSES Yamuna Power Limited
17.	BSES Rajdhani Power Limited
18.	TATA Power Delhi Distribution Limited
19.	New Delhi Municipal Corporation
20.	Electricity Wing of Engg. Dept, Chandigarh
21.	Power Grid Corporation of India Limited
22.	U.P Power Corporation Limited
23.	PTC(BUDHIL), PTC India Limited
24.	Uttarakhand Power Corporation Limited

The NRSS XXIX Transmission Limited, of which 100% equity shares has been acquired by Sterlite Grid Ltd, shall be responsible as the TSP, for ensuring that it undertakes ownership, financing, development, design, engineering, procurement, construction, commissioning, operation and maintenance of the Project, and to provide Transmission Service on a long term basis to the Long Term Transmission Customers

3.3. EPC Contract

The contracts of Supply, Erection and Civil Works Construction are executed separately between NRSS-XXIX Transmission Limited (Owner) and Sterlite Power Grid Ventures Limited (Contractor) on 15th January 2015. The scope of work includes:

- a) Laying of 400 kV Double Circuit Twin Moose Conductor Transmission Lines from Jalandhar sub-station in the state of Punjab to Samba sub-station in the state of Jammu & Kashmir (approximately 134.811 km)
- b) Laying of 400 kV Double Circuit Twin Moose Conductor Transmission Lines from Samba sub-station in the state of Jammu & Kashmir to Amargarh sub-station in the state of Jammu & Kashmir (approximately 279.19 km)
- c) 400 kV Double Circuit LILO Transmission Lines at Amargarh in the state of Jammu & Kashmir (approximately 5.84 km)
- d) Establishment of 7x105 MVA (Single Ph units), with 400/220 kV GIS sub-station at Amargarh in the state of Jammu & Kashmir.

IE observed that Laying of 400 kV Double Circuit Transmission Lines from Samba to Amargarh is about 279.19 km as per the Scheme against 307 kms as indicated in the Contract. Similarly, 400 kV Double Circuit LILO Transmission Lines at Amargarh is about 5.84 km against 2 kms indicated in the Contract. Check Survey being a simultaneous process along with the execution of foundation and Tower erection works, sometimes there is change in route length depending upon the change in tower location.

As per the EPC Contract signed between NRSS XXIX Transmission Limited (Project Company) and SPGVL (EPC Contractor), the completion date is 4th October, 2018. ***IE observes that the completion date is in line with TSA.***

The break – up of the EPC Contract Price placed on SPGVL is shown in the Table below:

Contracts	Price in Rs. Crs.	Land, Forest & ROW (Rs. Crs.)
Supply	1396.49	Land – 126.85 Forest – 100
Erection	346.48	ROW – 56.23
Civil	451.79	ROW – 28.12
TOTAL	2188.76	311.22

The above Contract Value is inclusive of all taxes & duties including but not limited to Excise Duty, CST, Sales Tax, VAT, Entry Tax/ Octroi (if applicable).

Further, SPGVL has signed several sub – contracts for the supply, erection and construction of the Transmission System.

As per schedule provided for Phase – 1 (Jalandhar to Samaba 400 kV Transmission Line) by the sub – contractor (M/s KEC International Ltd.), the testing and commissioning was scheduled as 31st December 2016. As per POSOCO letter dated 28th December, 2016, stating successful completion of trial – run operation of 400 kV Jalandhar (PG) – Samba (PG) ckt 1 & 2 on 10th December, 2016, ***the 400kV Jalandhar to Samba Transmission line is charged and commissioned along with the associated bays. The POSOCO Letter is attached as Annexure – 1.***

The Samba to Amargarh line along with the Uri – Wagoora LILO Line is about (280.22 kms) and is divided into four packages as mentioned below:

1. Samba Substation to AP 72 (Package 1) – sub – contracted to M/s. KEC International Ltd. Stretch of 83.93 kms
2. AP 73 to AP 270 (Package 2) – sub – contracted to M/s. TATA Transmission Ltd. Stretch of 84.02 kms
3. AP 271 to AP 393 (Package 3) – sub – contracted to M/s. TATA Transmission Ltd. Stretch of 52.60 kms
4. AP 394 to Amargarh Substation – sub – contracted to M/s. Unitech Transmission Ltd. Stretch of around 59.67 kms.

As per schedule provided by the sub – contractors for Phase – 2 of the Project, the testing and commissioning was expected by 30th November, 2017 for Package 1 to 3 and 31st July, 2017 for package 4 & LILO. However, due to unanticipated insurgency for 6 months during the Year 2016, the construction works got delayed.

However, as per the site visit and information provided by the Project Company, Amargarh – Uri Ckt I & II (LILo connectivity) got charged on 9th April, 2018 and 15th March, 2018 respectively and Amargarh – Wagoora Ckt. I & II (LILo connectivity) got charged on 9th April, 2018 and 15th March respectively. POSOCO Letter is attached as Annexure – 2.

The actual construction progress of Phase 2 (S – A Line) as of 24th September, 2018 is indicated below:

SA line	Scope	UOM	Plan	Actual
Foundation	784	No.	784	784
Erection	784	No.	780	784
Stringing	280.22	KM	273.12	280.22
Overall Progress			99.19%	100.0%

The above planned estimates are as per the L2 schedule agreed between NRSS XXIX and SPGVL. IE observes that the actual construction progress is 100.0% as against the planned construction progress of 99.19% as of 24th September 2018. The CEA approval letter indicating the readiness to Energize was accorded vide letter dated 20th August, 2018. The POSOCO letter indicating the successful completion of trial – run was granted vide letter dated 20th September, 2018. POSOCO Letter is attached as Annexure – 3.

As per the substation construction schedule provided by M/s Alstom, IE noted that the final commissioning was expected by January, 2018. IE notes that ICT 1 & 2 of 400/220 kV rating got charged on 10th May, 2018. POSOCO letter dated 3rd July, 2018, for the successful trial run operation of ICT 1 & ICT 2 of 400/220 kV, Bay No. 403 & 406 is accorded. 2 nos. of reactor of capacity 63 MVAR each is also charged and has successfully complete the trial run operation, as accorded by POSOCO vide letter dated 4th July, 2018. POSOCO letter is attached as Annexure – 2.

4. EPC CONTRACT

The contracts of Supply, Erection and Civil Works Construction Contract have been executed separately between NRSS-XXIX Transmission Limited (Owner) and Sterlite Power Grid Ventures Limited (Contractor) on 15th January 2015. The scope of work includes:

- ✓ Laying of 400 kV Double Circuit Transmission Lines from Jalandhar sub-station in the state of Punjab to Sambha sub-station in the state of Jammu & Kashmir (approximately 134.811 km)
- ✓ Laying of 400 kV Double Circuit Transmission Lines from Sambha sub-station in the state of Jammu & Kashmir to Amargarh sub-station in the state of Jammu & Kashmir (approximately 279.19 km)
- ✓ 400 kV Double Circuit LILO Transmission Lines at Amargarh in the state of Jammu & Kashmir (approximately 5.84 km)
- ✓ Establishment of 7x105 MVA (1 Ph units), with 400/220 kV GIS sub-station at Amargarh in the state of Jammu & Kashmir.

4.1. Supply Contract

The Supply Contract dated 15.01.2015 has been placed on M/s Sterlite Power Grid Ventures Ltd., for Design, Manufacturing, Procurement & Supply of all the equipment/materials for the above facilities.

The Supply Contract is for laying of 400 kV D/C Transmission lines from Jalandhar in the state of Punjab to Samba (Jammu & Kashmir), 400kV D/C Transmission Line from Samba in the state of Jammu & Kashmir to Amargarh in the state of Jammu & Kashmir, 400kV D/C (LILO) Transmission Line at Amargarh (in the state of Jammu & Kashmir) and installation of 400/220 kV GIS substation at Amargarh (in the state of Jammu & Kashmir).

4.1.1. Scope of Work

The scope of work is to be carried out by the Contractor pursuant to the terms of this Contract comprises of the complete scope as mentioned in the RFP (Request for Proposal under tender no. NRSS-XXIX/EPC/14-15/001 and NRSS-XXIX/EPC/14-15/002), subsequent amendments, clarifications and minutes of meetings, it includes but is not limited to the following:

- ✓ Design, Fabrication, proto-assembly, proto – witnessing and supply of all types of 400kV D/C transmission line towers, including river crossing towers (wherever applicable) including fasteners, step bolts, hangers, D-shackles etc., as per Owner's design/ drawings.
- ✓ Mandatory Spares as specified in the tender documents and its subsequent amendments and clarifications
- ✓ Supply of all types of tower accessories like phase plate, circuit plate (where ever applicable), number plate, danger plate, anti-climbing device, Bird guard (where ever applicable).
- ✓ Supply of Insulators, Insulator Hardwares for the 400kV D/C transmission line.
- ✓ Supply of Zinc rich primer and enamel paint.

- ✓ Supply of Earth wire & Earth wire Accessories, ACSR Moose Conductor & Conductor accessories, OPGW & OPGW Accessories and Spacer Damper for 400kV double circuit transmission line.
- ✓ Design, Engineering, Testing and Supply of 400kV, 1-phase, 105MVA Power Transformer.
- ✓ Design, Engineering, Testing and Supply of 400kV, 1-phase, SOMVAR Line Reactor and 400kV, 3-phase, 63MVAR Bus Reactor.
- ✓ Design, Engineering, Testing and Supply of 400/220 kV GIS. All the switchgear such as Circuit Breaker, Isolator, Earth Switch including CT, PT etc. shall be GIS type. Design, Engineering, Testing and Supply of Surge Arrestors for Transformer/Reactor connections shall be AIS or GIS type.
- ✓ Design, Engineering, Testing and Supply of Oil Filtration Machine, BDV Kit, PPM Kit, Count Particle Meter, Resistance Tester and any other testing equipment required for 400kV Transformer and Reactor.
- ✓ Design, Engineering, Testing and Supply of complete Relay & Protection System, Substation Automation including hardware & software.
- ✓ Design, Engineering, Testing and Supply of 400kV Line Bays, Reactor Bays and Transformer Bays and 220kV Line Bays, Reactor Bays and Transformer Bays.
- ✓ Design, Engineering, Testing and Supply 33/433kV LT Transformer along with 33kV Isolator, 33kV Surge Arrestor and Horn Gap Fuse for LT Sub-Station.
- ✓ Supply of Silent Type Outdoor DG set and complete lighting and illumination system.
- ✓ Supply of OPGW system for communication with other end substations, fire protection system, air conditioning system, LT Switchgear (AC/DC Distribution Boards) and Battery & Battery Chargers.
- ✓ Supply of 33kV HT XLPE Power Cables and 1.1kV grade Power & Cables along with complete accessories. Supply of Auxiliary power supply and control cables for control room/Bay Panel room and RTCC panel to respective common marshalling boxes of auto transformers/reactors.
- ✓ Supply of complete earthing material.
- ✓ Design, Engineering, Testing and Supply of support structures (galvanized).
- ✓ Supply of Bus Post Insulators, Insulator Strings and Hardware, Clamps & Connectors, Equipment terminal connectors (including terminal connectors for Bus & Line Reactors and Transformers), Conductors, Aluminium Tubes, Bus Bar, Spacers, Cable Supporting Angles/channels, Cable Trays & Covers, junction Box, buried Cable Trenches.
- ✓ Project Insurance as indicated in the GCC and subsequent amendments to the tender documents. (Transit Insurance for the Contractor's supplied items of the complete Project will be in the scope of Contractor).
- ✓ All other misc. items not specifically mentioned in the Specifications but are required for the successful commissioning of the transmission line and sub-station, unless specifically excluded in the Contract required for completion of job, shall deemed to be included in the Contract Value and in the scope of the Contractor.

IE noted that the scope of Supply Contract covers all the items exhaustively and is in line with the RFP.

4.1.2. Responsibility for Completeness

Any scope of supplies (including the above scope of works) which has not been specifically mentioned but is required, in the opinion of the Owner under the purview of the Contract, for the completion of the work and/or for safe, trouble free, normal operation shall be supplied by the Contractor at no extra cost or time to the Owner, unless expressly excluded in the supply Contract. Such work shall not be cause for delay or reason to seek extension of time from the Owner.

Any approval by the Owner at any stage for any works by sub-Contractors appointed by the Contractor or their representative/employees/agents shall not relieve the Contractor of its obligations under the Supply Contract. In case of sub-contracting, the Contractor shall continue to be liable for all the compliances under the Contract and shall be Single Point of Contact (SPOC) to the Owner on behalf on any sub-Contractor(s) which Contractor engages.

The performance of the sub-supplier/sub-Contractors of the Contractor or their representative/employees/agents shall not relieve the Contractor of its obligations under the Contract.

IE noted that the responsibility for completeness of the scope of work covered in the contract will benefit the Owner towards the smooth completion of the Project.

4.1.3. Effective Date and Completion Period

The effective date of the contract is 06.12.2014. The Completion date is 04.10.2018 which around 46 months from the effective date. ***IE opines that the completion date is in line with the TSA SCOD.***

The period from the Effective Date to the Operational Acceptance and handing over of the Facilities shall be referred to as the "Contract Period" herein. The "Operational Acceptance" (as mentioned in GCC of RFP) shall be considered after One (1) month from the COD.

The Contractor agrees that time is the essence of this Contract. The Contractor shall ensure that the entire Scope of Work shall be completed by 04.10.2018, which shall also be referred to as "Completion Date". The period from the Effective Date of the Contract to the Completion Date shall be referred as "Completion Period".

Contractor shall make the best efforts for an early completion of the Facilities and shall support the Owner with the necessary requirements to achieve an early COD of the Facility.

IE found that the completion period works out to be around 46 months. As per TSA, the Jalandhar-Samba line to be completed within 34 months and S – A line along with substation to be completed within 38 months from effective date.

As per CERC order 10/12/2014, the Jalandhar-Samba line to be completed within 34 months and other lines viz. (Samba-Amargarh and LILO of Uri-Wagoora) and Amargarh and substation to be completed within 50 months from effective date.

Regarding Jalandhar – Samba 400 kV D/C Transmission Line, as per site progress, and as per the POSOCO letter dated 28th December, 2016, stating successful completion of trial – run operation of 400 kV Jalandhar (PG) – Samba (PG) ckt 1 & 2 on 10th December, 2016, IE noted the 400kV Jalandhar to Samba Transmission line is charged and commissioned along with the associated bays. The POSOCO letter is attached as Annexure – 1.

Amargarh – Uri Ckt I & II (LILO connectivity) got charged on 9th April, 2018 and 15th March, 2018 respectively and Amargarh – Wagoora Ckt. I & II (LILO connectivity) got charged on 9th April, 2018 and 15th March respectively. POSOCO Letter is attached as Annexure – 2.

For Samba-Amargarh line the CEA approval letter was accorded vide letter dated 20th August, 2018. The POSOCO letter indicating the successful completion of trial – run for this line was granted vide letter dated 20th September, 2018. POSOCO Letter is attached as Annexure – 3

IE found that the project SCOD is 4th October 2018 as per CERC order 10/12/2014 which matches the completion date (4th October 2018) indicated in the Contract.

4.1.4. Guarantees

The Advance Guarantee ("AG") shall initially be kept valid up to Completion Period of the complete transmission line and sub-station. The validity of the ABG shall be extended by the Contractor from time to time till the actual date of Completion of the Facility in accordance with the Contract.

IE observed that the advance payment Guarantee for defect liability period is considered in the form Corporate Guarantee, vide Agreement dated 2nd May, 2015 and is valid till Project Operational Acceptance or Termination of Contract whichever is earlier.

The Performance Guarantee ("PG") shall be for a sum equivalent to Ten Percent (10%) of the Contract Value and shall be submitted in two parts:-

- ✓ During the execution of Contract till Operational Acceptance.
- ✓ During the Defect Liability period.

IE observed that the Performance Guarantee for defect liability period is considered in the form Corporate Guarantee, vide Agreement dated 2nd May, 2015 and is valid till Project Operational Acceptance or Termination of Contract whichever is earlier.

The Performance Guarantee for the performance of Contract during execution shall be valid up to Operational Acceptance date under this contract. This Guarantee shall be returned on submission of PG for the Defect Liability Period of Twenty Four (24) months.

E is of the view that Defect Liability Period of Twenty Four (24) months is as per Industry practice.

The Contractor understands and accepts that the submission of the Guarantees are the integral part of the Contract and any delay on this account will lead to the breach of the Contract and would expose Contractor to other actions available and under this Contract and in law.

4.1.5. Liquidated Damages

Time being the essence of the Contract, in the event the completion schedule set out in the contract are not met, Owner shall be entitled to levy liquidated damages on the Contractor as mentioned in the subsequent articles:

If the Contractor fails to achieve the completion date as defined in the contract, the Contractor shall pay to Owner a sum calculated @ 1% (One percent) of the Contract Value for each week of delay or part thereof subject to a maximum of 10% of the Contract Value as liquidated damages ("Liquidated Damages") for such default and not as penalty, without prejudice to the Owner's other remedies available under this Contract.

IE observed that the obtaining of Forest Clearance and acquisition of land is the responsibility of the Contractor, which depends up on the concerned approval of Government Authorities. IE found that the above clause is better for the Owner.

IE found that if the Project is delayed for 6 months from the SCOD as per TSA reasons solely attributable to Contractor, the maximum LD envisaged in the Supply Contract is Rs 143.4 Crores which is 10% of the Contract Value.

The Owner may without prejudice to any other method of recovery, deduct the amount of such damages from any amount due or becoming due to the Contractor or from any securities/guarantees under this Contract. The payment deduction of such damages shall not relieve the Contractor from its obligation to complete the works and remedy the defects in the works or from any other of its obligations and liabilities under the Contract.

IE opines that the Line Project is commissioned and charged and hence no applicability of LD.

4.1.6. Insurance

The perils required to be covered under the transit insurance shall be as mentioned in clause 30 of GCC and shall include but not be limited to cover for fire and allied risks, miscellaneous accidents, loss or damage in transit, theft, pilferage, riot and strikes and malicious damages, civil commotion, weather conditions, accidents of all kinds etc. The scope of such insurance shall be adequate to cover the replacement/reinstatement cost of the equipment for all risks up to and including delivery of goods and other costs till the equipment is delivered at Site.

The insurance policies to be taken should be on 110% of the Contract Value plus value of Owner Supplied Material and incorporating 40% escalation clause. Notwithstanding the extent of insurance cover and the amount of claim available from the underwriters, the Contractor shall be liable to make good the full replacement/rectification value of all equipment/materials and to ensure their availability as per project requirements. Without limiting any of his obligations under the Contract, the Contractor, at its cost, shall arrange, secure and maintain all insurance as may be pertinent to the Facility and obligatory in terms of law to protect its interest and interests of the Owner against all perils detailed herein, within Thirty (30) days after the start of the work.

4.1.7. Defect Liability

The Contractor shall be liable to remedy or compensate the Owner for the remedy of any defect, imperfection, deficiency, shortcoming or any other fault in the Items or the material(s) or in the execution of the works or a breach of any obligations under the scope of work of this Contract (collectively called "Defects") in accordance with this clause.

The Defects Liability Period for Element shall be twenty four (24) months from the date of Taking Over of such Element.

If during the Defects Liability Period any Defect is found, the Contractor shall promptly, in consultation and agreement with the Owner regarding appropriate remedy of the Defects and at the cost of the Contractor, repair, replace or otherwise make good such Defect as well as any damage to the Element caused by such Defect and losses suffered by the Owner thereby and shall ensure that the Element is in accordance with the requirements of this Contract.

The Owner shall give the Contractor a notice stating the nature of any such Defect together with all available evidence thereof, promptly following the discovery thereof. The Owner shall afford all reasonable opportunity for the Contractor to inspect any such Defect.

If the repair, replacement or making good is of such a character that it may affect the efficiency of any Element, the Owner may give to the Contractor a notice requiring to tests the defective part of such Element and the same shall be made by the Contractor, whereupon the Contractor shall carry out such tests at its own risk and cost.

If such defective part fails the tests, the Contractor shall remedy the Defect or carry out such replacement or make good (as the case may be) until that part of the material(s) passes such tests.

The Contractors above obligations shall not apply to:

- ✓ Any materials that are supplied by the Owner and are normally consumed in operation, or have a normal life shorter than the Defect Liability Period stated herein;
- ✓ Any designs, specifications or other data designed, supplied or specified by or on behalf of the Owner or any matters for which the Contract has disclaimed responsibility herein; or
- ✓ Any other materials supplied or any other work executed by or on behalf of the Owner, except for the work executed by the Owner.

4.1.8. Contractor's Responsibilities

It is understood that the Contractor has duly inspected the location of supplies, its surroundings and has satisfied themselves as to all technical, commercial and general condition affecting the work and materials necessary for carrying out the Works, the means of communication, and in general all risks and contingencies influencing or affecting the Scope of Work. The Contractor shall not be entitled to any extension of the Completion Schedule or to any adjustment of the Contract Value on grounds of misinterpretation or misunderstanding under this clause and the Agreement.

- ✓ For all technical clarifications, the Contractor shall report to Owner's Project Manager. All works under this Contract shall be carried out under his instructions.

- ✓ The Contractor shall prepare a Quality Assurance Plan and get approval by the Owner, which will form the basis for stage wise inspections and final inspections and preparation of respective protocols. Notwithstanding the aforesaid, at any stage of execution, Owner shall be free to inspect the quality of material supplied and can ask the necessary modification if the Owner is of the opinion that the current work does not meet the quality standards.
- ✓ The Contractor shall submit detailed activity-wise bar chart for approval of Owner. The Contractor shall also submit monthly progress report and other documents as required from time to time by the Owner.

Sub – Contractor:

- ✓ The Contractor shall apply to the Owner for permission to enter into any sub-contract with any proposed Sub-Contractors before the intended date of entering into a contract with such Sub- Contractors. Only after the Owner's approval, the order to the Sub-Contractor shall be placed.
- ✓ It has been agreed that only those manufacturers who have supplied/ and are approved by PGCIL for at least 400 V D/C quad towers in the last 3 years shall be considered for tower supply by the Contractor. In case, any other manufacturer is suggested by the Contractor, the same shall be approved by the Owner after assessment of the factory of the Sub-Contractor.
- ✓ The un-priced copy of all offers and purchase orders, issued to the Sub-Contractors, shall be furnished to the Owner within 15 days of issuance of the same.
- ✓ Notwithstanding any approval granted by the Owner as to the acceptability of Sub- Contractors or of the terms of a sub-contract proposed to be entered into by the Contractor, the Contractor shall be responsible for observance of all Sub-Contractors responsibilities for all the requirements under this Contract and the Contractor shall not be relieved of any of its obligations hereunder. The Contractor shall be solely responsible for the acts or defaults of any Sub-Contractors, its agents or employees, as fully as if they were the acts or defaults of the Contractor, its agents or employees. The Contractor shall remain SPOC (Single Point of Contact) to the Owner

IE observed that the criteria for selection of sub – contractors do not indicate the supply experience of GIS sub – station. Hence, the credential check of the Sub – contractor on grounds for supply of materials for GIS Sub – station will be difficult. However, the sub – contract for supply and erection of GIS sub – station is awarded to M/s. Alstom T&D India Limited, it being a renowned Company for Sub – station works

4.1.9. Latent Defects

At the end of the Defects Liability Period, the Contractor's liability in respect of Defects ceases except for Latent Defects. The Contractor's liability for Latent Defects shall be applicable during the Latent Defects Liability Period, which shall be for a period often (10) years from the expiry of the Defects Liability Period and the terms shall be as per the GCC.

4.1.10. Contractor's/Owner's representation and warranties

The Contractor hereby warrants to the Owner that the Scope of Work will be carried out uninterrupted without any delay and that it shall otherwise perform its obligations under this Contract as per the terms of GCC in this regard.

The Owner hereby warrants to the Contractor that it shall meet its obligations, commitments under this Contract as per the terms of the GCC in this regard and be responsible for its scope of work.

4.1.11. Other Provisions

IE has reviewed the clauses pertaining to Interpretation of Contract Documents, Contracts covenant to supplies for 400 kV D/C Transmission Lines and Sub-station, Key man-power that includes Owner's Manpower and Contractor's Man-power, Indemnity, Confidentiality, Suspension, Termination Force Majeure, Notices to Owner and contractors, Governing Laws and found the same to be in order.

IE found the above provisions are in line with other Transmission line projects and are in order.

4.2. Erection Contract

The Erection Contract dated 15.01.2015 has been placed on M/s Sterlite Power Grid Ventures Ltd., Haveli-396230 under NRSS-XXIX Transmission Ltd. Project.

The Erection Contract is for laying of 400 kV D/C Transmission lines from Jalandhar in the state of Punjab to Samba (Jammu & Kashmir), 400kV D/C Transmission Line from Samba in the state of Jammu & Kashmir to Amargarh in the state of Jammu & Kashmir, 400kV D/C Transmission Line at Amargarh (in the state of Jammu & Kashmir) and installation of 400/220 kV GIS substation at Amargarh (in the state of Jammu & Kashmir).

4.2.1. Scope of Work

The scope of work broadly covers the following:

- It includes but is not limited to erection works and necessary site preparation including mobilization, right of way, forest clearance if any, and provision of all Labour, materials, consumables, tools and plants as required for the Erection Works of transmission lines of the size and scope of the Project, other construction services and management for the Project and the remedy of defects within agreed Defect Liability Period. The detailed scope of the Works shall be as per the Technical Specifications of the Owner, and subsequent amendments, which forms integral part of this Contract.
- The Contractor has carefully studied the technical parameters of the equipments/ materials to be erected under this Contract and agrees that the service rendered by it shall be fit for the said purpose. The major activities to be covered under scope of work but not limited to shall be as follows:

- The Contractor shall also be responsible for stringing and associated works for the 400kV D/C Transmission lines Jalandhar (Punjab) to Samba (Jammu & Kashmir), 400kV D/C Transmission Line from Samba (Jammu & Kashmir) to Amargarh (Jammu & Kashmir), 400kV D/C LILO Transmission Line at Amargarh (Jammu & Kashmir) and 400/220kV GIS substation at Amargarh (Jammu & Kashmir) under NRSS XXIX Transmission Limited (NRSS-XXIX) project.
- The Contractor shall also be responsible for erection of all equipment and material and associated works for the 400kV D/C Transmission lines Jalandhar (Punjab) to Samba (Jammu & Kashmir), 400kV D/C Transmission Line from Samba (Jammu & Kashmir) to Amargarh (Jammu & Kashmir), 400kV D/C Transmission Line at Amargarh (Jammu & Kashmir) and 400/220 kV GIS substation at Amargarh (Jammu & Kashmir) under NRSS XXIX Transmission Limited (NRSS-XXIX) project.
- All statutory approvals related to PTCC, Road, Railway, Civil aviation, river, shut down, electrical inspectorate and any other agency, Land Acquisition, ROW clearance and related issues including crop/tree compensation payment/clearance etc. are in Contractor's scope. Any approvals from RLDC/CTU/LTCC/SLDC shall be in the scope of the Contractor, all related documentation and paperwork for the same shall be done by the Contractor.
- Project Insurance as indicated in the GCC and subsequent amendments to the tender documents (NRSS-XXIX/EPC/14-15/001 and NRSS-XXIX/EPC/14-15/002). (Erection all risks (EAR) insurance of the complete Project will be in the scope of Contractor).
- EHV Crossings:
 - Arranging the Shutdown activities for crossings of the EHV/ HVDC/ HV/LT etc. from the state utilities, PGCIL, private transmission lines, RLDC shall be in the scope of the Contractor. Including all paperwork.
 - Compensation for loss of revenues during the shutdown period for working on EHV crossings demanded by the utilities/PGCIL/ private transmission line owner shall be borne by the Contractor.
 - The Contractor shall ensure compliance with all the relevant acts, laws, rules, regulations, guidelines at its own cost and expenses and furnish all certificates in support of the compliance done for further submission with the concerned authorities.
- Apart from the activities listed above, the Contractor shall also undertake the following activities within the Forest:
 - Contractor shall undertake the work of tree cutting, its transportation etc. and liaising for the construction of foundations, erection & stringing. The deforestation charges to be paid to the forest authorities for the construction of line through the forest shall be in Owner's scope.
 - Complete Detail Survey, Check Survey, erection & stringing in forest area is in the scope of the Contractor.
 - Expediting & assistance in preparation of Application case for the forest shall be in the scope of Contractor. Any liaising work for forest application is included in Contractor's scope
- Detail Survey and Check Survey of the route.
- Terminating the transmission lines at the respective substation gantries.
- Testing and commissioning of the erected transmission lines and sub-station.
- The Contractor shall submit to the Owner all complete as built drawings, O&M manuals, detailed tower profile etc. before Operational Acceptance.

- All other misc. items not specifically mentioned in the Specifications and/or BOQ but are required for the successful commissioning of the transmission line, unless specifically excluded in the Specifications required for completion of job, shall deemed to be included in the contract Value and in the scope of the Contractor.
- The Contractor shall be responsible for the complete integration of material supplied for the project. (Owner's and Contractor's supplied) and its installation/erection at site.
- All other misc. works not specifically mentioned in the Specifications but are required for the successful commissioning of the transmission line, unless specifically excluded in the Contract required for completion of job, shall deemed to be included in the Contract Value and in the scope of the Contractor.

IE observed that the obtaining of Forest Clearance and acquisition of land is the responsibility of SPGVL, which depends up on the approval from the concerned Government Authorities. IE found that the above clause is better for the Owner and also, the scope of work covered in the contract is in order.

4.2.2. Responsibility for Completeness

- ✓ Any scope of work/services (including the scope of works as mentioned in this contract) ("Works") which has not been specifically mentioned but is required, in the opinion of the Owner under the purview of this Contract, for the completion of the work/services and/or for safe, trouble free, normal operation shall be rendered at no extra cost or time to the Owner, unless expressly excluded in this Contract. Such work shall not be cause for delay or reason to seek extension of time from the Owner.
- ✓ Any approval by the Owner at any stage for any works by sub-Contractors appointed by the Contractor or their representative/employees/agents shall not relieve the Contractor of its obligations under this Contract. In case of sub contracting, the Contractor shall continue to be liable for all the compliances under this Contract and shall be Single Point of Contact (SPOC) to the Owner on behalf on any sub Contractor(s) which Contractor engages.
- ✓ The performance of the Sub-Contractors of the Contractor or their representative/employees/agents shall not relieve the Contractor of its obligations under the Contract.

4.2.3. Contractor's Covenant to Erection Works for 400 kV D/C Transmission Lines and Sub – station

- ✓ In consideration of the payments to be made by the Owner to the Contractor as provided in the Agreement, the Contractor covenants with the Owner to complete the Works in conformity in all respects with the provision of the Contract.
- ✓ Contractor shall submit to the Owner on quarterly basis, documents pertaining to statutory compliances viz. ESI, EPF etc., without any failure.
- ✓ Contractor shall submit to the Owner on quarterly basis cash-flow statement, stock statement pertaining to work progress in the specific quarter along with progress report of the Project.
- ✓ Preparation of the forest application for the forest approval shall be in the Contractor's scope.
- ✓ Approval from RLDC/CTU/LTTC/SLDC in the scope of Contractor, also all related documentation and paper work for the same shall be done by the Contractor.

- ✓ Arranging the Shutdown activities for crossings of the EHV/ HVDC/ HV /LT etc. from the state utilities, PGCIL, private transmission lines, RLDC shall be in the scope of the Contractor.
- ✓ Compensation for loss of revenues during the shutdown period for working on EHV crossings demanded by the utilities/PGCIL/ private transmission line Owner shall be borne by the Contractor.
- ✓ Land Acquisition, ROW resolution and Crop/Tree Compensation shall be in the scope of Contractor. Contractor shall depute their best team for obtaining and resolving ROW Clearances & Other issues /Tree/Crop compensation. Contractor's team shall ensure that there is no time and cost escalation in the project on account of this activity. Contractor shall speedily resolve all ROW issues. ROW resolution and Crop/Tree Compensation shall be reimbursed plus facilitation charge by the Owner on submission of documents.

4.2.4. Effect Date and Completion Schedule

The Effective Date of Erection Contract is 06/12/2014. ("Effective Date").

The period from the Effective Date to the Operational Acceptance and handing over of the Facilities shall be referred to as the "Contract Period" herein. The "Operational Acceptance" (As mentioned in GCC of RFP) shall be considered after One (1) month from the COD.

The Contractor agrees that time is the essence of this Contract. The Contractor shall ensure that the entire Scope of Work shall be completed by 04.10.2018, which shall also be referred to as "Completion Date". The period from the Effective Date of the Contract to the Completion Date shall be referred as "Completion Period".

Contractor shall make the best efforts for an early completion of the Facilities and shall support the Owner with all the necessary requirements to achieve an early COD of the Facility.

4.2.5. Guarantees

The Advance Guarantee ("AG") shall initially be kept valid up to Completion Period of the complete transmission line. The validity of the AG shall be extended by the Contractor from time to time till the actual date of Completion of the Facility in accordance with the Contract.

Project Company informed that Advance Guarantee is in the form of Corporate Guarantee.

The Performance Guarantee ("PG") shall be for a sum equivalent to Ten Percent(10%) of the Contract Value and shall be submitted in two parts:-

- ✓ During the execution of Contract till Operational Acceptance.
- ✓ During the Defect Liability period.

Project Company informed that Performance Guarantee is in the form of Corporate Guarantee.

The Performance Guarantee for the performance of Contract during execution shall be valid up to Operational Acceptance date under this contract. This Guarantee shall be returned on submission of PG for the Defect Liability Period of Twenty Four (24) months.

The Contractor understands and accepts that the submission of the Guarantees are the integral part of the Contract and any delay on this account will lead to the breach of the Contract and would expose Contractor to other actions available and under this Contract and in law.

4.2.6. Liquidated Damages

Time being the essence of the Contract, in the event the completion schedule as set out in this contract are not met, Owner shall be entitled to levy liquidated damages on the Contractor as mentioned in the subsequent articles.

If the Contractor fails to achieve the completion date as defined in this contract, the Contractor shall pay to Owner a sum calculated @ 1% (One percent) of the Contract Value for each week of delay or part thereof subject to a maximum of 10% of the Contract Value as liquidated damages ("Liquidated Damages") for such default and not as penalty, without prejudice to the Owner's other remedies available under this Contract.

IE observed that the obtaining of RoW is the responsibility of the Contractor, which depends up on the concerned approval of Government Authorities and tenants. IE found that the above clause is better for the Owner.

IE found that if the Project is delayed for 6 months from the SCOD as per Contract, reasons solely attributable to Contractor, the maximum LD envisaged in this Erection Contract is Rs 58.7 Crores which is 10% of Contract value.

The Owner may without prejudice to any other method of recovery, deduct the amount of such damages from any amount due or becoming due to the contractor or from any securities / guarantees under this contract. The payment deduction of such damages shall not relieve the Contractor from its obligation to complete the works and remedy the defects in the works or from any other of its obligations and liabilities under the Contract.

IE opines that the Line Project is commissioned and charged and hence no applicability of LD.

4.2.7. Site Requirement

Keeping in view of the project time lines and to meet the milestones, the Contractor shall follow the below aspects diligently during the execution of works at site.

Separation of ROW resolution team and work execution team is required to be put in place for making the work front available continuously for smooth execution of the works. The Contractor shall be dealing & liaising with the relevant Govt. authorities/ private entities as and when required for ROW resolution. The Construction Manager shall be enabled suitably with sufficient team and resources. Detailed plan of forming the teams for execution of the things shall be submitted by the Contractor to the Project Manager of the Owner before commencement of works for acceptance.

Necessary evaluation mechanism of deciding the compensations payable under section 10(d) & 16(3) of the Telegraph Act, 1885 shall be devised, right in the beginning of the Project. Contractor shall ensure timely disbursement of compensations, tree or crop, diminution in value of land for the reason of the drawal of overhead power line across the land or any other well in time so as to avoid any public agitation/ unrest for the execution of works. The Contractor's Construction Manger at site shall be adequately enabled/empowered for doing all the needful in this matter. The Owner shall be provided the record of the compensations released for maintaining as a licensee for reference as may be sought by various authorities. Separate team for disbursing the compensation payments shall be engaged without mixing the responsibilities with execution team members.

For all ROW issues, and compensations to be paid as per section 10(d) & 16(3) of the Telegraph Act, 1885 for crop/tree cutting or any other or related compensations for the total line length, the Contractor shall take the complete responsibility of the same unto 6 months after the Operational Acceptance of the line, after which the Contractor shall submit an indemnity bond to the Owner regarding these payments and any unresolved issues.

Safety and security of the work place and work men will have to be ensured by the Contractor for smooth execution of the works. Necessary preventive and proactive measures shall be put in place by the Contractor as per the directions of the Project/ site in charge from time to time based on the site conditions.

Separate teams shall be engaged for enumeration, preparation of documentation & submission of tree cutting applications to the concerned officers for approval shall be arranged much in advance as directed by the site in charge. A suitable program in this respect shall be submitted by the Contractor for acceptance by the site in charge. Clearance of the corridor be done well in advance before initiating the stringing works so as to maintain no damages happen to the conductors during stringing.

Detailed planning of executing the EHV power line crossings shall be done much in advance considering the inputs of seasonal load flows and staggering days. The plan shall be submitted to the site in charge for acceptance. All EHV crossings outage be arranged by the EPC turnkey Contractor as per requirement. All other power line crossings LT/11kV/33kV outages should be timely arranged by the Contractor so that it does not hamper planned stringing schedule even if it amounts to providing temporary arrangements like cable bypass etc. for uninterrupted works.

Any issues from time to time during the course of execution as directed by the Project Manager in the interest of the Works for faster execution shall be implemented by the Contractor diligently.

The Contractor can demobilize its erection gangs upon completion of the work only after approval of the Owner; however the site establishment shall not be de-mobilized as Contractor is required to provide relevant and specialized manpower for the smooth and efficient COD of the line.

4.2.8. Service Level Agreement

It is recognized and understood between Contractor and Owner that deployment of qualified and experienced manpower as per the project management chart is necessary and essential to execute the Scope of Work as per specified standards and the time schedule and key human resources as approved by the Owner such as Project Manager, Construction Manager, line in-charge etc. will be continuously deployed during execution of contract.

Penalties for Safety non-compliance/ non addressal of Quality Non- Compliance report are as mentioned below:

Description	Grace Period	Penalty
Availability of TSE Machine of suitable tonnage in working condition & its related man-power	15days from resource mobilization schedule	Rs.10,000 per day per machine
Delay in Labour Payments	15 days from the due date	Rs. 200 per day of delay per labour
Project Manager/Construction Manager	6 Weeks from Resource mobilization schedule	Rs.5000/- per day line
Safety Non Compliance to be addressed	30 days from Non Compliance Report	As per the EHS SOP
Quality Auditing by the surveillance team on a random manner basis	15days from Non Compliance Report	Rs.5000/- per NCR per incident on Non rectification
Steel Drums of Conductors to be returned to main stores	Within 30 days of its use	Rs.20,000/-per drum

For the sake of clarity, it is understood by the parties that the provision this Article does not stop Owner to initiate any other action for Safety non – compliance/ non addressal of Quality Standards against the Contractor as available under this Contract and in law.

4.2.9. Insurance

The Contractor shall take necessary insurance policies for an appropriate value so as to cover all risks required as per statute as well as may be required by the Owner. The said insurance policies shall also cover fire and allied risks, miscellaneous accidents workman compensation risks, loss or damage in transit, theft, pilferage, riot and strikes and malicious damages, civil commotion, weather conditions, accidents of all kinds, comprehensive risks during transportation, handling, storage, erection and commissioning. Besides, the Contractor shall also take an "All Risks" insurance, Third Party Liability insurance, Personal Accident Insurance in respect of Contractor's Supervisory Personnel and workmen and such other insurance as required as per statute and mentioned in GCC clause 30.

The value of the insurance policy shall be as indicated in the GCC clause 30 and subsequent amendments.

The Owner shall be the principal beneficiary of the policy along with the Contractor and shall reserve the exclusive right to assign the policy.

In the event of loss or damage, the Contractor shall be solely responsible to lodge the claims and settle the same. The Contractor shall proceed with repair or replacement of the goods without waiting for settlement of the claim. It is further clarified that neither extension of completion schedule nor any extra claim shall be admissible on account of insurance.

Copy of such insurance policies shall be submitted to Owner prior to commencement of the work

Without limiting any of his obligations under the Contract, the Contractor, at its cost shall arrange, secure and maintain all insurance as may be pertinent to the Works and obligatory in terms of law to protect its interest and interests of the Owner against all perils detailed herein within Thirty (30) days from the notification of the Award.

The Contractor shall take the insurance for 110% of complete contract Value and Owner issue material with 40% escalation.

4.2.10. Sub – Contracting

The Contractor shall not subcontract the whole of the Scope of Works, unless otherwise stated in this Contract:

- ✓ The Contractor shall apply to the Owner for permission to enter into any sub-contract with any proposed Sub-contractor before the intended date of entering into a contract with such Subcontractor; the Contractor shall submit the details (other than Value) of the subcontract proposed to be entered into and also of the proposed Subcontractor, along with its request for consent of the Owner in respect of the proposed Subcontract.
- ✓ The un-priced copy of all offers and work orders, issued to the Sub-contractors, shall be furnished to the Owner within 15 days of issuance of the same; and
- ✓ The Contractor shall ensure that the Sub-contractors purporting to enter into contracts with other Sub-contractors in respect of any matters falling within the scope of this Contract comply with the provisions applicable to the Contractor in respect of sub-contracting.

Notwithstanding any approval granted by the Owner as to the acceptability of a Sub-contractor or of the terms of a sub-contract proposed to be entered into by the Contractor, the Contractor shall be responsible for observance of all Subcontractor's responsibilities, for all the requirements under this Contract and the Contractor shall not be relieved of any of its obligations hereunder. The Contractor shall be solely responsible for the acts or defaults of any Subcontractor, its agents or employees, as fully as if they were the acts or defaults of the Contractor, its agents or employees. The Contractor shall remain SPOC (Single Point of Contact) to the Owner.

The Contractor shall obtain from its Sub-contractors for the benefit of the Owner, the best possible warranties and guarantees in respect of the equipment and workmanship of such portions of the Contractor's equipment that is procured from, and of such part of the Works that is performed by, the Sub-contractors, provided however that such warranties and guarantees shall be no less stringent than those sought from the Contractor herein.

Nothing contained in these provisions shall be construed to bind the Owner to the Sub-contractor in respect of any of the obligations under the sub-contracts and the Contractor shall be solely responsible for all claims and liabilities raised by the Sub-contractors under the sub-contracts.

If a Sub-contractor has undertaken a continuing and assignable obligation in the nature of a warranty or otherwise, to the Contractor for the Works performed, or materials or services provided, or supply of the Contractor's equipment or any part thereof, by such Sub-contractor, and if such obligation extends beyond the expiry of the Contract Period, the Contractor shall, prior to the issue of the Performance Certificate, assign the benefit of such obligation to the Owner for the unexpired duration of such obligation. All sub-contracts and purchase and work orders in relation to the works shall provide that they are assignable to Owner/the Owner's Representative.

4.2.11. Limitation of Liability

Except in cases of fraud, negligence or misconduct, or strict or absolute liability or obligation of the Contractor to indemnify the Owner, the Contractor shall not be liable to the Owner, whether in contract, tort, or otherwise, for any indirect loss or damage, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Owner. The Owner shall not be liable whether in contract, tort, or otherwise, for any indirect loss or damage suffered by the Contractor.

The aggregate liability of the Contractor to the Owner, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Value, provided that this limitation shall not apply to the cost of repairing, or to any obligation of the Contractor to indemnify the Owner with respect to patent infringement.

4.2.12. Defect Liability

The Contractor shall be liable to remedy or compensate the Owner for the remedy of any defect, imperfection, deficiency or any other fault in the Work or the Element(s) or in the execution of the works or a breach of the requirements of this Contract (collectively called "Defects") in accordance with this clause.

The Defects Liability Period for each Element shall be twenty four (24) months from the date of Taking Over of such Element.

IE is of the Defects Liability Period of twenty four (24) months is in line with Industry practice.

If during the Defects Liability Period any Defect is found, the Contractor shall promptly, in consultation and agreement with the Owner regarding appropriate remedy of the Defects and at the cost of the Contractor, repair, replace or otherwise make good such Defect as well as any damage to the Element caused by such Defect and losses suffered by the Owner thereby and shall ensure that the Element is in accordance with the requirements of this Contract.

The Owner shall give the Contractor a notice stating the nature of any such Defect together with all available evidence thereof, promptly following the discovery thereof. The Owner shall afford all reasonable opportunity for the Contractor to inspect any such Defect.

If the repair or making good is of such a character that it may affect the efficiency of any Element, the Owner may give to the Contractor a notice requiring that such Element and the same shall be made by the Contractor, whereupon the Contractor shall carry out such tests at its own risk and cost.

If such defective part fails the tests, the Contractor shall remedy the Defect or carry out such replacement or make good (as the case may be) until that part of the material(s) passes such tests.

If the Contractor fails to commence the work necessary to remedy such Defect or any damage to the material(s) caused by such Defect within fifteen (15) days) or if after having so commenced fails to remedy the Defect in the manner provided in clause 22 of GCC to the satisfaction of the Owner, within a reasonable period of time, the Owner may, following notice to the Contractor, proceed to carry out such work either by itself or through any other person at the risk and costs of the Contractor. In addition to its obligation to remedy Defects hereunder, the Contractor shall also be responsible for all costs incurred by the Owner in connection with such Defects including all costs of dismantling any Items, clearing it from the Site and returning such Items to the Contractor and such costs shall be paid to the Owner by the Contractor or may be deducted by the Owner from any amount due to the Contractor.

If any part Element cannot be commercially used by reason of such Defect and/or failure in making good of such Defect, the Defects Liability Period of such Element shall be extended by a period equal to the period during which such Element or such part cannot be used by the Owner because of any of the aforesaid reasons. Upon rectification of the Defects in an Element by repair, such repaired Element shall have the Defects Liability Period extended by a period mentioned in this clause, from the time of such repair of such Element

The Contractor's above obligations (under Defect Liability) shall not apply to:

Any materials that are supplied by the Owner and are normally consumed in operation, or have a normal life shorter than the Defect Liability Period stated herein;

Any designs, specifications or other data designed, supplied or specified by or on behalf of the Owner or any matters for which the Contract has disclaimed responsibility herein; or

Any other materials supplied or any other works executed by or on behalf of the Owner, except for the work executed by the Owner.

4.2.13. Latent Defects

At the end of the Defects Liability Period, the Contractor's liability in respect of Defects ceases except for Latent Defects. The Contractor's liability for Latent Defects shall be applicable during the Latent Defects Liability Period, which shall be for a period of ten (10) years from the expiry of the Defects Liability Period and other terms shall be as per the GCC.

IE is of the view that Latent Defect Liability Period of ten (10) years from the expiry of the Defects Liability Period is good for the Project and Owner.

4.2.14. Contractor's /Owner Representation and Warranties

The Contractor hereby warrants to the Owner that the Scope of Work will be carried out and that it shall otherwise perform its obligations under this Contract as per the terms of GCC in this regard.

The Owner hereby warrants to the Contractor that it shall meet its obligations, commitments under this Contract as per the terms of the GCC in this regard and be responsible for its scope of work

4.2.15. Other Provisions

IE has reviewed the clauses pertaining to Interpretation of Contract Documents; Key man-power that includes Owner's Manpower and Contractor's Man-power, Indemnity, Confidentiality, Suspension, Termination Force Majeure, Notices to Owner and contractors, Arbitration, Governing Laws and found the same to be in order.

IE found the above provisions are in line with other Transmission line projects and are in order.

4.3. Civil Contract

The above Civil Contract dated 15.01.2015 has been placed on M/s Sterlite Power Grid Ventures Ltd., Haveli-396230 for Civil work Construction of all the equipment/materials for the above facilities as mentioned in the above table under NRSS-XXIX Transmission Ltd. Project.

4.3.1. Scope of Work

The scope of work broadly covers the following:

- ✓ Civil work for construction as per requirement, necessary site preparation including mobilization of manpower, machineries, Labour, materials, consumables, tools and plants, as required for the construction of transmission lines of the size and scope of the Facility and handing over of the Facility which shall be complete in all respects, arranging complete ROW and Statutory Approvals, if any and also other construction services and management for the Facility.
- ✓ Design, Classification and Casting of foundation for different types of towers, gantries, transformers, reactors, GIS, Lattice Structures, associated SA along with jacking pad and pylon supports, rail track and all other equipments.
- ✓ Civil works for Switchyard panel rooms, GIS room, kiosk and fire resistance wall.
- ✓ Construction of Roads, Cable Trench, Road Rail Tracks, Culverts, Drainage System.
- ✓ Construction of Fire Fighting Pump House, Control Room cum administrative building, fire water tank, security building, store room and boundary wall with gate.
- ✓ Construction of permanent water supply system and rainwater harvesting system.
- ✓ Land Levelling.

- ✓ All statutory Approvals related to PTCC, Road, Railway, Civil aviation, river, shut down, electrical inspectorate and any other agency, ROW including crop/ tree compensation payment/ clearance etc. is in Contractors scope.
- ✓ Forest:
 - Forest clearance is in Contractor's scope. Contractor shall undertake the work of tree cutting, its transportation etc. and liaisioning for the construction of foundations for the purpose of laying of line. The deforestation charges to be paid to the forest authorities for the construction of line through the forest shall be in the scope of the Owner
 - Complete Check Survey in forest area is in the scope of the Contractor
- ✓ EHV Crossing
 - Arranging the Shutdown activities for crossings of the EHV/ HVDC/ HV/LT etc. from the state utilities, PGCIL, private transmission lines, RLDC shall be in the scope of the Contractor. Including all paperwork.
 - Compensation for loss of revenues during the shutdown period for working on EHV crossings demanded by the utilities/PGCIL/ private transmission line owner shall be borne by the Contractor.
 - The Contractor shall ensure compliance with all the relevant acts, laws, rules, regulations, guidelines at its own cost and expenses and furnish all certificates in support of the compliance done for further submission with the concerned authorities.

IE observed that the scope of work covered in the contract is in order.

4.3.2. Contract Period and Completion Schedule

The period from the Effective Date to the Operational acceptance and handing over of the Facilities shall be referred to as the "Contract Period". The "Operational Acceptance" shall be considered after 1 month from COD.

The Contractor shall ensure that the entire Scope of Work shall be completed by 04.10.2018, which shall be referred to as "Completion Date". The completion period is around 46 months.

IE found that the SCOD is 4th October 2018 as per CERC order 10/12/2014 which matches the completion date (4th October 2018) indicated in the Contract.

4.3.3. Advance Guarantee

The Advance Guarantee shall initially be kept valid up to Completion Period of the complete transmission line. The validity of the AG shall be extended by the Contractor from time to time till the actual date of Completion of the Facility in accordance with the Contract.

Project Company informed that the Advance Guarantee is in the form of Corporate Guarantee.

4.3.4. Contract Performance Guarantee

The contractor has to submit an unconditional and irrevocable Contract Performance Bank Guarantee for a sum equivalent to 10% of the Contract Price and shall be submitted in two parts:

- During the execution of Contract till Operational Acceptance

- During the Defect Liability period

Project Company informed that the Performance Guarantee is in the form of Corporate Guarantee.

4.3.5. Liquidated Damages

If the Contractor fails to achieve the completion date, the Contractor shall pay to Owner a sum calculated @ 1% (One percent) of the Contract Value for each week of delay or part thereof subject to a maximum of 10% of the Contract Value as liquidated damages for such default and not as penalty, without prejudice to the Owner's other remedies available under this Contract.

IE observed that obtaining of RoW is the responsibility of the Contractor, which depends up on the concerned approval of Government Authorities and tenants. IE found that the above clause is better for the Owner.

IE found that if the Project is delayed for 6 months from the SCOD as per Contract reasons solely attributable to Contractor, the maximum LD envisaged in the Civil Contract is Rs 47.90 Crore which is 10% of the Contract Value.

The Owner may without prejudice to any other method of recovery, deduct the amount of such damages from any amount due or becoming due to the Contractor or from any securities/guarantees under this Contract. The payment deduction of such damages shall not relieve the Contractor from its obligation to complete the works and remedy the defects in the works or from any other of its obligations and liabilities under the Contract.

IE opines that the Line Project is commissioned and charged and hence no applicability of LD.

4.3.6. Insurance

The scope of insurance shall be adequate to cover for fire and allied risks, riot and strikes and malicious damages, civil commotion, weather conditions, accidents of all kind, miscellaneous accidents, theft, pilferage, comprehensive risk during transportation, handling, storage, erection and commissioning etc. besides, the Contractor shall also take an "All Risks" insurance, Third Party Liability Insurance, Personal Accident Insurance in respect of Contractor's Supervisory Personnel and workmen and such other insurance as required as per statute.

It is mentioned in the contract that the value of the insurance policy shall be as per clause 30 of the GCC.

4.3.7. Other Provisions

IE has reviewed the clauses pertaining to Force Majeure, Arbitration and Termination and found the same to be in order.

IE found the other provisions are in line with other Transmission line project contracts and are in order.

4.4. Overall Observation

IE reviewed the clauses pertaining to Force Majeure, Arbitration and Termination and found the same to be in order.

The contract also incorporates the implication of introduction of GST during the Contract period. On mutual agreement, GST should be dealt on actual basis on submission of relevant documentary proofs. In case if there is any decrease in the overall taxes and duties, the same shall be passed to the Owner. **IE opines that cost incurred towards GST should be appropriately dealt by the Project Company in the Project Cost. (Risk Category – A)**

As per TSA, IE observes that if the Project is delayed by 180 days beyond schedule COD reasons attributable to TSP, the maximum LD imposed as per TSA is Rs 324.25 Crores.

However, as per the EPC Contract, if the Project is delayed beyond schedule COD for reasons solely attributable to EPC Contractor, the maximum LD recovered as per EPC Contract (combined Supply, Erection and Civil works contract) is Rs 250.00 Crores. IE found that there is a shortfall of Rs 74.25 crores, which shall be covered by the EPC Contractor, for delay due to any reasons.

As per the terms of Contract, the Contract Value is FIRM and non negotiable for the entire duration of the Contract and the same shall not be subject to escalation or increase on any account whatsoever, at any point of time during the execution of this Contract. The quantity mentioned in BOQ is firm, irrespective of quantity put to use in the said project the total quantity will be billed by contractor to owner. No escalation / overrun compensation shall be paid for the extended duration of Contract, if delay is for the reasons attributable to the Contractor.

Observations of IE regarding the contracts are given below:

- The EPC Contract executed by NRSS with SPGVL is a fixed price turnkey contract and any cost escalation has to be absorbed by SPGVL without passing the same on to NRSS.
- The sub-contracts awarded by SPGVL to various contractors are on BOQ (Bill of Quantities) basis, with the contract value determined based on estimated quantities of required materials & the unit price of each material specified in the contracts.
- The material quantities presently specified in each sub-contract are estimates based on the initial check survey, soil testing etc. carried out by EPC Contractor & sub-contractors and are subject to change during the course of project implementation.
- However, the unit – rate of each material will remain fixed as specified in each sub-contract.
- Considering the hilly & difficult terrain of Phase – II (completely located in J&K) involving high altitudes & snow – clad terrain, EPC Contractor expects an increase of 20% from the estimated material quantity presently specified in each sub – contract and correspondingly, 20% increase in contract values. **IE opines that considering the difficult terrain of Phase – 2, increase of 20% in contract values is reasonable, which can only be evaluated during the Project Completion.**

- To insulate the Project SPV's from any cost over – runs & delays, SPGVL provides fixed price turnkey EPC contracts to the SPV's and takes on the risk of land acquisition / right of way & forest clearances on itself. Any increase in project cost is absorbed by SPGVL and not passed on to the SPV. In order to be able to absorb such risks across projects, SPGVL needs to have an element of risk margin built into each contract with Project SPV's, which can enable SPGVL to absorb such un-predictable risks. Recent instance of this was seen in NRSS when ~8% increase in cost of KEC sub-contract for Phase-I & cost of additional 3 towers to be constructed for bypassing the bays at Jalandhar & Samba substation, were absorbed by SPGVL without passing the same on to NRSS.
- Sterlite Group has implemented its earlier transmission projects, namely BDTCL, JTCL & ENICL using the package route – where different reputed contractors were roped in for implementing different sections of the project. Based on the above past experience of projects implementation, complexity of the NRSS & difficult terrain and to minimize implementation risks, Sterlite Group considered it important to have a single point responsibility for co-ordination of EPC activities (including land acquisition, forest clearances & RoW). Hence SPGVL has taken over these responsibilities

Based on the experience, IE is of the view that the main reason which could result in delay of the Project are:

- **Obtaining of Forest Clearance**
- **Obtaining of ROW**
- **Obtaining other permits and clearances as in Power line crossing, Railway crossing, NH crossing etc.**

IE observed that EPC Contractor has taken responsibility for obtaining RoW, and all permits and clearances.

4.5. Back to Back Contracts

SPGVL has signed several sub – contracts for the supply, erection and construction of the Transmission System. The various sub – contracts have been discussed in the table below:

Table 4.1 - List of Sub – Contractors

S. No.	Scope of Work	Sub – Contractor
Phase – 1		
1.	Supply, Civil and Erection work for Jalandhar – Samba 400 kV D/ Line	KEC
2.	Supply of ACSR Moose Conductor (J – S)	STL
3.	Supply of OPGW and Hardware Fittings	STL
4.	Civil Pile Foundation Works	Shreyas
Phase – 2		
5.	Supply, Civil and Erection work for Samba – Amargarh (Package – 1)	KEC
6.	Supply, Civil and Erection work for Samba – Amargarh (Package – 2)	TATA Projects

S. No.	Scope of Work	Sub – Contractor
7.	Supply, Civil and Erection work for Samba – Amargarh (Package – 3)	
8.	Supply, Civil and Erection work for Samba – Amargarh (Package – 4)	Unitech
9.	Supply, Civil and Erection work for LILO of Uri – Wagoora (Part of Package – 4)	
10.	Supply and Erection of GIS sub – station at Amargarh	Alstom T&D
11.	Civil Works of GIS at Amargarh	Shreyas & VCC
12.	Aerial construction Services	Erickson Inc.
13.	Project Execution Consulting Services	Burns McDonnell Inc.
14.	Supply of Conductor (Sambha – Amargarh Line)	Sterlite Technologies Ltd.
15.	OPGW & Hardware	Sterlite Technologies Ltd.
16.	Supply of Hard Ware and Accessories	Mosdorfer
17.	Supply of Insulators	Nanjing Electric
18.	Additional OPGW	STL
19.	Helicopter Running Cost	Himalaya

As per schedule provided for Phase – 1 (Jalandhar to Samaba 400 kV Transmission Line) by the sub – contractor (M/s KEC International Ltd.), the testing and commissioning was scheduled as 31st December 2016. As per POSOCO letter dated 28th December, 2016, stating successful completion of trial – run operation of 400 kV Jalandhar (PG) – Samba (PG) ckt 1 & 2 on 10th December, 2016, **IE noted the 400kV Jalandhar to Samba Transmission line is charged and commissioned along with the associated bays.**

As per schedule provided by the sub – contractors for Phase – 2 of the Project, IE noted that the testing and commissioning was expected by 30th November, 2017 for Package 1 to 3 and 31st July, 2017 for package 4. However, due to unanticipated insurgency for 6 months during the Year 2016, the construction works got delayed. As of 24th September, IE observed that all the mechanical and electrical works were complete for the line. The CEA approval letter for ready to Energize was accorded vide letter dated 20th August, 2018. The POSOCO letter certifying the successful completion of Trial – run operation was accorded vide letter dated 20th September, 2018.

As per the substation construction schedule provided by M/s Alstom, IE noted that the final commissioning was expected by January, 2018.

From the above project completion schedule as approved between the Main EPC Contractor (SPGVL) and the Sub – Contractors for the Transmission Line and the Sub – station, IE opines that the schedule completion is well within the TSA completion schedule with a cushion of 10 months.

5. DESIGN PHILOSOPHY OF TRANSMISSION SYSTEM

5.1. Technical Requirements for Transmission Lines

The Tower shall be fully galvanized using mild steel or/and high tensile steel sections. Bolts and nuts with spring washer are to be used for connection.

IS Steel section of tested quality in conformity with IS 2062:2006, grade E 250 (Designated Yield Strength 250 Mpa) and/or grade E 350 (Designated Yield Strength 350 Mpa) are to be used in towers, extensions, gantry structures and stub setting templates. The contractor can use other equivalent grade of structural steel angle sections and plates conforming to latest International Standards. However, use of steel grade having designated yield strength more than that of EN 10025 grade S355 JR/JO (designated yield strength 355 Mpa) is not permitted. The steel used for fabrication of towers shall be manufactured by primary steel producers only.

In general, Transmission Systems in India adopt the guidelines laid down in CBIP Transmission Line Manual while finalizing the types of Transmission Towers. A brief summary of the CBIP Guidelines for different tower types is given below Table:

TABLE 5.1: TOWER TYPES WITH DEVIATION LIMITS AS PER CBIP GUIDELINES

Tower Type	Deviation Limit	Typical Use
DA	0 deg – 2 deg	To be used on straight runs and up to 2° line deviation
DB	0 deg - 15 deg	Small Angle tower with tension insulator string. To be used for line deviation from 0 to 15 degrees For use as section tower
DC	15 deg - 30 deg	Medium angle tower with tension insulator string. To be used for line deviation from 15 to 30 degrees To be used for transposition of transmission line, if required
DD	30 deg - 60 deg	Large Angle and Dead – end (DE) Tower with Tension Insulator string. To be used for line deviation from 30 to 60 degrees Complete dead end. Dead end with 0 deg to 15 deg deviation both on line and substation side (slack span)

Towers shall be designed as per latest revision of IS-802. In addition to design conditions & stipulations in present IS-802, tower design wind pressure under security condition shall be 75 % of full wind pressure for suspension towers. For line in snowbound area, suitable ice loading (minimum 15mm) on conductor & earth wire shall be considered. As per CEA's technical standards for construction of lines Regulation 2010, Transmission Service Provider (TSP) may adopt any additional loading/ design criteria for ensuring reliability of the line, if so desired and/ or deemed necessary.

The Project Company has followed the CBIP guideline in classifying the different types of Transmission towers. The quantity of each tower type & associated extensions has been finalized based on the survey and route profiling.

IE is of the view point that the towers are designed for Reliability, Security & Safety Conditions as per IS: 802 and CBIP Manual 323 (latest) to take care of broken wire, dead end and anti-cascading effects. In line with the prevailing practices in the country, the Project Company has considered the use of a combination of MS and HT steels in the structural materials to achieve optimum tower designs with minimum weights.

5.2. Review of Tower Design & Type Test Certificate

Jalandhar – Samba 400 kV D/C Transmission Line –

1. Wind Zone – test was conducted for WZ 2 and 4 for J – S line and WZ 2 & 3 for S – A Line
2. Conductor Type – Moose Conductor
3. Conductor Bundle – twin bundle
4. Voltage Level – 400 kV Voltage level
5. Span between the Towers – avg. span of 340 mts

The Tower type test for Jalandhar – Samba Line has been conducted and Certified by M/s. Jyoti Structures Limited. The four tower types DA (+9M Body extension), DB (Angle Tower type with +9.0 M Body Extension), DC (+9.0M Body Extension) and DD (+9.0M Body Extension), considering a factor of safety of 1.02 with the following conditions:

- a) Reliability (Normal condition) – this test is carried out for 0°/ 30°/ 45° wind incidence, with 100% wind velocity and implication of Transverse, Vertical and Longitudinal Forces. Load is being applied in steps of 50%, 75%, 90%, 95% (with a waiting period of 2 minutes at each step) and 100% (with a waiting period of 5 minutes).
- b) Security (Break – Wire Condition) – under this condition 75% of wind velocity as per Tower design is considered. For suspension tower 1 Ground Wire and 1 Conductor is broken. For tension towers, 1 Ground wire and 1 conductor or 2 conductors is broken. For the dead – end tower where maximum tension is encountered, 1 Ground wire and 2 Conductors OR 3 Conductors is broken. Under broken condition correspondingly the longitudinal forces increase.
- c) Safety condition – is a conventional/ ideal tower condition with no wind velocity and just applying the stringing loads, assuming the loads encountered during execution works to ensure the safety of works.
- d) Anti – Cascading – under this condition, all the conductors are intact with 100% loads and no wind velocity, applicable for tension type towers.
- e) Narrow Front Wind – under this condition, maximum narrow face wind velocity applicable particularly for suspension towers.
- f) Destructive test – based on the above all loading condition, the maximum critical load is identified to conduct the destructive test. Accordingly, the loads were increased beyond 100%. Hence as per Test Certificates, under Reliability condition with maximum vertical load, towers could successfully withstand 100% design loads. The loads were increased in steps of 5% after 100% (i.e. 105%) with holding period of 5 mins. No deformation was seen in tower till 115%. While increasing the loads from 115% and above, some shearing effect was observed.

Samba – Amargarh and LILO 400 kV D/C Line –

The Tower type test for Samba – Amargarh and LILO Transmission Lines has been conducted and Certified by M/s. KEC International Limited, who has been assessed and accredited in accordance with the Standard ISO/IEC17025:2005 by National Board for Testing and Calibration Laboratories (NABL).

KEC had prepared the test procedures specific to the site and accordingly has defined all the cases with its criticality which could be encountered at site.

The four tower types DA, DB (Angle Tower type with +3.0 M Body Extension and +3.0M Leg Extension), DB (+6.0M Body Extension and +3.0 M Leg Extension), DD (Heavy Snow Zone with +3.0M Leg Extension and +3.0M Body Extension) and Dead End Tower DD (+6.0M Body Extension and +3.0M Leg Extension) have underwent the test at 28°C maximum temperature with the following conditions:

- a) Reliability (Normal condition) – this test is carried out for 0°/ 30°/ 45° wind incidence, with 100% wind velocity and implication of Transverse, Vertical and Longitudinal Forces. Load is being applied in steps of 50%, 75%, 90%, 95% (with a waiting period of 2 minutes at each step) and 100% (with a waiting period of 5 minutes).
- b) Security (Break – Wire Condition) – under this condition 75% of wind velocity as per Tower design is considered. For suspension tower 1 Ground Wire and 1 Conductor is broken. For tension towers, 1 Ground wire and 1 conductor or 2 conductors is broken. For the dead – end tower where maximum tension is encountered, 1 Ground wire and 2 Conductors OR 3 Conductors is broken. Under broken condition correspondingly the longitudinal forces increase.
- c) Safety condition – is a conventional/ ideal tower condition with no wind velocity and just applying the stringing loads, assuming the loads encountered during execution works to ensure the safety of works.
- d) Anti – Cascading – under this condition, all the conductors are intact with 100% loads and no wind velocity, applicable for tension type towers.
- e) Narrow Front Wind – under this condition, maximum narrow face wind velocity applicable particularly for suspension towers.

Destructive test – based on the above all loading condition, the maximum critical load is identified to conduct the destructive test. Accordingly, the loads were increased beyond 100%. Hence as per Test Certificates, for snow bound regions, under Normal Reliability condition with maximum vertical load and minimum temperature +28% wind and ice, towers could successfully withstand 100% design loads. The loads were increased in steps of 5% after 100% (i.e. 105%) with holding period of 5 mins. No deformation was seen in tower till 110%.

IE observed from the Type Test Report that both the sides of the tower with various combinations of loads was tested which ensured more factor of safety. IE observed that no critical observation was encountered and could withstand all designed load conditions. IE noted that Tower Deflection on both Transverse and Longitudinal direction was measured and was found to be within limits.

Project Company has also submitted the sag tension calculation alongwith type test report. IE observed that for wind zone (WZ – 2 & WZ – 4) sag-tension calculations reports as submitted by the Company are found in order.

The conductor configuration shall be Twin Moose or equivalent AAAC. The details of ACSR/ AAAC Moose shall be as below:

Line configuration	ACSR Conductor specified	Equivalent AAAC conductor based on 53.5% conductivity of Al Alloy	Stranding details of AAAC Conductor
400kV D/C with Twin conductor	Moose : Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 528.5 sq mm, Aluminium area, 31.77mm diameter	31.95mm diameter; 604 sq.mm Aluminium alloy area	61/3.55mm

Note: The transmission lines shall have to be designed for a maximum operating conductor temperature of 85 deg C for both ACSR as well as AAAC.

The required phase to phase spacing and horizontal spacing for 400kV D/C line shall be governed by the tower design as well as minimum live metal clearances for 400kV voltage levels respectively under different insulator swing angles.

The minimum live metal clearances for 400kV D/C line shall be considered as follows:

- i. Under stationary conditions: From tower body: 3.05m & 3.35m for line in snowbound area
- ii. Under swing conditions

Wind pressure Condition	Minimum electrical clearance
a) Swing angle (22°)	3.05m & 3.35m for line in snowbound area
b) Swing angle (44°)	1.86 mtrs

Minimum values of live metal clearance shall be as specified above. Live metal clearance for other conditions viz. maximum operating voltage & swing angle, etc. may be decided by the TSP based on relevant IS standards, prudent utility practices.

Further, the phase to phase spacing for 400kV D/C line shall not be less than 8m.

- i. The minimum ground clearance for 400kV D/C transmission lines shall be 8.84m.
- ii. The minimum mid span separation between earthwire and conductor shall be 9.0m. Shielding angle shall not exceed 20 deg for 400 kV D/C line.
- iii. The switching impulse withstand voltage (wet) for 400kV line shall be 1050 kVp & 1175 kVp for line in snowbound area.
- iv. The Fault current for design of line shall be 40 kA for 1 sec for 400 kV.
- v. Minimum level of pollution for design of lines shall be medium pollution (creepage of 25mm/kV). For locations in light/ medium pollution areas, porcelain/glass insulators shall be used while for locations coming in areas with higher pollution level, antifog type insulators with higher creepage distance or silicone rubber polymer insulators depending on the level of pollution shall be used.

5.3. Tower Foundation

The technical documents of foundation designs were reviewed and generally found to be in order. Following are IE's observations:

- a. The Foundation Design Calculations and drawings have been developed as per Indian standards / CBIP Manual on Transmission Tower Line for Soil types Normal Dry Soil, Wet Soil, Fully submerged Soil, Partially submerged Soil, Dry Fissured Rock & Wet Fissured Rock.
- b. Conventional RCC Spread type foundations have been adopted. For foundation design calculation tower leg extension provision for 3M, 6M & 9M have been adopted
- c. Detailed foundation designs are done after investigation of soil and assessment of soil bearing capacity at different locations along the route length. The design of foundation is in line with IS: 456 and CBIP Transmission Line Manual 323 (latest).
- d. M20 grade concrete and Fe415/500 grade reinforcement steel adopted for RCC foundations

IE observed that the foundation designs for both Transmission lines (J – S and S- A lines) (wind zone – 2 & Wind zone – 4) are meeting Indian standards and as per the good Industry Standards.

5.4. Insulator Design

Insulators are used to support the line conductor and provide clearance from ground and structure.

The insulators installed for the Project are of composite polymer type having Electromechanical Strength of 120 KN for suspension strings & 160 KN for Tension string and minimum creepage of 31mm/kV:

For 400 kV D/C Transmission Line with QUAD ACSR Conductor

Sl. No.	Type of String	Min. Creepage of each Disc	Electro-mechanical strength of insulator (KN)	Mechanical Strength of insulator strings along with hardware fittings (KN)
1.	Single tension	315 mm	120	120
2.	Single 'I' suspension Pilot	315 mm	120	120
3.	Double 'I' suspension	315 mm	160	2X160
4.	Quad tension	330 mm	160	4 x 160 (in line strength)

The conductor offered has been subjected to Type Tests, Acceptance Tests and Routine Tests as per National / International Standards as per the specifications.

IE observed that the Suspension/Tension Insulator Strings are designed as per the technical requirement of the 400kV systems based on the required Creepage Distance applicable for the system. IE has reviewed test reports as provided by the Project Company, and the same is generally found to be in order.

5.5. Quality Assurance and Safety Aspects

5.5.1. Quality Control

The Project Company is adhering to the Quality Assurance Program which is in line with the industry standards and practices and is complying with the requirements of the Indian and International Standards. IE observed that, during execution of work, the Project Company has adopted appropriate measures to keep a strict vigil in implementing the Field Quality Plan & Material Quality Plans and in supervising the construction work. The Material Quality Plans (MQP) of different components were reviewed by the IE and opines that the requisite tests and inspections are in line with Indian and International standards at various stages of the manufacturing process. This includes stringent quality control via Raw Material Inspection, In – process Inspection, Final Inspection and Testing and Checks conducted during Packing & Despatch. IE is satisfied with the QAP followed for implementation of the Project.

5.5.2. Safety Aspects

Safety practices have been followed by the Project Company as per their Safety Standards which is in line with the industry standards and practices. IE is of the opinion that the safety rules and norms have been followed in the Project. During the execution of the project, all stores were properly fenced and provided with adequate lights. Safety equipment / accessories were used by site workers

5.6. Technical Requirement for Substation

The proposed new sub-station shall be Gas Insulated Switchgear (GIS) type generally confirming to the requirement of CEA regulation for construction of sub-station.

The Project Company has provided the drawings for Single line Diagram (Dwg. No.5427PN067-AMR-E-SYD-SLD-0401-Rev.00) and the Layout for the Amargarh 400/220kV GIS Substation (Dwg. No. 5427PN068-AMR-E-SYD-SYS-0001-GA Rev.03). Based on the review of these drawings IE's observations have been discussed in the below paragraphs.

IE noted that the substation mainly consists of 220kV GIS & 400kV GIS Buildings, LT Switchgear room, Battery room, Gas Insulated Busducts, 7 nos. 105MVA Interconnecting Transformers (ICT), Line & Bus Reactors, Line Gantry space for 400kV & 220kV lines, other miscellaneous switchyard equipments like Bus Post Insulator (BPI), Current Voltage Transformer (CVT), Lightning Arrestor, Wave Trap & Circuit Breaker and Space for staff quarters

400 kV System: -

IE observed that the 400kV GIS Switchyard system has been supplied with one and half breaker scheme system which consists of 5 upcoming diameters and 2 diameters for future consideration.

Out of these 5 diameters there are total of 6 upcoming lines which are mentioned below: -

- 2 nos. 400kV D/C Samba-Amargarh line defined as Samba Circuit Line-1 and Samba Circuit Line-2.
- 2 nos. 400kV D/C LILO line of Uri defined as Uri Circuit Line-1 and Uri Circuit Line-2.
- 2 nos. 400kV D/C LILO line of Wagora defined as Wagora Circuit Line-1 and Wagora Circuit Line-2.

The ICT-1 and ICT-2 is connected with two separate diameters. 2 nos.63 MVAR bus reactor is been connected with the same diameter. There is also planned connection of ICT-3 for the future.

220 kV System: -

IE observed that the 220V GIS system has been supplied with two main bus scheme systems which consist of 6 upcoming lines and 3 future planned lines.

There are total 9 upcoming bays for the 220 kV system in the substation. 4 no. bays are planned for further future extension. Bay no. 3 is connected to the 220kV side of ICT-1 and Bay no. 9 is connected to the 220kV side of ICT-2. There is also planned bay connection to ICT-3 for the future.

Outdoor Equipments: -

IE observed that there are total 7 nos. ICT of capacity 105 MVA, 1-phase has been provided. 1 no. 105 MVA ICT among these, 7 nos. is kept as a spare transformer and shall be utilized in the event of failure of any of the ICT. Space is also provided for the ICT-3 for future provision in the layout.

There are 2 nos. line reactor of capacity 50 MVAR which are connected to the 2 nos. line for Samba.

Other Equipments: -

IE observed that the switchyard has been provided with electrical switchgear room from where the local power supply of the complete substation will be met. Separate room has been provided to accommodate batteries for 220 V DC System for control & supervision of the switchyard equipment and 48 V DC System for SCADA. A separate DG room is also provided to cater the emergency loads of the substation.

The substation has also marked space for the staff quarters.

IE is of the view that the systems considered under the 400/220kV GIS substation are reasonable and the space for the substation is generally found to be in order

5.6.1.1. SALIENT FEATURES OF 420 KV & 245 KV GIS SUB STATION

The design and specification of substation equipment are to be governed by the following factors:

Insulation Coordination

420 KV System would be designed to limit the Switching overvoltage to 2.5 pu and is expected to decay to 1.5 p.u. in 5 to 6 cycles. Consistent with these values and protective levels provided by lightning arrestors, the following insulation levels are proposed to be adopted for 420 KV & 245 KV systems:

S. No.	Particulars	420 KV	245 kV
a)	Impulse withstand voltage for Transformer and reactors for Other Equipment	1300 kVp 1425 kVp	950 kVp 1050 kVp
b)	Switching surge withstand voltage	1050 kVp	
c)	Minimum creepage distance	10500 mm	6125 mm
d)	Max. fault current	40 kA	40 KA
e)	Duration of fault	1 Sec	1 Sec
f)	Corona extinction voltage	320 kV rms	

To control the steady state, transient and dynamic overvoltage to specified levels, compensation equipment shall be provided.

Switching Scheme

It is essential that the system should remain secure even under conditions of major equipment or bus-bar failure. Substations being the main connection points have large influence on the security of the system as a whole. The selection of the bus switching scheme is governed by the various technical and other related factors. One & Half breaker bus scheme for 400kV and Double Main along with Bus coupler for 220kV system have been generally considered due to their merits in terms of reliability, security, operational flexibility and ease of maintenance of equipments.

The following switching schemes have been considered in various substations:-

Sub-station	420 KV	245 kV
400/220kV Amargarh	One & Half breaker	Double Main

5.6.1.2. SUBSTATION EQUIPMENT AND FACILITIES:

The switchgear shall be designed and specified to withstand operating conditions and duty requirements.

GIS Substation Equipment:

GIS (Gas Insulated Switchgear) shall be indoor type and in accordance to IEC: 62271-203. The switchgear shall be designed and specified to withstand operating conditions and duty requirements. All the switchgear such as Circuit Breaker, isolator, earth switch including CT, PT etc. shall be GIS type. Surge Arrestors used for transformer/Reactor connections will be AIS or GIS type. 400kV scheme shall be designed in such a way that it shall be possible to use line reactors (if provided) as bus reactors, in case of outage of line, to control bus voltage.

Power Transformer

Power transformers shall conform to IEC: 60076 / IS: 2026 in general. These transformers shall have On Load Tap Changer (OLTC). The air core reactance shall be of the order of 20%. Tertiary windings shall be provided for large auto transformers, which shall be capable of being loaded to one third of transformer loading. Insulation level of tertiary winding shall not be less than maximum transferred surge from HV/MV winding to tertiary winding.

Shunt Reactors

Shunt Reactors, wherever provided, shall comply to IEC: 289/IS: 5553 in general. 420 kV Shunt reactors shall have linear characteristics upto 1.5 p.u. voltage. These should be ONAN Cooled. The neutral of line reactors shall be grounded through adequately rated neutral grounding reactors to facilitate single phase reclosure against trapped charges. The neutral of 420 kV class shunt reactors shall be insulated to 550 kV peak for lightning impulse and shall be protected by means of 145 KV Class surge arresters.

Circuit Breakers

Circuit breakers shall in general be of C2-M2 class and comply to IEC-62271-1 and shall be of SF6 Type. The rated break time shall not exceed 40 ms for 420KV and 60 ms for 245kV and 145KV circuit breakers. 420 kV Circuit breakers shall be provided with single phase and three phase auto reclosing. The Circuit breakers controlling 420 KV lines wherever required shall be provided with pre insertion closing resistor of about 400 ohms with 8 ms insertion time. The short line fault capacity shall be same as the rated capacity and this is proposed to be achieved without use of opening resistors. Control switching device shall be required for controlling of ICT/bus reactor and Line reactor as the case may be for Main bay and tie bay of 400kV. Further, it shall be possible to use line reactors as bus reactors, in case of outage of line.

Isolators

The isolators shall comply to IEC 62271-102 in general. All Isolators and earth switches shall be motor operated. Earth switches are provided at various locations to facilitate maintenance. Main blades and earth blades shall be interlocked and interlock shall be fail safe type.

Current Transformers

Current Transformers shall comply with IEC 60044-1 in general. All ratios shall be obtained by secondary taps. Generally, Current Transformers (CT) shall have five cores (four for protection and one for metering) whereas, CT in Tie bays shall have six cores (four for protections & two for metering) suitably distributed on both sides of CB. The burden and knee point voltage shall be in accordance with the requirements of the system including possible feeds for telemetry. Accuracy class for protection core shall be PS and for metering core it shall be 0.2S.

Capacitor Voltage Transformers/ Voltage Transformers

Voltage transformers shall comply to IEC 60044-2 & IEC-6044-5 in general. These shall have three secondaries out of which two shall be used for protection and one for metering. Accuracy class for protection core shall be 3 P and for metering core shall be 0.2. The voltage transformers on lines shall be suitable for Carrier Coupling. The Capacitance of CVT Shall be 4400/8800 pF depending on PLCC requirements.

Surge Arresters

Station class current limiting, heavy duty gapless type Surge arresters conforming to IEC 60099-4 in general shall be provided.

The rated voltage of Surge arrester and other characteristics are chosen in accordance with system requirements. Surge arresters shall be provided near line entrances, transformers so as to achieve proper insulation coordination. These shall be fitted with pressure relief devices and diverting ports suitable for preventing shattering of porcelain housing providing path for the flow of rated currents in the event of arrester failure.

AC & DC power supplies

For catering to the requirements of three phase & single phase AC supply and DC supply for various substation equipments, the following arrangement is envisaged:-

- (a) For LT Supply at each new Substation, two (2) nos. 630 kVA LT Transformers shall be provided out of which one shall be connected with SEB supply and other one shall be connected to tertiary of 400/220kV transformer.
- (b) 2 Nos. batteries of 220V for control & protection and 2 Nos. 48V batteries for PLCC/ Communication equipment shall be provided at each new Substation. Each battery would have a float-cum-boost charger. Battery shall be of VRLA type.
- (c) Suitable AC & DC distribution boards and associated LT Switchgear would be provided at new Substations. For Substation Extensions, existing facilities shall be augmented as required. For new substations following switch boards with minimum rating as is specified here under shall be considered with duplicate supply.
 - (a) 1000 Amps 415V Main switch board – 1 no.
 - (b) 400 Amp AC distribution board – 1 no.
 - (c) 400 Amp main lighting distribution board – 1no.
 - (d) 200 Amp emergency lighting distribution board – 1no.
 - (e) 220 volt DC distribution board – 2nos.
 - (f) 48 volt DC distribution board – 2nos.
- (d) In new Substations, one No. 250 KVA DG set shall be provided for emergency applications.

Sizing of Auxiliary system (like battery, charger, LT switchgear) may be done considering future bay requirements to avoid replacement in future with higher sizes. ACDB/ DCDB modules for future bays are not in the scope, however adequate space in the building shall be considered for future panels.

Fire Fighting System

Fire fighting system in general conforms to fire insurance regulations of India. The fire fighting system is proposed placed in both AC motor & diesel engine driven pumps housed in a fire fighting pump house building along with water storage tank of adequate capacity.

Automatic heat actuated emulsifying system is proposed for transformers & reactors. In addition for alarm system based on heat/smoke detectors are proposed to be installed at sensitive points in a substation e.g. Cable Vault, Control Room building and other buildings etc. Further, adequate water hydrants and portable fire extinguishers shall be provided in the substations. At existing substations the fire fighting systems if already available, would be extended for meeting the additional requirements.

Oil evacuating, filtering, testing & filling apparatus

To monitor the quality of oil for satisfactory performance of transformers, shunt reactors and for periodical maintenance necessary oil evacuating, filtering, testing and filling apparatus would be provided at new substations. Oil tanks of adequate capacities for storage of pure and impure transformer oil would be provided.

Control Room

Substation control room would be provided to house substation work station for station level control (SAS) along with its peripheral and recording equipments, AC & DC distribution boards, DC batteries & associated battery chargers, Fire Protection panels, Telecommunication panels & other panels as per requirements. Air conditioning will be provided in the building as functional requirements.

Protection Relaying & Control System

The protective relaying system proposed to be provided for transmission lines, auto-transformers, reactors and bus bars to minimize the damage to the equipments in the events of faults and abnormal conditions, is dealt in this section. All main protective relays shall be numerical type with IEC 61850 communication interface. All numerical relays shall have built in disturbance recording feature.

a) Transmission Lines Protection

400 kV and 220 kV lines shall have MAIN-I numerical three zone distance protection scheme with carrier aided inter-tripping feature. 400 kV and 220 kV lines shall also have MAIN-II numerical distance protection scheme like Main-I but from different make that of MAIN-I. Line Current Differential as Main-II may be considered, for short lines having Fibre Optic communication link. In case of loop in loop out of transmission lines, the existing protection scheme shall be studied and suitable up-gradation (if required) shall be carried out.

All 400 kV lines shall also be provided with two stages over voltage protection.

Further, all 400/220 kV lines shall be provided with single and three phase auto-reclosing facility to allow reclosing of circuit breakers in case of transient faults. These lines shall also be provided with distance to fault locators to identify the location of fault on transmission lines.

b) Auto Transformer Protection

These shall have the following protections:

- ✓ Numerical Differential protection
- ✓ Numerical Restricted earth fault protection
- ✓ Over-current and earth fault protection on HV & MV side
- ✓ Over fluxing protection on HV & MV side
- ✓ Overload alarm

Besides these, power transformers shall also be provided with BUCHOLZ relay, protection against high oil and winding temperature and pressure relief device etc.

c) 420 kV Reactor Protection

Reactor shall be provided with the following protections:

- ✓ Numerical Differential protection.
- ✓ Numerical Restricted earth fault protection
- ✓ Numerical Back-up impedance protection

Besides these, reactors shall also be provided with Bucholz relay, protection against oil and winding temperatures & pressure relief device etc.

d) Bus bar Protection

The high speed bus bar differential protection, which is essential to minimize the damage and maintain system stability at the time of bus bar faults, shall be provided for 400KV and 220KV buses. Duplicated bus bar protection is envisaged for 400kV bus-bar protection. Bus bar protection scheme shall be such that it operates selectively for each bus and incorporate necessary features required for ensuring security. The scheme shall have the provision for future expansion. For existing substations, the existing bus bar protection shall be augmented wherever required.

e) Local Breaker Back up Protection

This shall be provided for each 420 kV, 245KV and 145 kV breakers and will be connected to de-energize the affected stuck breaker from both sides.

f) Substation Automation System

For all the new substations, state of art Substation Automation System (SAS) conforming to IEC-61850 shall be provided. The distributed architecture shall be used for Substation Automation system, where the controls shall be provided through Bay control units. The Bay control unit is to be provided bay wise for voltage level 220kV and above. All bay control units as well as protection units are normally connected through an Optic fibre high speed network. The control and monitoring of circuit breaker, dis-connector, re-setting of relays etc. can be done from Human Machine Interface (HMI) from the control room. SAS shall be equipped with the facility of remote operation and by providing remote HMI and suitable communication link, the substation can be controlled from a remote location. Necessary gateway & modems (as required) shall be provided to send data to RLDC/SLDC.

The functions of control, annunciation, disturbance recording, event logging and measurement of electrical parameters shall be integrated in Substation Automation System. The Automation System shall be provided with the facility of communication and control for remote end operation. In existing Substations where Substation automation is not provided, control functions shall be done through control panels.

PLCC & PABX

Power line carrier communication (PLCC) equipment complete for speech transmission, line protections, and data channels shall be provided on each 420 KV & 220kV transmission line. The protections for transmission line and the line compensating equipment shall have hundred percent back up communication channels. The PLCC equipment shall in brief include the following:-

Coupling device, line traps, carrier terminals, protection couplers, HF cables, PABX and maintenance and testing instruments.

A telephone exchange (PABX) of 24 lines shall be provided at new substations as means of effective communication among various buildings of the substation, remote end substations and with control centres (RLDC/SLDC) etc.

Coupling devices shall be suitable for 4400pF 420kV CVT & 8800pF 765kV CVT with phase to phase coupling. Coupling devices shall be suitable for 4400pF 220kV CVT & 8800pF 132 kV CVT with Phase to Phase or Inter-circuit coupling. In case 132kV line is S/C then Phase-earth coupling is adequate. The pass band of coupling devices shall have sufficient margin for adding communication channel in future if required. Necessary protection devices for the safety of personnel and low voltage part against power frequency voltages and transient over voltage shall also be provided.

The line traps shall be broad band tuned suitable for blocking the complete range of carrier frequencies. Line Trap shall have the necessary protective devices such as lightning arresters for the protection of tuning device and shall be equipped with corona rings. Decoupling network consisting of line traps and coupling capacitors may also be required at certain substation in case of extreme frequency congestion.

The carrier terminals shall be of single side - band (SSB) amplitude modulation (AM) type and shall have 4 KHz band width.

Wherever Fibre Optic/OPGW based telecommunication terminal equipment (i.e. SDH/MUX) are being provided; the same shall be utilized for Data, Voice and line protection applications. For protection purposes, both end Digital Protection Couplers (DPCs) shall be included. However, for line protection application, back up communication channel/link may be considered as per requirement so as to take care of OPGW/Telecommunication equipment outage.

Addition /Modification /shifting/re-commissioning etc. of PLCC due to LILO of Uri – Wagoora line shall be covered under TBCB scope. PLCC carrier equipment for Jalandhar – Samba – Amargarh 400 kV D/C Line shall be under Powergrid scope, however CVT, coupling device, Land Trap and HF cable at Amargarh s/s shall be covered under TBCB scope.

5.7. Technical Requirements for Communication

5.7.1.1. SAMBA –AMARGARH 400KV D/C LINE:

- i. On Samba-Amargarh 400kV D/c transmission line, one OPGW containing 24 Fibres is to be installed by the TSP in place of conventional earth wire during the construction of line for grid management and substation operation purpose by CTU. The installation of OPGW shall be done from gantry of 400kV Samba Substation up to gantry of 400kV Amargarh Substation and shall be terminated in a Joint Box by TSP at both the ends. These Joint Boxes shall be installed at a height of around 10m above ground and shall conform to IP66.
- ii. All these fibres of OPGW shall be at the disposal of CTU. The maintenance of the OPGW shall be the responsibility of TSP (Transmission Service Provider).

5.7.1.2. LILO OF BOTH CIRCUITS OF URI - WAGOORA 400 KV D/C LINE AT AMARGARH S/S:

- i. On LILO of both circuits of Uri - Wagoora 400 kV D/c line at Amargarh S/s, one OPGW containing 24 Fibres is to be installed by the TSP in place of conventional earth wire during the construction of line for grid management and substation operation purpose by CTU. The installation of OPGW shall be done on LILO portion up to gantry of 400kV Amargarh Substation and shall be terminated in a Joint Box by TSP at both the ends. These Joint Boxes shall be installed at a height of around 10m above ground and shall conform to IP66.
- ii. All these fibres of OPGW shall be at the disposal of CTU. The maintenance of the OPGW shall be the responsibility of TSP.

5.7.1.3. 400/220KV GIS SUBSTATION AT AMARGARH GIS SUBSTATION:

- i. SSP (Substation Service Provider) shall provide one STM-16 equipment alongwith necessary interfaces to meet the voice and data communication requirement and shall be integrated with the CTU communication equipments at remote ends.
- ii. SSP shall provide FODP and Approach Cable (24F), which shall be connected with OPGW to be installed on LILO portion of Uri - Wagoora 400 kV D/c upto gantry of 400kV Amargarh substation gantry by other TSP.
- iii. SSP shall install Phasor Measurement Units (PMUs) at the Amargarh GIS substation for all the bays (line/feeders & transformers) of the substation and shall support IEEE C-37.118.2011 protocol. These PMUs shall be integrated with the PDC (Phasor Data Concentrator) located at NRLDC (Northern Region Load Despatch Center).
- iv. SSP shall install RTU/SAS with necessary interfaces which shall be integrated with NRLDC SCADA System on IEC 60870-5-101/104 protocol

5.8. Useful Life of Asset

The review of the Technical documents pertaining to the project by IE including the Technical Specifications, Type Test Certificates and Quality Plan of the different equipment/ components of the Substations & Transmission Lines confirm the quality of components and technical suitability of the Substation & Transmission Lines.

All the transmission line assets are designed as per IS:802 Part 1 & 2 with a reliability factor of 1.0 which ensures the reliability period of the transmission line for 50 years and for the Substation Equipment for 35 years. As per the TSA, the Term of Applicability of the TSA is 35 years from the Schedule COD of the Project. Hence, IE confirms that the Transmission Assets are technically designed and are reliable as per the TSA.

The life extension of the asset beyond 35 years can be assessed based on the Residual Life Assessment (RLA) results, Load Studies and the Technological advancements after 35 years of Project Operation.

The useful life of the different substation equipment is indicated below:

Equipment	Approx. life period
Circuit Breaker (All types and ratings)	10000 operations
Isolators with Earth switches (All types and ratings)	35years
ICT's (765/400 kV)	35 years
Reactors (All Types and ratings)	35 years
Current Transformer (All types and ratings)	35 years
Capacitor Voltage Transformers (All types and ratings)	35 years
Lightening Arrestors (400 kV)	35 years
Lightening Arrestors (765 kV)	35 years
33/11 kV Distribution Transformer	35 years
Battery Charger (220 V and 48 V)	35 years
Battery Banks (220 V and 48 V)	1000 cycles
ACDB panels	35 years
DCDB panels	35 years
MLDB panels	35 years
320 kVA Diesel Generator	35 years
Relays	35 years
PLCC Panels	35 years
FOTE panels	35 years
SAS system	35 years
NIFPS (for Transformers and Reactors)	35 years
Hydrant Fire Protection system (for Buildings)	35 years

Project Company is advised to continue with the prudent maintenance practice and follow the OEM recommendation to achieve the useful life.

5.9. Technical Guarantee

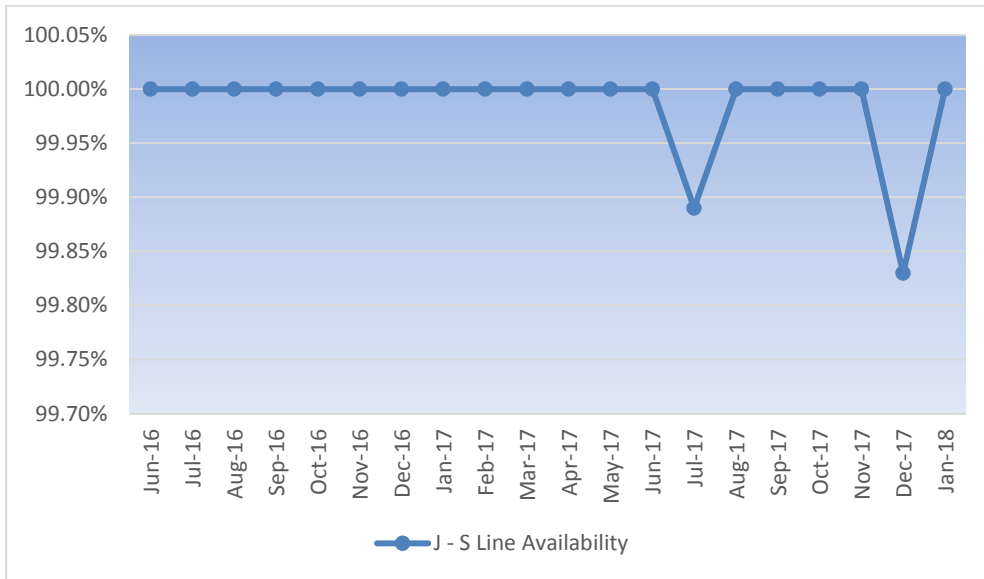
Typically contract for Transmission Project does not envisage any performance guarantee parameters. However, the project has been implemented in line with the technical specifications with proper quality checks.

The Certificate for approval for Energization from CEA ensures the completeness and technical acceptability of the project. IE observed that all the elements have received the CEA approval for the same,

5.10. Availability of Transmission Lines and Substations

Normative availability of each element has been considered as 99%. This is in line with CERC Notification. The target availability of the project as per Transmission Service Agreement is 98%.

The Project Company has submitted the monthly availability data for the Jallandhar – Samba 400 kV D/C Transmission Line of NRSS XXIX. The availability of transmission line from June, 2016 to January 2018 is indicated in the Graph below:



IE observed that the Project Company has planned proper O&M procedures and an effective O&M organization set – up to maintain the availability of the substations and the lines. IE observed that the Availability is maintained more than 99%. IE is of the view that with prudent maintenance practices and deployment skilled manpower, maintaining 98% availability is achievable.

5.11. Assessment of Technology Risk

Based on the technical assessment of the project, IE does not foresee any Technology risk

6. TIME SCHEDULE

6.1. Schedule as per TSA

As per TSA, the scheduled COD of the project is 38 months from the effective date of TSA. The effective date of TSA is 4th August, 2014. Therefore, the SCOD works out to 4th October, 2017.

However as per CERC tariff order dated 10.12.2014 the completion target of the Project is 50 months from the effective date. Therefore, the SCOD works out to be 4th October, 2018.

6.2. Schedule as per EPC Contracts

The schedule completion date as EPC Contract is 04.10.2018 which is within the SCOD date as per TSA.

6.3. Schedule as per CERC tariff order 10.12.2014

The details of the completion target as per CERC tariff order dated 10/12/2014 is as mentioned below:-

Sl. No.	Transmission Elements	Completion Target
1.	Jalandhar – Samba 400kV D/C	34 months from effective date
2.	LILO of both circuits of Uri – Wagoora 400kV D/C line at Amargarh (on multi circuit towers)	50 months from effective date
3.	Samba-Amargarh 400kV D/C line routed through Akhnoor/ Rajouri	50 months from effective date
4.	II. Substation Establishment of 7X105MVA (1-Ph units) with 400/220kV GIS Substation at Amargarh 400kV - Line bays 6 no. - 400/220kV ICT 7X105MVA (1-Ph units) - ICT Bays 2 no. - Line reactor (50 MVAR): 2 no. for Amargarh line - Bus Reactor (63 MVAR): 2 no. - Bus Reactor Bay: 1 no.(2 bus reactor on 1 bay) - Space for line/ICT bays: 4 no. - Space for ICT: 1 no. 220kV Bay - Line bays 6 no. - ICT Bays 2 no. - Space for line/ICT bays: 4 no.	50 months from effective date

IE found that the completion target for the transmission line is in line with the EPC contract.

7. PROJECT MANAGEMENT ARRANGEMENT

7.1. Project Organization

This section presents the Project Organization arrangement adapted during the execution of the project.

The Jalandhar – Samba 400 kV D/C Transmission Line (Phase – 1) is commissioned and is operational. The O&M philosophy and activities carried out for the Phase – 1 of the project is indicated herewith.

The Main Hub office and store of J – S line is at Gurdaspur where the personnel of NRSS are stationed. The common services such as Accounts, Commercial, Safety, and Quality are catered from the Hub office.

The line is operational and was executed through following two sub-hubs.

- a) **Jalandhar:** This office had one supervisor and 2 nos. Technician.
- b) **Samba:** This office had one supervisor and 2 nos. Technician.

IE opines that the Project Company has taken adequate measures for management of the complete project by allocating separate teams at separate location for supervision of the transmission line.

7.2. O&M Organization Set – up & its adequacy

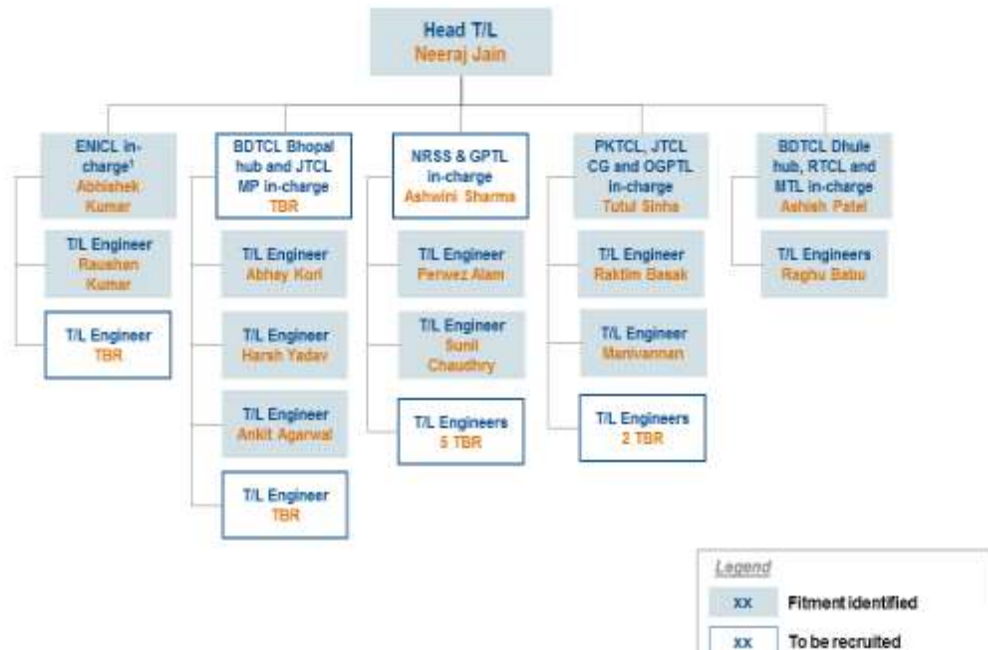
The Project Manager of Indigrd. shall be responsible for the Operation & Maintenance for NRSS.

The operation and maintenance of the transmission lines is done by the O&M contractor. Supervision of operation and maintenance work being carried out by the contractor is done by the SPGVL in-house team.

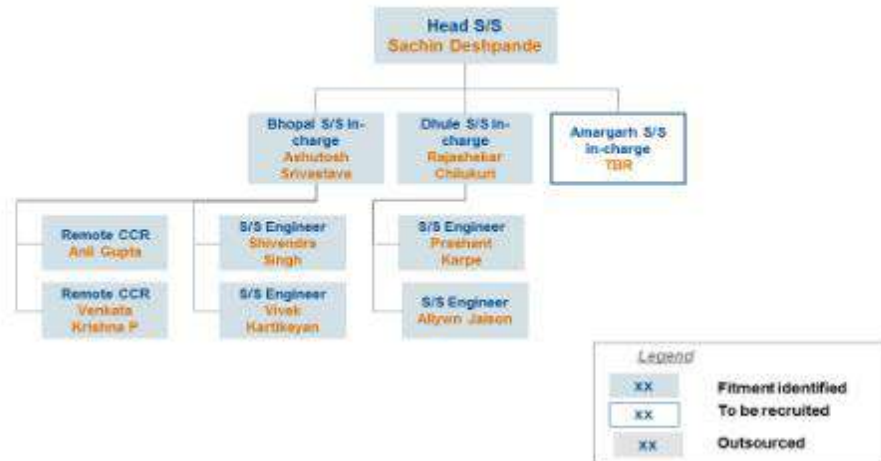
For trouble free operation and proper maintenance, SPGVL is taking up the following measures:

- a) Routine, Periodic, Preventive & Predictive maintenance shall be done by O&M contractor as per guide lines provided by SPGVL and under the supervision of SPGVL team.
- b) Close monitoring of agency, maintaining data and analysis to reduce down time shall be done by SPGVL Team.
- c) Mandatory spares shall be provided by SPGVL to the contractor. However, the contractor at his own cost, shall make provision of all other spares and consumables as may be required for O & M during the contract duration.
- d) Break down / Emergency shall be handled jointly by O&M contractor, SPGVL O&M & EHS (Environment, Health & Safety) Team.

7.2.1. Organization Chart for Transmission Line and sub – station



Organization structure for O&M S/S team



NRSS has outsourced the maintenance works of 400kV D/C Jalandhar – Samba Line to M/s. Telegence Powercomm Private Limited. Work order dated 27th July, 2016, was awarded for maintenance works from Jalandhar Substation Gantry to AP 66/4 and AP 67/2 to AP 67/3 (106.604 kms) at Punjab. The effective date of the Contract was 27th July, 2016 and valid till 36 months i.e. Three years from effective date.

Similarly another work order dated 23rd December, 2016 was awarded for Maintenance works from AP 67/0 to AP 67/1 and AP 68/0 to Samba substation Gantry (28.206 kms) at Jammu. The effective date of the Contract was 1st August, 2016 and valid for 36 months i.e. three years from effective date.

The total work order Period is valid for 36 months i.e. 3 years from the date of successful commissioning of the respective lines. The extendable period of 2 yrs is based on the performance.

The brief scope of the contractor includes:

- i. Routine patrolling and maintenance
- ii. T&P
- iii. Stores
- iv. Vehicles
- v. Transportation of material
- vi. Security of stores
- vii. Insulator cleaning
- viii. Corridor cleaning (vegetation), cutting of trees
- ix. Replacement of mission members
- x. Tightening of nuts and bolts
- xi. Visual inspection for hot spots
- xii. Breakdowns
- xiii. Inspection of foundations
- xiv. Strengthening of tower foundation and civil works
- xv. Night Patrolling
- xvi. Thermo vision once in six months
- xvii. Signature analysis as and when required
- xviii. Measurement of tower footing resistance
- xix. Mock drill
- xx. Thorough inspection of the corridor during pre monsoon and post monsoon
- xxi. Tree cutting if required
- xxii. Checking of foundation and ground clearance.

At extra cost, the following works shall be covered:

- i. ERS erection
- ii. ROW & compensation
- iii. Spares to be provided by SGL
- iv. Major Breakdowns and failures
- v. Major Civil Works

The Incentive for increase in Availability over the target Annual Availability Value, limited to an overall Annual availability of 99.75 % and no incentive shall be paid over and above 99.75%. The Target Annual Availability shall not be less than 99.0%, during each Financial Year.

The 400kV D/C Jalandhar – Samba Transmission Line shall be managed by NRSS as follows:

To optimize costs, the contractor has deployed manpower at Gurdaspur (in state of Punjab) and Jammu. The gangs at these hubs shall look after the maintenance of transmission lines. The contractor shall maintain manpower and stores at Sub – hubs wherever required to have optimum maintenance. Each section shall be taken care of by Section In- charge from the SPGVL In-house O&M team. The O&M contractor shall take care of all the O&M activities under the guide lines of the Section In- charge.

IE is of the opinion that the proposed O&M organization set-up is adequate. The division of responsibility of SPGVL O&M personnel for different line sections and the supervision of the O&M contractor by the SPGVL In-house team shall be effective in the smooth and trouble-free operation of the lines. Additionally, the proposal for providing mandatory spares by SPGVL to the contractor shall facilitate in reducing the down-time of the lines.

7.3. Operation & Maintenance (O&M) Activities

The Operation and Maintenance Activities have been classified under the following heads:

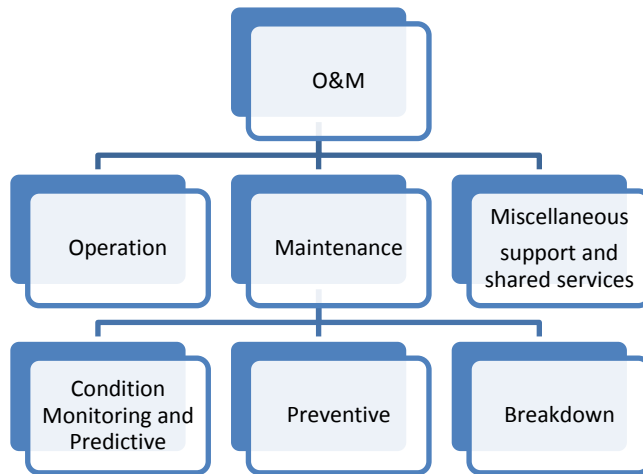


Figure 4.1 – Operation & Maintenance Activities

The day to day operation of the transmission systems is the primary responsibility of the Regional Load Dispatch Centre (RLDC). Consequently, the O&M strategy of NRSS will focus primarily on the maintenance aspect.

The objective of the O&M strategy of NRSS is:

- To achieve the system availability as specified in the TSA at the most economic cost,
- To carry out periodic 'preventive maintenance' so as to maximize the life of transmission lines
- To minimize the down time of the Transmission Lines/sub-stations for maintenance purpose

The maintenance activities are classified as follows to maximize the availability of the Transmission lines.

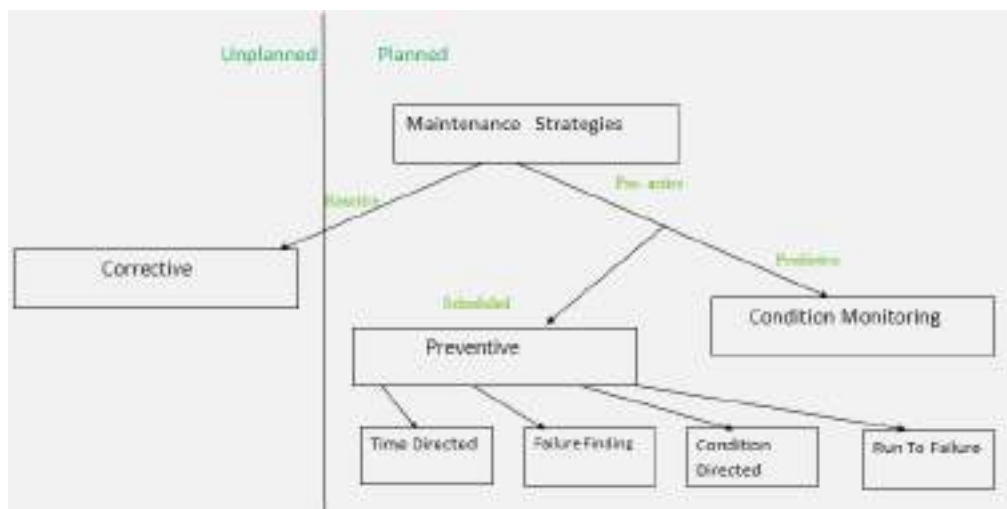


Figure 4.2 – Maintenance Strategy

7.3.1. Routine Maintenance (Preventive Maintenance)

NRSS shall adopt proven practices such as regular patrolling of the lines, periodically removal of vegetation over growth, thermo-vision scanning, live line washing, on-line insulator failure detection and hot line maintenance techniques etc. Project Company plans to maintain a team of trained manpower along with adequate spares to swiftly attend to unforeseen eventualities/ natural calamities.

The patrolling frequency as followed by the Project Company is indicated below:

S. No.	Type of Patrolling	Visit Plan
1	Ground Patrolling	Monthly
2	Night Patrolling	45 Days
3	Monkey Patrolling	2 Month
4	Ground Patrolling (critical location)	Weekly
5	Emergency Patrolling	Immediate

NRSS shall carry out regular maintenance of each of the Transmission Lines suiting to the nature of terrain, environment, surroundings, etc so as to achieve the desired level of performance. The following are examples of routine maintenance activities:

- Routine ground patrols to inspect structural and conductor components. Such inspections generally require either an all-terrain vehicle (ATV) or pickup and possibly additional support vehicles travelling on access and service roads and may rely on either direct line-of-sight or binoculars. In some cases, the inspector may walk the ROW. Follow-up maintenance is scheduled depending on the severity of the problem either as soon as possible or as part of routine scheduled maintenance.
- Patrolling in most vulnerable terrain is to completed on monthly basis. Patrolling sequence is such that each and every most vulnerable location shall be re patrolled in three to five weeks. Photographs of such location were taken using Digital Camera and Hard/Soft copies of the same were preserved to have the history of location.
- 100% Transmission Line towers and Spare were checked by concerned Lineman/ technician/ Engineer once in patrolling cycle. 20% Transmission Line Towers, spans in normal and vulnerable sections and all most vulnerable towers were checked by concerned Transmission Line Maintenance in Charge in each patrolling cycle of Three/four months.
- Climbing surveys may be necessary to inspect hardware or make repairs. Personnel generally access these structures by pickup, ATV, or on foot.
- Structure or conductor maintenance typically occurs manually. The maintenance vehicle may be located on or off a road, and no-to-minimal grading is necessary to create a safe work area.
- Cathodic protection surveys to check the integrity and functionality of the anodes and ground beds. These surveys typically require personnel to use an ATV or pickup and make brief stops.
- Routine cyclical vegetation clearing to trim or remove tall shrubs and trees to ensure adequate ground-to-conductor clearances. Vegetation clearing cycles vary from 3 to 5 years or as needed (dependent upon the vegetation present). Personnel generally access the area by pickup, ATV, or on foot; use chainsaws to clear the vegetation; and typically spend less than half a day in any one specific area. In some cases vegetation may be cleared using mechanical means.

- Removal of individual trees or snags (hazard trees) that pose a risk of falling into conductors or structures and causing outages or fires. Personnel generally access hazard trees by truck, ATV, or by foot from an access or service road, and cut them with a chainsaw or similar tool. Any felled trees or snags are left in place as sources of large woody debris or as previously directed by the land management agency. Felled green trees are limbed to reduce fire hazard.
- Rusting of tower parts: At some places, it was observed that rusting of tower parts/stubs have occurred due to direct contact of wet soil with tower parts. Therefore, it was ensured that the mandatory clearance from top of the coping of each leg and present ground level was maintained.
- Norms for tower top patrolling:- Tower top patrolling of the lines was carried out in case of repeated tripping/ auto-reclosure (twice or more in same section/area) to find the untraceable faults during ground patrolling and in stretches having component failure history/ to examine pollution level on Insulators.
- Ground patrolling after line faults:- Emergency ground patrolling of the line to be carried out for +/-5% towers both sides of the faulty tower indicated by online fault locator to trace the fault. In case of permanent faults, off-line fault locator were utilized by Maintenance Engineer to correlate the finding of on-line fault locator.
- Norms for Thermovision scanning:-Thermovision scanning of the lines to be carried out after three month of the charging and noticed defects were attended on priority. Subsequent Thermovision scanning of high capacity lines (quadruple conductor) and highly loaded lines (90% or above of SIL rating) were carried out at every five year interval. Hotspots identified through Thermovision scanning were attended by HLM/ Earliest Opportunity.
- Norms for Punctured Insulator Detection:- PID scanning of Transmission lines having Insulator decapping incidents irrespective of age were carried out immediately to ascertain the healthiness of Insulators. However PID of Lines which are 15 years old were carried out irrespective of decapping incidents. Defective Insulators were replaced on priority.
- Condition Monitoring of Polymer insulators:- Condition monitoring of Polymer Insulators were carried out using Corona camera.
- Procedure for Transmission Line Patrolling:- Transmission Line maintenance Engineer prepares a program of transmission line patrolling/ Maintenance for the lines under his/her jurisdiction to complete patrolling cycle as per operation system norms and maintenance activities planned during the month and send copies to concerned employee and Delhi (O & M). Patrolling/ Maintenance of Transmission Line was carried out as per the plan.
- Checklist for Ground patrolling: Formats for the ground patrolling were filled up by the person who has patrolled the section immediately after patrolling and submitted to line In charge on daily basis.

7.3.2. Corrective Maintenance

Corrective maintenance activities are relatively large-scale efforts that occur infrequently, may result in more extensive vegetation clearing or earth movement and associated activities. Such activities shall be scheduled in the Maintenance Schedule for Transmission Lines. The following are examples of corrective maintenance:

- a) Non-cyclical vegetation clearing to remove saplings or larger trees in the ROW.
- b) Structure or conductor maintenance in which earth must be moved, such as the creation of a landing pad for construction or maintenance equipment.
- c) Structure (e.g., cross-arm, insulator, structure) replacement.

7.3.3. Annual Maintenance Schedule for the Year 2018 – 19

Project Company plans to carry out the following Annual Maintenance for checking, tightening and rectification of jumper nut & bolts, hardware fitting, each phase conductors, earthwire and other accessories of line –

Table 7.1 – Annual Maintenance Plan for Year 18 - 19

Sr. no.	Line/Equipment name	From date	To date	Duration
1.	Jalandhar-Samba line, CKT-1	19.06.2018 (09:00)	19.06.2018 (12:00)	3 Hrs
2.	Jalandhar-Samba line, CKT-2	20.06.2018 (09:00)	20.06.2018 (12:00)	3 Hrs
3.	Jalandhar-Samba line, CKT-1	25.09.2018 (09:00)	25.09.2018 (12:00)	3 Hrs
4.	Jalandhar-Samba line, CKT-2	26.09.2018 (09:00)	26.09.2018 (12:00)	3 Hrs
5.	Jalandhar-Samba line, CKT-1	18.12.2018 (09:00)	18.12.2018 (13:00)	4 Hrs
6.	Jalandhar-Samba line, CKT-2	19.12.2018 (09:00)	19.12.2018 (13:00)	4 Hrs
7.	Jalandhar-Samba line, CKT-1	26.03.2018 (09:00)	26.03.2018 (12:00)	4 Hrs
8.	Jalandhar-Samba line, CKT-2	27.03.2018 (09:00)	27.03.2018 (12:00)	4 Hrs

7.3.4. Tripping Details

Project Company furnished the tripping details, the route cause analysis and corrective action plan, as indicated in the table below –

Table 7.2 – Tripping Details

Element	Event Date	Event Time	Restoration Date	Restoration Time	Loss hrs.	Reasons/ RCA
Jalandhar Samba Line 1	1-Dec-16	8:47	9-Dec-16	16:45	199:58:00	Normalization of the Line
Jalandhar Samba Line 2	1-Dec-16	8:47	9-Dec-16	17:45	200:58:00	Normalization of the Line
Jalandhar Samba Line 1	5-Jul-17	21:09	5-Jul-17	22:44	1:35	The relays showed that the fault occurred at a distance of 4.99 Kms from Jalandhar end. The Fault was a R phase to Y phase fault. no reason was found for the line tripping.
Jalandhar Samba Line 1	21-Dec-17	9:37	21-Dec-17	18:08	8:31:00	Maintenance Activity. OPGW rectification work
Jalandhar Samba Line 2	21-Dec-17	9:36	21-Dec-17	18:30	8:54:00	Maintenance Activity. OPGW rectification work
Jalandhar Samba Line 1	24-Feb-18	18:50	24-Feb-18	23:20	4:30:00	The relays showed that the fault occurred at a distance of 40.91 Kms from Jalandhar end. The Fault was a R phase to Y phase fault. Tripping was due to bad weather.

Element	Event Date	Event Time	Restoration Date	Restoration Time	Loss hrs.	Reasons/ RCA
Jalandhar Samba Line 2	22-Mar-18	8:21	22-Mar-18	19:43	11:22:00	Shutdown for Annual Maintenance Program
Jalandhar Samba Line 1	24-Mar-18	8:26	24-Mar-18	19:54	11:28:00	Shutdown for Annual Maintenance Program

IE observed, that the major reason for the tripping of the line was bad weather conditions, which cannot be predicted and controlled. However, O&M team should regularly conduct Line Patrolling in order to minimize these trippings. Regular cutting of trees in the Corridor below the Transmission Line needs to be done after taking proper shutdown of the line.

7.3.5. Uprooting of Towers for Samba – Amargarh Line

During the month of June, 2017, three tower locations for Samba – Amargarh 400 kV D/C Transmission Line, were uprooted from the footing/ pad (Chimney pedestal). Towers were erected, and stringing was complete, however the line was not charged. M/s. Tata Consulting Engineers Ltd. (TCE) was hired by M/s. Sterlite Power Grid Ventures Limited (EPC Contractor) as third party Quality Auditor for the following uprooted locations –

- i. Location 20/3 (DA+0M Ext.)
- ii. Location 20/4 (DA+0M Ext.)
- iii. Location 21/0 (DD+3M Ext.)

TCE had visited the site, reviewed the approved Foundation drawing for the respective locations and verified the physical measurement of RCC, foundation depth, shape, size etc. of each location vis-à-vis the drawing/ specification.

Auditor had recommended for restoration works of all the above location in line with the Foundation Drawings/ specification. During site visit, IE observed that SPGVL had hired M/s Bureau Veritas was hired for entire S – A line and Quality Inspector. Bureau Veritas was responsible for all the quality check of all the foundation locations (casted and under – executed locations in entirety).

Henceforth, IE observed that each foundation works was verified by Contractor, Quality Inspector and SPGVL and then foundation approval was granted.

7.3.6. Emergency situations

Most of the activities, such as routine patrols, inspections, or scheduled maintenance, are planned in advance as per the O&M procedures. However, there will be an occasional need for emergency response in cases where safety and property are threatened, to prevent imminent damage to the transmission line and ancillary facilities, or to restore service in the event of an outage. Such activities which need to be addressed immediately shall be identified in the Maintenance Schedule for Transmission Lines. The following are examples of Emergency situations:

- a) Failure of conductor splices.
- b) Damage to structures or conductors from wildfire, high winds, ice, or other weather related conditions.
- c) Line or system outages or fire hazards caused by trees falling into conductors.

- d) Breaking or imminent failure of cross-arms or insulators, which could, or does, cause conductor failure.
- e) Damage to structures or conductors from vandalism

In the case of an emergency where life or substantial property is at risk or there is a potential or actual interruption in service, the Companies will promptly respond to the emergency and conduct any and all activities, including emergency repair requiring heavy equipment access to the structures or other ancillary facilities, needed to remedy the emergency and will implement feasible and practicable Environmental Protection Measures (EPMs).

7.3.7. Consumption of Spares

The List of Spares has been furnished to the IE. The details of the inventory available at store as on 30.04.2018 has been given below –

Table 7.3 – Consumption of Spares

Material Details				
S. No.	Material Handed Over from Sterlite to Telegence	Last month Balance Qty.	Material used in April 2018	Closing Balance
1	Pipe Type Earthing (in nos.)	2	0	2
2	DT fitting	1	0	1
3	120 KN 'Single "I" Suspension Pilot Insulator String	4	0	4
4	Counter Weight 25Kgs - (8 Nos = 1 set).	9	0	9
5	T-Connector Bolted Type (in nos.)	14	0	14
6	T-Connector Comp. Type (in nos.)	12	0	12
7	Twin Spacer Damper (in nos.)	0	0	0
8	Twin Rigid Spacer 457 mm (in nos.)	3	0	3
9	Vibration Damper for 7/3.66 mm Earthwire (in nos.)	5	0	5
10	Flexible Copper Bond For Earthwire (in nos.)	1	0	1
11	120 KN Polymer Insulator (in nos.)	1	0	1
12	160 KN Polymer Insulator (in nos.)	1	0	1
13	ACSR Conductor Bit (in m)	606	0	606
14	GS. Earthwire 7/3.66 mm Bit (in m)	90	0	90
15	Extension Link (in nos.)	6	0	6
16	Empty Conductor Drum (in nos.)	5	0	5
17	Empty OPGW Drum (in nos.)	4	0	4
18	120 KN Single "I" Suspension Pilot Insulator String			
18.1	Arking Horn (in nos.)	2	0	2
18.2	Yoke Plate (in nos.)	3	0	3
18.3	Suspension Clamp (in nos.)	3	0	3
18.4	20MM Dia D-Shackle (in nos.)	3	0	3
18.5	Corona Control Ring (in nos.)	3	0	3
19	Conductor & OPGW			
19.1	ACSR Moose Conductor (in m.)	0	0	0
19.2	OPGW Cable (Without Tested) (in m.)	2.25	0	2.25

Material Details				
S. No.	Material Handed Over from Sterlite to Telegence	Last month Balance Qty.	Material used in April 2018	Closing Balance
20	OPGW Hardware Fitting			
20.1	Single Tension/Dead End Clamp (in nos.)	10	0	10
20.2	Single Suspension Assembly (in set.)	1	0	1
20.3	Joint Box (in nos.)	0	0	0
20.4	Down Lead Clamp (in nos.)	34	0	34
21	Tower			
21.1	DA+0 (in set.)	5	0	5
21.2	DB+0 (in set.)	1	0	1
21.3	DC+0 (in set.)	1	0	1
21.4	DD+0 (in set.)	1	0	1
22	Hardware Fitting			
22.1	MSCJ For Moose (in nos.)	146	0	146
22.2	Repair Sleeve for Moose (in nos.)	18	0	18
22.3	T-Connector (in nos.)	18	0	18
22.4	MSCJ for Earthwire (in nos.)	2	0	2
22.5	Repair Sleeve for Earthwire (in nos.)	12	0	12
23	Template			
23.1	DA+0-9 (in set.)	1	0	1
23.2	DB+0-9 (in set.)	1	0	1
23.3	DC+0-9 (in set.)	1	0	1
23.4	DD+0-9 (in set.)	1	0	1

The stores are provided with necessary Tools and Equipments along with nuts and bolts. The spares recommended by the Project Company are sufficient and in line with standard practices. However, there few recommended spares, which should be available at store for the O&M services –

- a. Lug for CP earthing
- b. Bird Guard
- c. Grading Rings
- d. PG Clamp
- e. Down lead clamp for OPGW
- f. Repair sleeve for ACSR
- g. Twin Rigid Spacer for Jumper
- h. Jumper cone
- i. Dead End with AL & Steel
- j. Vibration Dampers for Earthwire
- k. Flexible Copper Bond
- l. Mid Span Joint for Earthwire
- m. Dead End for Earthwire
- n. CC ring for suspension and tension
- o. Arcing horn for suspension & Tension
- p. Twin Spacer Damper
- q. Clamp cap/ keeper spacer
- r. T – Connector (open type)

7.4. Standard Operating Procedures

The Standard Operating Procedures (SOP) for Operation and Maintenance of the Transmission lines have been laid down by the Project Company. The Standard Operating Procedures elaborate the General Safety Precautions to be followed during the operation and maintenance of the transmission lines. It also includes the detailed procedure and working instructions for the following activities:

- a) Steps to be taken in case of Tower collapse
- b) Method employed to overcome failure of Jumpers
- c) Preventive Maintenance of Tower Foundation
- d) Maintenance Earthing of Transmission Lines
- e) Patrolling of Transmission Lines

The Standard Operating Procedures include the Maintenance Schedule of the Transmission lines and Checklist for Ground Patrolling. It also includes the various standard formats to be filled in during the operation and maintenance of the lines.

- a) Monthly Patrolling Programme
- b) Ground Patrolling report
- c) Tower Climbing Patrolling Report
- d) Log Book of Line Defects
- e) Emergency Patrolling Report on Tripping/ Auto re – closure of Transmission Lines
- f) Summary of Line Defects for the Month
- g) Shut Down Nature Defects
- h) Non-Shut down Nature Defects
- i) Details of Tree cutting
- j) Inspection Report for Major Maintenance/ Breakdown works
- k) Live Line Puncture Insulator Detection
- l) Thermovision scanning
- m) Insulator Washing/ cleaning

7.5. Implementation of the O&M Procedures

For proper implementation of the O&M Procedures, the following initiatives are being taken by the Project Company:

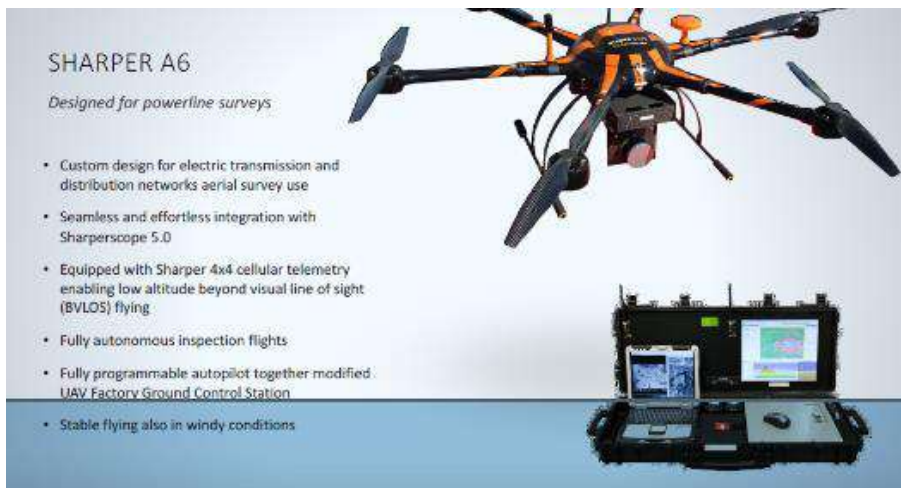
- a) Use of separate IT (Information Technology) based tool is being put in place for O&M, to computerize all the formats for the purpose of storage for easy access and for centralization of the information.
- b) To promote knowledge sharing within the team, a Knowledge management portal is already in place.
- c) Document management system in “WRENCH” software is already implemented for storage and retrieval of documents like engineering drawings, tower schedules, commissioning reports etc.
- d) Regular training programs are being held to train the personnel on the latest techniques for effective maintenance of the transmission lines and safety measures to be adopted during maintenance.

The O&M philosophy and methodology being adopted by the Project Company is in line with the widely accepted practices followed for similar projects. The Standard Operating Procedures laid down by the Project Company are comprehensive and include all major aspects required for effective operation and maintenance of the transmission lines.

7.6. O&M Technology

Project Company informed that they are planning to supervise their transmission assets with the drone based asset management technology developed by Sharper Shape Inc. This technology will enable to monitor the critical asset conditions and ensure full economic optimization of resource deployment in maintenance operations. The drone based asset management technology will improve the reliability, resilience and safety of the transmission lines.

NRSS plans to implement Aerial Surveillance, through Drones. Sterlite has entered into partnership with Sharper Shape (Finland), for Drone based automated transmission line inspection.



Long distance inspection will be provided through drone based technology. The use of drones will increase the uptime of the grid, and also save the environment by conducting preventive maintenance and reducing deforestation along the line corridors.

Based on review of the O&M arrangement, IE observed that the same is in line with the industry practices and addresses all relevant works and obligations including the schedules of preventive and reactive maintenance activities to be performed for reducing the downtime.

7.7. Disaster Management Plan

Due to ever growing expanse of our operating territory and the variety of climatic conditions our transmission lines are subjected to, these lines may fail sometimes due to natural disasters. Failures can occur due to

- High wind loading or floods

- Storm damage
- Earthquake or Rock slides
- Mud slides
- Erosion of foundations
- Corrosion of towers
- Vandalism or sabotage

Total losses resulting from an extended outage of a key transmission line is site specific and can be considerable. Major monetary losses may depend directly or indirectly on the lost revenue due to unavailability of the line and cost of restoration. The total losses may be more than just the direct losses of the utility, especially if the utility is answerable to customers and government entities.

While the cost to rebuild or restore a failed transmission line is inversely proportional to the restoration time, the total losses are directly proportional to the outage time. In almost all cases, it is best to restore the transmission line as quickly as possible.

Likewise, Transmission lines, various factors that can cause major failures and interruption inside a Substation are:

- High wind loading or floods
- Storm damage
- Earthquakes
- Equipment failure
- Fire hazards
- DC Supply failure
- Vandalism or sabotage

Therefore, Sterlite Power has derived a well laid out crisis management plan to tackle difficult scenarios arising out of any emergencies such as natural disasters, equipment failures, multiple tripping etc.

7.7.1. Objective and Scope of Disaster Management Manual

The following are the objective and scope of this Manual:

- To improve state of preparedness to meet any contingency;
- To reduce response time in organizing the assistance;
- To identify major resources, man power material & equipment needed to make the plan operational;
- Making optimum use of the combined resources

7.7.2. Inventory Management and Procedures

To perform any unplanned emergency work, critical materials have been identified and have been made available for restoration, for example, standardized conductor sizes in appropriate quantities including all terminations and splices are in stock. Project Company has variety of different types of Transmission towers, one plan that has proved effective is to maintain only tower steel for the heavier types and classes of permanent towers.

Emergency Materials for Transmission Lines –

- Mandatory T & P's (as per SOP's) for each and every activity related to Transmission Lines.

- Conductor of various type used in sufficient quantities.
- Hardware of all types
- Tower members (as per requirement and criticality)

Emergency Materials for Substations –

- Mandatory Spare Equipment and accessories as per the approved list.
- T & P's
- Conductor and IPS tube of various types in sufficient quantities.
- Clamps, Connectors and Hardware of all types
- Structure and Tower members
- SF6 and N2 Gas in sufficient quantity
- Transformer Oil
- Fire Extinguishers and Fire Fighting resources in adequate quantity

The entire inventory, spares, T & P's related to Substation should to be stored inside the Substation premises in properly secured Stores and the location/ identification of the materials should be clearly marked to facilitate the restoration process in case of emergencies.

External Resources

In excess to all the internal resources available, special arrangement with the external O & M contractors, agencies etc. has been tied up to provide assistance in case of emergencies.

Storage Locations

In case of any emergencies, inventory of recovery equipment and spares are available at critical locations so that these could be pressed into service within the shortest possible time.

All the required Emergency materials are available in the Stores identified for each and every Transmission lines or in the stores managed by O & M contractors.

Logistics

Arrangements for adequate number of vehicles for movement of people and materials are ensured. Medical facilities around the clock shall be made available to the staff engaged in the restoration activities. Arrangements for drinking water supply shall also be ensured.

Emergency Procedures for restoration of Lines

The various activities in response to an emergency shall include:

- The Central Control Room for monitoring the various lines is at Bhopal Substation. In case on any outages or tripping, it receives the information from the nearest substation and accordingly alerts the Line-in-Charge.
- Upon receiving preliminary information about the damage/tripping, site visit is done by Line in charge along-with the O&M gang located nearer to the location within a maximum of 02 hrs after receiving of information.
- After site visit exchange of information in terms of event description and its severity, takes place among the Head-O&M, Head-O&M (TL), Head-O&M(SS) & the Line-in-Charge and an action plan is worked out and it is communicated to all internal as well as external stake-holders.

- In case of Conductor snapping, upon receiving instructions, Gangs, T & P's and required materials to be mobilized to the site immediately within shortest possible time.
 - Meanwhile, Site survey and damage assessment is carried out by Safety Officer regarding the safe working conditions.
 - Safe working conditions for the Transmission Line Gangs are ensured. Medical facilities in case of emergencies are tied up. Basic amenities like drinking water etc. to be procured.
 - Site preparedness is done before the commencement of work.
 - Restoration Strategy is derived.
 - Restoration work is started immediately as soon as the required materials, T & P's reaches the location.
- In case of Tower failure, after receiving the confirmation from the Line In charge, detailed Damage assessment to be done and action plan to be formulated within 2 days.
 - Identification of resources need and their deployment viz, technical experts, manpower, equipment, spare parts & other material is done.
 - All Heads from O&M, Safety & Quality functions jointly develop a comprehensive disaster management plan and garner support from other internal/external agencies.
 - Restoration Models and Restoration Strategy are derived depending upon the scenario of Tower damage.
 - Restoration-activities are finalized & Restoration-team is formed with resources from various functions as per requirement. Daily log is maintained and control-room for monitoring the situation and for exchange of information internally/externally is created.
 - Site survey and damage assessment to be carried out by Safety Officer regarding the safe working conditions.
 - Safety Plan is finalized and put into action as soon as the assessment is completed.
 - O & M functional Heads to coordinate for any assistance in terms of men & materials.
- Restoration of Transmission Line should be completed within the desired timeline
- All the erection, construction, stringing activities is to be carried out within the stipulated safe working conditions.
- Once the restoration of the Transmission Line has been completed, Post investigation and analysis to be initiated to avoid such instances in the future.

IE observed that various safety measures have been covered in Disaster Management Manual which needs to be adopted to avoid any crisis/ disaster, ways and means to tackle a crisis/ disaster, if it occurs in spite of preventive measures.

8. ENVIRONMENTAL AND SOCIAL ASPECT

8.1. Environmental Impacts and Mitigation Measures

The operation of the transmission line shall have no environment impact and hence, no clearance or mitigation measures are required.

8.1.1. Environment, Health & Safety Assessment

NRSS has implemented the following procedures to ensure that the Environment, Health & Safety (EHS) aspects are duly taken care of.

8.1.2. Quality, Health, Safety & Environment Scoring System

ENICL follows the QHSE Scoring methodology, wherein Safety Performance Monitoring System is classified in two categories i.e. –

1. Proactive monitoring
 - i. Various safety training as fall from height, electrical safety, fire, first aid training etc.
 - ii. Capturing of near miss incidents
 - iii. Mock drill on fall from height, fire, snake bite, electrocution etc
 - iv. Work place awareness as National safety day celebration, world environment day celebration, tool box talk etc
 - v. Workplace inspection
 - vi. Audit
 - vii. Environmental monitoring
 - viii. Management review meet
 - ix. Operation SOP driven, HIRA, EIA etc
2. Reactive monitoring such as
 - i. Capturing Unsafe acts / unsafe conditions / first aid and analysis for correction
 - ii. Dangerous occurrence and prevention.

8.1.3. EHS Inspection Procedure.

The EHS Inspection Procedure applies to the construction sites. The objective of this instruction is as follows:

- Demonstrate the involvement and commitment of middle managers in safety management
- Deploy common EHS managerial practices within all sites
- Promote the culture and to eradicate deviations and reach 100% compliance level

The EHS Inspection is achieved through

a) Safety Observation Tour (SOT) Process

This is a management process which is used to ensure the application of safety standards, instructions and practices/tools used in a given area. It is an inspection for the frontline engineer & middle management. This is a safety observation visit. The SOT is conducted to check the application of the EHS rules and regulations in the area. The inspection format is filled by the Engineer & Manager involving channel partner & validated by EHS manager. During SOT, all points are checked in line with the Safety Tour Observation Check List which is provided as a part of the EHS Inspection Procedure. At the end of the SOT, a debrief between the SOT leader and the channel partner of the area visited takes place. All findings are reviewed and a commitment is taken by the channel partner to avoid new occurrences of the deviations found.

b) Intermediary Safety Visit (ISV)

It is a management process which should ensure the application of safety standards, instructions and practices/ tools used in a given area. It is an Intermediary Safety Visit Inspection for the Project Head, Commercial Head and Project Management & Business Head. The objective of the ISV is to make managements commitment visible. Also, the ISV is used to make sure that all the risks are managed, i.e under control. It is used to verify that local standards (workshop, customer site etc) are respected and applied. It helps to identify deviations and unsafe practices. The ISV format is filled and at the end of the ISV, a debrief between the ISV leader and the Line / Station Manager of the area visited take place. All findings are reviewed and a commitment is taken by Line/ Station Manager to implement actions to avoid new occurrences of the deviations found. Any open non compliance follows up & closeout is responsibility of EHS manager through Project Head.

The Project Company submitted sample reports of Safety Observation Tours and EHS Inspection reports for the project.

8.1.4. Work Stoppage or EHS Non conformance Report (NCR) Procedure.

This procedure describes the methods for raising EHS non-conformances at the construction sites with subsequent corrective action. Non-Conformity is any circumstances, material or method within the operation of the construction of Transmission Line/ Substation which does not comply with the specified requirements contained within the Safe Working Procedure (SOP) and SPGVL EHS manual. This procedure applies to across the SPGVL construction site.

The responsibility to ensure that the procedure is followed, reported and appropriate records are maintained lies with the Project Head/ Line Manager/ EHS Lead. The responsibility to issue NCR / work stoppages to contractor Line Manager/ Project Manager, EHS Lead in case of any non-conformity, unsafe act/ unsafe condition and recommend corrective and preventive action. When the agreed remedial action is completed, the Engineer/ Line Manager/ Project Manager shall sign off the respective non-conformance report.

IE observed that by this process, the Project Company has been taking adequate measures for ensuring safety at the site.

8.1.5. Review of the status of Environment, Health & Safety Aspects by IE

Upon review of the various EHS documents received from the Project Company, IE is of the opinion that the Project Company is following the EHS Procedures to ensure that the aspects related to Environment, Health and Safety of the project are duly taken care of.

9. PROJECT PERMITS AND CLEARANCES

Following table 10.1 shows the latest status of various Permits and Clearances obtained/ to be obtained:

Table 9.1 – Status of Permits and Clearances

Sl. No.	Description	Authority	Present Status
1.	Aviation Clearance – LOC for 400 KV D/C Jalandhar – Samba Transmission Line	661 Army Aviation Squadron (R&O)	Issued on 22 nd February 2016, letter no – 01206/GS (Ops-Air)/X/AA. NOC is issued and is one-time activity.
2.	PTCC	Central Electric Authority	Letter no – CEA/PCD/PTCC/PNB 333/618 dated 22/03/2016, for J – S Line NOC from PTCC for S – A Line was obtained on 25 th July, 2018, vide letter no. B/46937/Sigs7(b)/422.
3.	CEA Approval for Energisation of 400 kV D/C (Twin Moose) J – S line	CEA	Approval received vide letter dated 30/03/2016
4.	Certificate for completion of trial Operation	Power System Operation Corporation Limited (POSOCO)	POSOCO letter dated 28 th December, 2016, indicates that successful completion of trial run for 400 kV Jalandhar (PG) – Samba (PG) D/C Transmission line was achieved on 10 th December, 2016
5.	Stage – I Forest Clearance for Jalandhar-Samba Line	Ministry of Environment, Forest and Climate Change	Obtained
6.	Stage – II Forest Clearance for Jalandhar-Samba Line	Ministry of Environment, Forest and Climate Change	Obtained
7.	Forest Clearance for Samba –Amargarh Line	State Govt. of J&K	Obtained
8.	Clearance for wild life	State Board for Wildlife(SBWL) and National Board for Wildlife (NBWL)	Final wildlife clearance has been issued on 04/10/2016.
9.	Aviation Clearance – Height Clearance	Airport Authority of India	Letter no – AAI/ RHQ- NR/ATM/NOC/2015/276/156-157 dated 15.02.2016 valid for 7 years from date of issue.
10.	Power Line Crossings	Power Grid Corporation of India	All the Power Line Crossings for Jalandhar – Samba Line is obtained. The permits for Samba to Amargarh section is listed below.
11.	Railway Line Crossing Jalandhar – Samba	Indian Railway	Letter no – 63-Elect/1867 dated 25.02.2016, permission for crossing the location: Track kilometer 58/9 – 59/0 between telegraph post No 58/9 and Telegraph post no 59/0 and between Ghagwal and Samba Railway stations on PKT – JAT section. Letter no – 63-Elect/1867 dated 25.02.2016, permission for crossing the location: Track kilometer 76/8-9 – 76/8 between telegraph post No 76/8 and Telegraph post no 76/9 and between Gurdaspur and Dinanagar Railway stations on ASR – PTK section.

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Sl. No.	Description	Authority	Present Status
12.	Road Crossing Jalandhar to Samba	National Highway Authority of India	Clearances for all the NH/SH crossings are obtained.
13.	Canal Crossing Jalandhar to Samba	Department of Irrigation, Punjab	Letter no: 1970/74 dated 11.05.2011, permission to cross the canal under the Gurdaspur Mandal
14.	River Crossing	Central Water Commission, Ministry of Water Resources, River Development and Ganga Rejuvenation	Letter no: 6/70/CE(IB)/2012/2729 dated 11/08/2015, stating that the Central Water Commission has no network/ activity on the River Beas and Ravi in Punjab State. Hence, the permit should be sought from the Punjab Government. No clearance required as stated by the State Govt.
15.	Section 68 of Electricity Act	Ministry of Power, Government of India	Letter no: 11/33/2013-PG (REC NRSS – XXIX) dated 19th September 2013. The permit is valid for 3 years from the date of issue for commencement of Construction work.
16.	Section 164 of Electricity Act	Central Electric Authority	Gazette order no: S.O. 2671 (E), dated 17 th September 2015. The approval is granted for 25 years.
17.	Section 17 (3) of Electricity Act, 2003	CERC	Project Company has filed petition to CERC for creation of Security Trustee and acknowledgement was received from CERC vide letter dated 30th June, 2016. However, clarification/ approval from JKERC is awaited.
18.	Defense Aviation		NOC received.

Each Section wise permit for Samba to Amargarh Section is indicated below:

1. Samba – Amargarh_PKG1

Description	Details
Railway Crossing – 1 No.	NOC obtained
State Highway Crossing – 1 No.	NOC obtained.
Power Line Crossings – 6 Nos.	NOC obtained for all the crossings

2. Samba – Amargarh_PKG2

Description	Details
SH/BRO Crossings – 9 Nos.	Proposals for all the 9 crossings are submitted to BRO office. NOC obtained for 8 no. of crossings & balance 1 is under consideration by BRO Authority for approval.
Power line Crossing – 6 Nos.	NOC obtained for all the crossings

3. Samba – Amargarh_PKG3

Description	Details
SH/ BRO Crossings – 7 Nos.	NOC obtained for all SH/BRO crossings
Mughal Road Crossing – 3 Nos.	NOC obtained for all the 3 nos.

4. Samba – Amargarh_PKG4

Description	Details
SH crossings – 1 No.	NOC obtained
Power Line Crossings – 5 Nos.	NOC obtained for all the 5 crossings.

IE found that the requisite Permits and Clearances for Jalandhar to Samba and Samba – Amargarh 400 kV D/C Transmission Line, for successful operation, are in place. However, approval under Section 17(3) of EA 2003, is still awaited (**Risk Category – C**)

10. SUMMARY OF MAJOR FINDINGS

- The project comprises of 134.811 kms of 400 kV D/C interstate transmission line with Twin Moose ACSR conductor from Jalandhar (Punjab) to Samba (Jammu) (J – S Line), 279.19 kms of 400 kV D/C transmission line with Twin Moose ACSR conductor from Samba (Jammu) – Amargarh (Kashmir) (S – A Line), LILO of Uri – Wagoor Line at Amargarh of around 6.82 kms and 400/220 kV GIS sub – station at Amargarh.
- Project Company has successfully completed the trial run of Phase – 1 and Phase – II of the Project –
 - 400 kV D/C Twin Moose Conductor Jalandhar – Samba Transmission line Phase-I of the Project, successfully completed the trial – run operation on 24.06.2016/ 18:29 Hours
 - 400 kV Amargarh (NRSS XXIX) – Samba (PG) ckt – 1, along with 50 MVAR Non – switchable line reactors at Amargarh (NRSS XXIX) end and associated bays on 1st September, 2018 at 20:15 hrs
 - 400 kV Amargarh (NRSS XXIX) – Samba (PG) ckt – 2 along with 50 MVAR Non – switchable line reactors at both the ends and associated bay on 22nd August, 2018 at 22:00 hrs.
 - 400/220 kV, 315 MVA – 1 & 2 (6X105 MVA) along with associated 400 kV bays and 220 kV bay at Amargarh on 18th May, 2018 at 15:35 hrs
 - 400 kV, 3 – Ph 63 MVAR Bus Reactor – 1 with associated 400 kV Bay at Amargarh (NRSS XXIX) on 3rd June, 2018 at 11:15 hrs
 - 400 kV, 3 – Ph 63 MVAR Bus Reactor – 2 at Amargarh (NRSS XXIX) on 8th June, 2018 at 16:42 hrs
 - 400 kV Uri (NHPC) – Amargarh (NRSS XXIX) ckt – 1 and associated bays at Amargarh (NRSS XXIX) and 400 kV Amargarh (NRSS XXIX) – Wagoora (PG) ckt – 1 and associated bays at Amargarh (NRSS XXIX) {Only LILO portion of 400 kV Uri 1(NHPC) – Wagoora Ckt – 1 at Amargarh (NRSS XXIX)} on 10th April, 2018 at 21:00 hrs
 - 400 kV Uri 1(NHPC) – Amargarh (PG) ckt – 2 and associated bays at Amargarh (NRSS XXIX) and 400 kV Amargarh (NRSS XXIX) – Wagoora (PG) ckt – 2 and associated bays at Amargarh (NRSS XXIX) {Only LILO portion of 400 kV Uri 1(NHPC) – Wagoora (PG) Ckt – 2 at Amargarh (NRSS XXIX)}, on 18th March, 2018 at 21:30hrs.
- The Project Company has provided the availability Certificate of J – S line for the months of Jun'16 to Jan'18. It is observed that the Asset's Average availability for the above mentioned period is 99% which is greater than the guaranteed availability of 98% as specified in TSA.
- IE found that the requisite Permits and Clearances for Jalandhar to Samba line are obtained and are well in place.
- Regarding S – A Line, IE noted that Clearances like Transmission Service Agreement, Transmission License, Approval under Section 68, Approval under 164 is obtained, however, approval under Section 17(3) of EA 2003, is still awaited (**Risk Category – A**). Non – Statutory Clearances like PTCC, Defense, Aviation, Crossings etc. approvals are received.
- Service conditions and system parameters are in line with the TSA and relevant Indian Standards & Practices for similar kind of projects

- Project Company has established the Project offices at three places, one in Gurdaspur (Punjab) – to monitor the J – S Line, second in Jammu to monitor the S – A line and third in Srinagar – to monitor the S – A Line, LILO and substation. During the site visit it was informed by the Project Company that all the three offices are fully functional with all necessary facilities.
- The O&M Contract for J – S Line was awarded to M/s. Telegence Powercomm Pvt. Ltd. for maintenance works on 27th July, 2016. The work order is valid for 3 years from the date of successful commissioning. The work order can be further extended for 2 years based on the performance.
- Maintenance records like checklist for patrolling (Civil & Electrical works), monthly patrolling program, monthly patrolling actual log – book of line defects, Emergency patrolling report of tripping, monthly project progress etc records are being regularly maintained and monitored.
- During site visit and as per the records, that the J – S line had two major faults, since its commissioning, reasons accountable to bad weather, with wind speed beyond 85 m/s, which is beyond the control.
- No displacement of people in the process of finalization of Right of Way and execution of the project took place. As such the socio – economic and external environment shall have no impact on the project and vice – versa.
- During site visit, IE observed that foundation strengthening activities (revetment) and restoration works were in progress as per the recommendations from Third Party Quality check M/s. Bureau Veritas India.
- A set of photographs taken during the site visit from 16th to 19th May, 2018 is attached as **Annexure – 4**.

At the helm of the Energy Transition, Tractebel provides a full range of engineering and advisory services throughout the life cycle of its clients' projects, including design and project management. As one of the world's leading engineering and advisory companies and with more than 150 years of experience, it's our mission to actively shape the world of tomorrow. With about 5,000 experts and presence in more than 70 countries, we are able to offer our customers multidisciplinary solutions in energy, water and urban.

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पॉवर सिस्टम ऑपरेशन कॉर्पोरेशन लिमिटेड
(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)
उत्तरी क्षेत्रीय भार प्रेषण केंद्र, नई दिल्ली



प्रमाणपत्र सं०: POSOCO/NRLDC/SO-I/112/1257

दिनांक: 02.08.2016

Certificate of Completion of Trial Operation of Transmission element

Reference:

- NRSS XXIX Transmission Ltd. (Sterlite) Communication dated 17.06.2016 regarding the submission of pre charging documents.
- Real time code issued by NRLDC to RTAMC, POWERGRID, NRTS-II on request, of NRSS XXIX Transmission Ltd. (Sterlite) on 23.06.2016.
- NRSS XXIX Transmission Ltd. (Sterlite), Communication dated 22.07.2016 regarding the submission of post charging documents.

Based on above references, it is hereby certified that the following Transmission elements have been successfully completed the trial operation:

Name of Transmission Asset:	1. 400 kV Jalandhar (PG)–Samba (PG)-I (The line has been constructed by M/s NRSS XXIX Transmission Ltd. The Line has been charged as 400kV Kishenpur – Jalandhar line* by connecting this line with earlier commissioned 400kV Kishenpur-Samba line of Powergrid by passing -Samba S/stn. This line has been commissioned in the existing bay at Jalandhar of 400kV Jalandhar-Moga line.
Owner of Transmission Asset:	NRSS XXIX Transmission Ltd.(Sterlite) (Owner of Jalandhar- Samba portion of line only.)
Date and Time of Energization for Commencement of trial run operation:	1. 23.06.2016/18:29
Date and Time of completion of trial run operation:	1. 24.06.2016/18:29

*This is a temporary arrangement as approved by CEA and approved in 38th NR standing committee.

This certificate is being issued in accordance with Regulation 5 of CERC (Terms & Conditions of Tariff) Regulations, 2014 to certify successful completion of total trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.

पी के अर्जुन
महापबंधक (उ. क्ष. भा. प्रे. केंद्र),

स्थान: नई दिल्ली

प्रतिलिपि:

- Head-Asset Management, NRSS XXIX, BHOPAL
- Executive Director, NRTS-II, POWERGRID, Jammu
- Member Secretary, NRPC, New Delhi
- Head of NLDC, POSOCO, New Delhi

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड
(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)
उत्तरी क्षेत्रीय भार प्रेषण केंद्र, नई दिल्ली



प्रमाणपत्र सं.: POSOCO/NRLDC/SO-I/112/ 1257

दिनांक: 02.08.2016

Certificate of Completion of Trial Operation of Transmission element

Reference:

- NRSS XXIX Transmission Ltd. (Sterlite) Communication dated 17.06.2016 regarding the submission of pre charging documents.
- Real time code issued by NRLDC to RTAMC, POWERGRID, NRTS-II on request, of NRSS XXIX Transmission Ltd. (Sterlite) on 23.06.2016.
- NRSS XXIX Transmission Ltd. (Sterlite), Communication dated 22.07.2016 regarding the submission of post charging documents.

Based on above references, it is hereby certified that the following Transmission elements have been successfully completed the trial operation:

Name of Transmission Asset:	1. 400 kV Jalandhar (PG)-Samba (PG)-I (The line has been constructed by M/s NRSS XXIX Transmission Ltd. The Line has been charged as 400kV Kishenpur – Jalandhar line [*] by connecting this line with earlier commissioned 400kV Kishenpur-Samba line of Powergrid by-passing Samba S/stn. This line has been commissioned in the existing bay at Jalandhar of 400kV Jalandhar-Moga line.
Owner of Transmission Asset:	NRSS XXIX Transmission Ltd.(Sterlite) (Owner of Jalandhar- Samba portion of line only.)
Date and Time of Energization for Commencement of trial run operation:	1. 23.06.2016/18:29
Date and Time of completion of trial run operation:	1. 24.06.2016/18:29

* This is a temporary arrangement - as approved by CEA and approved in 38th NR Standing Committee.

This certificate is being issued in accordance with Regulation 5 of CERC (Terms & Conditions of Tariff) Regulations, 2014 to certify successful completion of total trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.

Verifying Dept.	Details of verifications	Remarks	Name/Signature	Name/signature of HOD
SCADA	Confirmation of availability of telemetry data	Data not available from Jalandhar End. Verified from Kishenpur End data		 Debasis De AGM (SL-II)
MO	Confirmation of availability of requisite metering system (To be cross checked with the data submit by the assets owner)	verified		 H.K. Chawla DGM (MO)
SO-II	Adequacy of protection systems as per undertaking /data furnished by the transmission licensee.	verified		 R.K. Porwal DGM (SO-II)
SO-I	Confirmation of start time/date and completion time/date for trial operation of 24 hrs. As per control room logbook data.	Verified		 M.K. Agrawal DGM (SO-I)

डी. के. जैन.

अपरमहाप्रबंधक (उ. क्ष. भा. प्र. केंद्र).

पी के अग्रवाल

महाप्रबंधक (उ. क्ष. भा. प्र. केंद्र).

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड
(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)
उत्तरी क्षेत्रीय भार प्रेषण केंद्र, नई दिल्ली



प्रमाणपत्र सं०: POSOCO/NRLDC/SO-I/113/1258

दिनांक: 02.08.2016

Certificate of Completion of Trial Operation of Transmission element

Reference:

- NRSS XXIX Transmission Ltd. (Sterlite) Communication dated 17.06.2016 regarding the submission of pre charging documents.
- Real time code issued by NRLDC to RTAMC, XXIXGRID, NRTS-II on request, of NRSS XXIX Transmission Ltd. (Sterlite) on 21.06.2016.
- NRSS XXIX Transmission Ltd. (Sterlite), Communication dated 22.07.2016 regarding the submission of post charging documents.

Based on above references, it is hereby certified that the following Transmission elements have been successfully completed the trial operation:

Name of Transmission Asset:	1. 400 kV Jalandhar (PG)-Samba (PG)-II (The line has been constructed by M/s NRSS XXIX Transmission Ltd. The Line has been charged as 400kV Moga – Samba line* by connecting this line with earlier commissioned 400kV Jalandhar-Moga-I line of Powergrid by- passing Jalandhar S/stn. This line has been commissioned in the existing bay at Samba s/stn of 400kV Kishenpur - Samba line.
Owner of Transmission Asset:	NRSS XXIX Transmission Ltd(Sterlite). (Owner of Jalandhar- Samba portion of line only.)
Date and Time of Energization for Commencement of trial run operation:	1. 21.06.2016/19:01
Date and Time of completion of trial run operation:	1. 22.06.2016/19:01

*This is a temporary arrangement as approved by CEA and approved in 38th NR standing committee.

This certificate is being issued in accordance with Regulation 5 of CERC (Terms & Conditions of Tariff) Regulations, 2014 to certify successful completion of total trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.

पी के अशियाल
महाप्रबंधक (उ. क्षे. भा. प्रे. केंद्र)

स्थान: नई दिल्ली

प्रतिलिपि:

- Head-Asset Management, NRSS XXIX, BHOPAL
- Executive Director, NRTS-II, POWERGRID, Jammu
- Member Secretary, NRPC, New Delhi
- Head of NLDC, POSOCO, New Delhi

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड
(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)
उत्तरी क्षेत्रीय भार प्रेषण केंद्र, नई दिल्ली



प्रमाणपत्र सं: POSOCO/NRLDC/SO-I/113/1258

दिनांक: 02.08.2016

Certificate of Completion of Trial Operation of Transmission element

Reference:

- NRSS XXIX Transmission Ltd. (Sterlite) Communication dated 17.06.2016 regarding the submission of pre charging documents.
- Real time code issued by NRLDC to RTAMC, XXIXGRID, NRTS-II on request, of NRSS XXIX Transmission Ltd. (Sterlite) on 21.06.2016.
- NRSS XXIX Transmission Ltd. (Sterlite), Communication dated 22.07.2016 regarding the submission of post charging documents.

Based on above references, it is hereby certified that the following Transmission elements have been successfully completed the trial operation:

Name of Transmission Asset:	1. 400 kV Jalandhar (PG)-Samba (PG)-II (The line has been constructed by M/s NRSS XXIX Transmission Ltd. The Line has been charged as 400kV Moga - Samba line by connecting this line with earlier commissioned 400kV Jalandhar-Moga-I line of Powergrid by passing Jalandhar S/stn. This line has been commissioned in the existing bay at Samba s/stn of 400kV Kishenpur-Samba line.
Owner of Transmission Asset:	NRSS XXIX Transmission Ltd (Sterlite). (Owner of Jalandhar- Samba portion of line only.)
Date and Time of Energization for Commencement of trial run operation:	1. 21.06.2016/19:01
Date and Time of completion of trial run operation:	1. 22.06.2016/19:01

This certificate is being issued in accordance with Regulation 5 of CERC (Terms & Conditions of Tariff) Regulations, 2014 to certify successful completion of total trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.

• This is a temporary arrangement as approved by CEA and in 3rd time studies committee

Verifying Dept.	Details of verifications	Remarks	Name/Signature	Name/signature of HOD
SCADA	Confirmation of availability of telemetry data	verified		 Debasis De AGM (SL-II)
MO	Confirmation of availability of requisite metering system (To be cross checked with the data submit by the assets owner)	verified		 H.K. Chawla DGM (MO)
SO-II	Adequacy of protection systems as per undertaking /data furnished by the transmission licensee.	verified		 R.K. Porwal DGM (SO-II)
SO-I	Confirmation of start time/date and completion time/date for trial operation of 24 hrs. As per control room logbook data.	verified		 M.K. Agrawal DGM (SO-I)

डी. के. जैन.

अपरमहाप्रबंधक (उ. क्ष. भा. प्र. केंद्र),

पी. के. अग्रवाल

महाप्रबंधक (उ. क्ष. भा. प्र. केंद्र),



उत्तरी क्षेत्रीय भार प्रेशन केन्द्र / NORTHERN REGIONAL LOAD DESPATCH CENTRE
कार्यालय : 18-ए, शाहीद जीत सिंह सनसनवाल मार्ग, कटवारिया सराय, नई दिल्ली- 110018
OFFICE : 18-A, Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai, New Delhi- 110018
CIN : U40105DL2009GOI188682, Website : www.nrlc.org, www.nrlc.in, Tel: 011- 26519408, 26523889, Fax : 011- 2652747

प्रमाणपत्र सं.: POSOCO/NRLDC/SO-1 /212/

दिनांक: 22.05.2018

Certificate of Completion of Trial Operation of Transmission element

Reference:

- NRSS XXIX Communication dated 23.02.2018, 07.03.2018 & 14.03.2018 regarding the submission of pre charging documents for LLD of 400kV Uri(NHPC)-Wagoora(PG)-2 at Amargarh (NRSS XXIX).
- Real time code issued by NRLDC on request of NRSS XXIX Transmission Limited on 15.03.2018 (NRLDC Code: 1212 for 400kV Uri1-Wagoora-1 & 1197 for 400kV Amargarh-Wagoora-2).
- NRSS XXIX Transmission Ltd., Communication dated 29.03.2017, 04.04.2018, 30.04.2018, 19.05.2018 & 21.05.2018 regarding the submission of post charging documents.
- NRLDC, Communication dated 29.03.2018, 02.05.2018 & 11.05.2018 regarding the submission of post charging documents.

Based on above references, it is hereby certified that the following Transmission elements have been successfully completed the trial operation:

Name of Transmission Asset:	1. 400 kV Uri1(NHPC)-Amargarh(PG)-2 and associated bays 407 (main) at Amargarh(NRSS XXIX). 2. 400 kV Amargarh(NRSS XXIX)-Wagoora(PG)-2 and associated bays 412 (main) at Amargarh(NRSS XXIX). {Only LLD portion of 400kV Uri1(NHPC)-Wagoora(PG)-2 at Amargarh(NRSS XXIX)}
Owner of Transmission Asset:	1. NRSS XXIX Transmission Limited (LLD Portion Only)
Date and Time of Energization for Commencement of trial run operation:	1. 17.03.2018/21:30 hrs
Date and Time of completion of trial run operation:	1. 18.03.2018/21:30 hrs

This certificate is being issued in accordance with Regulation 6.3(A) (5) of CER (Indian Electricity Grid Code) Regulations, 2010 to certify successful completion of trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.


जी. के. जहा

सहायक (उ. व. व. व. व. व.)

स्थान: नई दिल्ली

प्रतिलिपि:

- Head-Asset Management, NRSS XXIX, O&M Office, A-634, Tulip, New Meenal residency, Ayodhya Bypass Road, Bhopal Madhyapradesh-462023, INDIA
- Member Secretary, NRPC, New Delhi
- Head of NLDC, POSOCO, New Delhi
- Executive Director, NRTS-II, POWERGRID, Jammu

Registered Office : B-8, Qutab Institutional Area, Katwaria Sarai, New Delhi -110 018
संकेत कार्यालय : बी-8, कृताभ संस्थानिक एरिया, कटवारिया सराय, नई दिल्ली -110 018



उत्तरी क्षेत्रीय भार प्रेशण केन्द्र / NORTHERN REGIONAL LOAD DESPATCH CENTRE

कार्यालय : 18-ए, शहीद जीत सिंह सनसनवाल मार्ग, कटवारिया सराय, नई दिल्ली- 110016

OFFICE : 18-A, Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai, New Delhi- 110016

CIN : U40105DL2009GOI188682, Website : www.nrlco.org, www.nrlco.in, Tel.: 011- 26519406, 26523869; Fax : 011- 26852747

प्रमाणपत्र सं०: POSOCO/NRLDC/SO-I/215/ 1169 - 1171

दिनांक: 03.07.2018

Certificate of Completion of Trial Operation of Transmission element


Reference:

- NRSS XXIX Communication dated 23.02.2018, 08.03.2018, 10.04.2018 (for ICTs) & 11.05.2018 (for Line bays) regarding the submission of pre charging documents for 400/220kV, 315 MVA ICT-1 & 2 and 220kV line bays no 202 & 206 at Amargarh (NRSS XXIX).
- Real time code issued by NREDC on request of NRSS XXXVI Transmission Limited on 17.05.2018 (NRLDC Code: 1547 for 220kV Amargarh-Delina-1 and 1559 for 220kV Amargarh-Zainkote-1).
- NRSS XXIX Transmission Ltd., Communication dated 01.06.2018, 04.06.2018, 21.06.2018, 22.06.2018 & 25.06.2018 regarding the submission of post charging documents.

Based on above references, it is hereby certified that the following Transmission elements have been successfully completed the trial operation:

Name of Transmission Asset:	<ol style="list-style-type: none"> 400/220 kV, 315 MVA-1 (3X105 MVA) along with associated 400kV bay 403 (main) & 220kV bay 203 at Amargarh (NRSS XXIX). 400/220 kV, 315 MVA-2 (3X105 MVA) along with associated 400kV bay 406 (main) & 220kV bay 209 at Amargarh (NRSS XXIX). 220kV bay no 202 of Zainkote-Amargarh at Amargarh (NRSS XXIX). 220kV bay no 206 of Delina-Amargarh at Amargarh (NRSS XXIX).
Owner of Transmission Asset:	1. NRSS XXIX Transmission Limited
Date and Time of Energization for Commencement of trial run operation:	<ol style="list-style-type: none"> 17.05.2018/15:35 hrs. 17.05.2018/15:35 hrs. 17.05.2018/18:30 hrs. 17.05.2018/15:35 hrs.
Date and Time of completion of trial run operation:	<ol style="list-style-type: none"> 18.05.2018/15:35 hrs. 18.05.2018/15:35 hrs. 18.05.2018/18:30 hrs. 18.05.2018/15:35 hrs.

This certificate is being issued in accordance with Regulation 6.3(A) (5) of CERC (Indian Electricity Grid Code) Regulations, 2010 to certify successful completion of trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.


डॉ. के. जैन, 03.07.18

महाप्रबंधक (उ. क्ष. भा. प्रे. केंद्र),

स्थान: नई दिल्ली

प्रतिलिपि:

- Head-Asset Management, NRSS XXIX, O&M Office, A-634, Tulip, New Meena residency, Ayodhya Bypass Road, Bhopal Madhyapradesh-462023, INDIA
- Member Secretary, NRPC, New Delhi
- Head of NLDC, POSOCO, New Delhi

Registered Office : B-9, Outab Institutional Area, Katwaria Sarai, New Delhi -110 016

पंजीकृत कार्यालय : बी-9, कटवार इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली - 110 016



उत्तरी क्षेत्रीय भार प्रेशन केन्द्र / NORTHERN REGIONAL LOAD DESPATCH CENTRE
कार्यालय : 18-ए, शहीद जीत सिंह सनसनवाल मार्ग, कटवारिया सराय, नई दिल्ली- 110016
OFFICE : 18-A, Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai, New Delhi- 110016
CIN : U40106DL2009GOM188682, Website : www.nrlc.org www.nrlc.in Tel.: 011- 26519498, 26523809, Fax: 011- 26892747

प्रमाणपत्र सं.: POSOCO/NRLDC/SO-1/216/ 1189-1191

दिनांक: 04.07.2018

Certificate of Completion of Trial Operation of Transmission element

Reference:

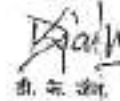
- NRSS XXIX Communication dated 23.02.2018, 10.04.2018 regarding the submission of pre charging documents for 400kV, 3-ph 63 MVAR Bus Reactor-1 & 2 at 400/220kV along with associated bays no 415(main) & 414(tie) Amargarh (NRSS XXIX).
- Real time code issued by NRLDC on request of NRSS XXXVI Transmission Limited on 01.06.2018 & 07.06.2018 (NRLDC Code: 35 for BR-1 and 602 for BR-2).
- NRSS XXIX Transmission Ltd., Communication dated 21.06.2018 regarding the submission of post charging documents.

Based on above references, it is hereby certified that the following Transmission elements have been successfully completed the trial operation:

Name of Transmission Asset:	1. 400 kV, 3-Ph 63 MVAR Bus Reactor-1 along with associated 400kV bay 415 (main) & 414 (tie) at Amargarh (NRSS XXIX). 2. 400 kV, 3-Ph 63 MVAR Bus Reactor-2 at Amargarh (NRSS XXIX).
Owner of Transmission Asset:	1. NRSS XXIX Transmission Limited
Date and Time of Emergization for Commencement of trial run operation:	1. 02.05.2018/11:45 hrs. 2. 07.05.2018/16:42 hrs.
Date and Time of completion of trial run operation:	1. 03.06.2018/11:15 hrs. 2. 03.06.2018/16:42 hrs.

*Note: Both the Bus Reactors are on same bays i.e. 415(main) & 414(tie).

This certificate is being issued in accordance with Regulation 63(A) (5) of CERC (Indian Electricity Grid Code) Regulations, 2010 to certify successful completion of trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.


डी. के. जैस

सहायक (उ. वी. आ. ई. विद्यु.)

स्थान: नई दिल्ली

प्रतिलिपि:

- Head/Asstt. Management, NRSS XXIX, O&M Office, A-634, Tulsi, New Mansal residency, Ayodhya Bypass Road, Bhopal Madhya Pradesh-462023, INDIA
- Member Secretary, NRPC, New Delhi
- Head of NRLDC, POSOCO, New Delhi

Registered Office : B-8, Okhla Institutional Area, Katwaria Sarai, New Delhi -110 016
कार्यालय : 8-ए, कृष्ण इन्स्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली - 110 016

उत्तरी क्षेत्रीय भार प्रेशन केन्द्र / NORTHERN REGIONAL LOAD DESPATCH CENTRE
कार्यालय : 18-ए, शाहीद जेत सिंह सनसनवाल मार्ग, कटवारिया सराय, नई दिल्ली- 110016
OFFICE : 18-A, Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai, New Delhi- 110016
CIN : U40105DL2009GOI188682, Website : www.nrlcdc.org, www.nrlcdc.in, Tel: 011- 26519406, 26523869, Fax : 011- 26852747

प्रमाणपत्र सं०: POSOCO/NRLDC/SO-I /221/

दिनांक: 20.09.2018

Certificate of Completion of Trial Operation of Transmission element

Reference:

- NRSS XXIX, Communication dated 01.06.2018, 31.07.2018, 04.08.2018, 07.08.2018, 10.08.2018 & 21.08.2018 regarding the submission of pre charging documents for 400kV Amargarh (NRSS XXIX)-Samba (PG)-1 & 2 along with 50 MVA Non-Switchable line reactors at Amargarh (NRSS XXIX) end.
- Real time code issued by NRLDC on request of NRSS XXIX & RTAMC, POWERGRID, Jammu on 31.08.2018 for ckt-1 (NRLDC Code: 2096).
- NRSS XXIX, Communication dated 12.09.2018 regarding the submission of post charging documents.

Based on above references, it is hereby certified that the following Transmission elements have been successfully completed the trial operation:

Name of Transmission Asset:	1. 400kV Amargarh (NRSS XXIX)-Samba (PG)-1 along with 50 MVAR Non-switchable line reactors at Amargarh (NRSS XXIX) end and associated bay no 401(main) & 402(tie) at Amargarh (NRSS XXIX) end.
Owner of Transmission Asset:	1. Line Portion, Line Reactors and bays at Amargarh (NRSS XXIX) end – NRSS XXIX Transmission Ltd. Line Reactors & Bays at Samba(PG) end - POWERGRID
Date and Time of Energization for Commencement of trial run operation:	1. 31.08.2018/20:15 hrs.
Date and Time of completion of trial run operation:	1. 01.09.2018/20:15 hrs.

This certificate is being issued in accordance with Regulation 6.3(A) (5), of CERC (Indian Electricity Grid Code) Regulations, 2010 to certify successful completion of trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.

एस एस बड़पंडा
21/9/18

एस. एस. बड़पंडा

कार्यपालक निदेशक (उ. क्षे. शा. प्र. केन्द्र),

स्थान: नई दिल्ली

प्रतिलिपि:

- Head-Asset Management, NRSS XXIX, O&M Office, A-634, Tulip, New Meenal residency, Ayodhya Bypass Road, Bhopal Madhyapradesh-462023, INDIA
- Member Secretary, NRPC, New Delhi
- Head of NLDC, POSOCO, New Delhi



उत्तरी क्षेत्रीय भार प्रेषण केन्द्र / NORTHERN REGIONAL LOAD DESPATCH CENTRE
कार्यालय : 18-ए, शाहीद जीत सिंह सनसनवाल मार्ग, कटवारिया सराय, नई दिल्ली- 110016
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प्रमाणपत्र सं०: POSOCO/NRLDC/SO-I /220/

दिनांक: 21.09.2018

Certificate of Completion of Trial Operation of Transmission element

Reference:

- NRSS XXIX, Communication dated 01.06.2018, 31.07.2018, 04.08.2018, 07.08.2018, 10.08.2018 & 21.08.2018 regarding the submission of pre charging documents for 400kV Amargarh (NRSS XXIX)-Samba (PG)-1 & 2 along with 50 MVA Non-Switchable line reactors at Amargarh (NRSS XXIX) end.
- RTAMC, Powergrid, Jammu Communication dated 21.08.2018 regarding the submission of pre charging documents for 400KV, 50 MVA Non-Switchable line reactors of Amargarh (NRSS XXIX) line-1 & 2 at Samba (PG) end.
- Real time code issued by NRLDC on request of NRSS XXIX & RTAMC, POWERGRID, Jammu on 21.08.2018 for ckt-2 (NRLDC Code: 1512) & 24.08.2018 for ckt-1 (NRLDC Code: 1643).
- NRSS XXIX & RTAMC, Powergrid, Jammu, Communication dated 28.08.2018 & 12.09.2018 regarding the submission of post charging documents.

Based on above references, it is hereby certified that the following Transmission elements have been successfully completed the trial operation:

Name of Transmission Asset:	1. 400kV Amargarh (NRSS XXIX)-Samba (PG)-2 along with 50 MVAR Non-switchable line reactors at both ends and associated bay no 404(main) & 405(tie) at Amargarh (NRSS XXIX), 416(main) & 417(tie) at Samba(PG) end. 2. 50 MVAR Non-switchable line reactor-1 of Amargarh (NRSS XXIX) line-1 at Samba (PG) end along with associated bays no 413(man) & 414 (tie) .
Owner of Transmission Asset:	1. Line Portion and Line Reactors & bays at Amargarh (NRSS XXIX) end – NRSS XXIX Transmission Ltd. 2. Line Reactors & Bays at Samba(PG) end -POWERGRID
Date and Time of Energization for Commencement of trial run operation:	1. 21.08.2018/22:00 hrs. 2. 24.08.2018/09:32 hrs.
Date and Time of completion of trial run operation:	1. 22.08.2018/22:00 hrs. 2. 25.08.2018/09:32 hrs.

This certificate is being issued in accordance with Regulation 6.3(A) (5), of CERC (Indian Electricity Grid Code) Regulations, 2010 to certify successful completion of trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.

एस एस बड़पंडा
21/9/18

एस. एस. बड़पंडा

कार्यपालक निदेशक (उ. क्षेत्र. भा. प्र. केन्द्र),

स्थान: नई दिल्ली

प्रतिलिपि:

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- Executive Director, NRTS-II, POWERGRID, Jammu
- Member Secretary, NRPC, New Delhi
- Head of NLDC, POSOCO, New Delhi

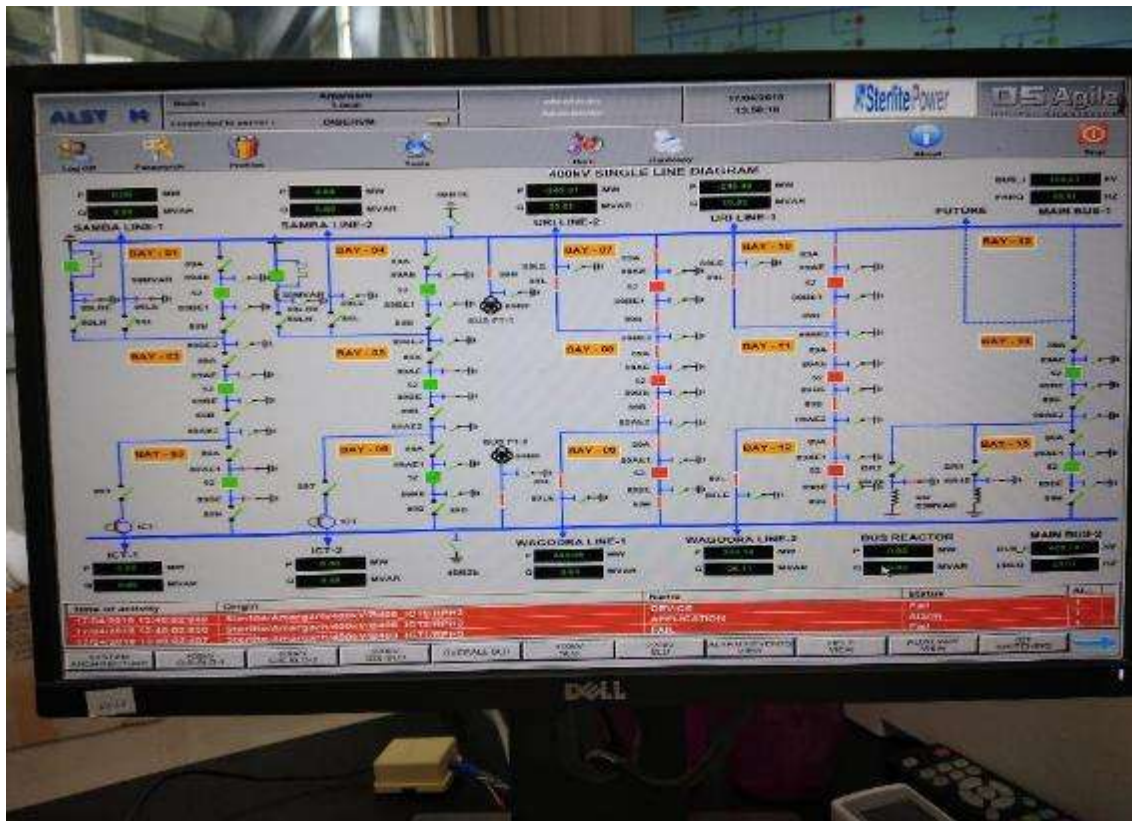


Uri – Wagoora LIL0 line stringing complete





400 kV GIS sub – station, Equipment installation complete, tested and charged



Around 248.64 MW of Power was flowing through the LILO Line



Inter – Connecting Sub – station yard



220 kV outgoing transmission lines



Stretch 409 to 413 – Stringing along with OPGW is complete



Stretch 330/0 to 332/0 – Pir Panjal Ranges



Stretch 332/3 to 332/5 – Transposition Tower



Stretch 310/0 to 313/0



Location 338/1 – Tower Erection in progress



Stretch 271/0 to 273/0



Location 34/0 – Tower erection in progress



Location 35/0 – Tower erection progress



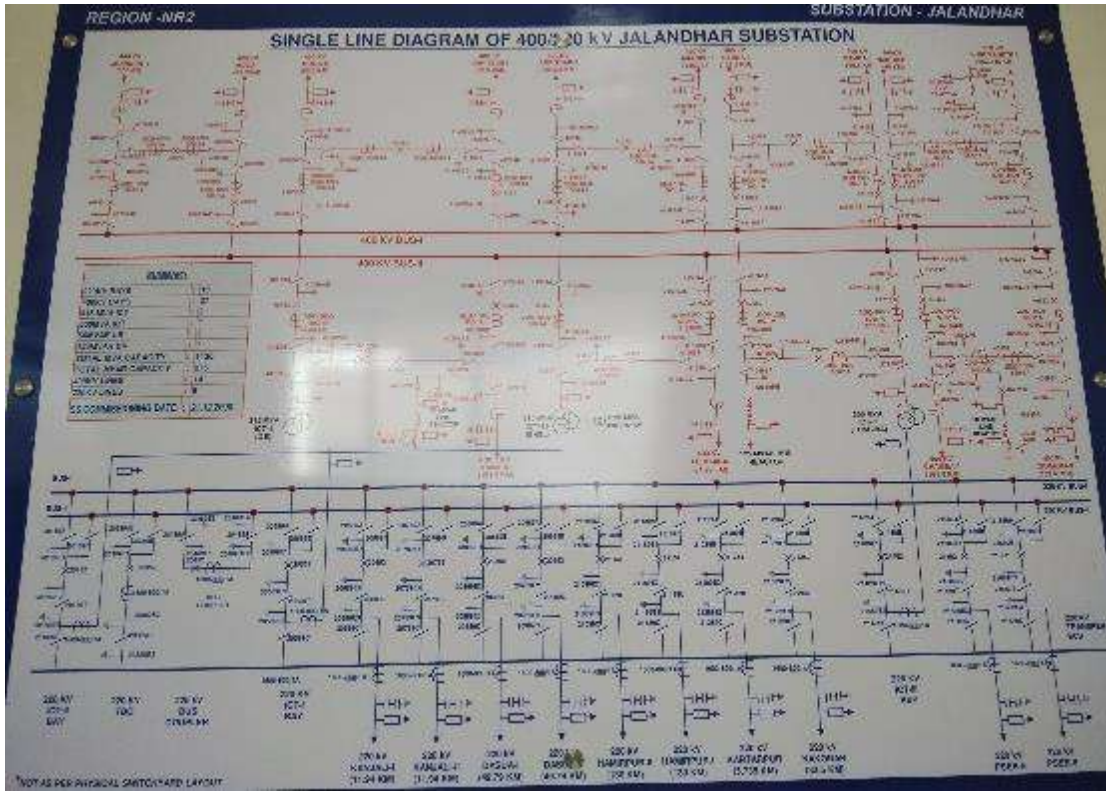
Stretch 20/3 to 30/9 – Stringing complete



400/220 kV PGCIL Substation at Jalandhar Samba Line 1 Bay



400/220 kV PGCIL substation at Jalandhar – indicating Voltage, Phase current and Power



Single line Diagram of 400/220 kV Jalandhar Substation



Jalandhar – Samba 400 kV D/C Powerline crossing

Odisha Generation Phase - II Transmission Limited_Indigrid Trust

Technical Due Diligence (OGPTL)

Indigrid Trust
Delhi | INDIA

RESTRICTED

31 December 2018

REPORT
Final

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TECHNICAL DUE DILIGENCE



Our ref.: Document No. P.013212-U-00108-001

Imputation: Project No. P.013212

[RESTRICTED]

Client : «Indigrd Trust»
Project : **Odisha Generation Phase – II Transmission Limited**
Subject : **Submission of DDR**
Comments:

Revision No.	Date	Prepared / Revision By	Description
00	2018/12/31	DMA	Final Issued for Submission

00	18/12/31	Final	DMA	SDM	SDM	DMA
REV.	YY/MM/DD	STAT.	WRITTEN	VERIFIED	APPROVED	VALIDATED

765 kV D/C Transmission Line from Raipur Pooling Station to Jharsuguda Pooling Station (Sundergarh) and 400 kV D/C Transmission Line from IB Thermal Power Station to Jharsuguda Pooling Station (Sundergarh)

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1. EXECUTIVE SUMMARY

Odisha Generation Phase II Transmission Limited (OGPTL) is a Special Purpose Vehicle incorporated for providing grid connectivity for “Common Transmission System for phase – II Generation projects in Odisha and Immediate Evacuation System for OPGC (1320 MW) Projects in Odisha”. Central Electricity Authority, Government of India had notified PFC Consulting Limited (wholly owned subsidiary of PFC Limited) as the Bid Process Coordinator (BPC) for the purpose of selection of bidder as Transmission Service Provider (TSP) for the aforementioned transmission system through tariff based competitive bidding process.

Indigrd Trust (IT) has appointed Tractebel Engineering Pvt. Ltd. (TEPL) as Independent Engineer (IE) to undertake Technical Due Diligence study for the above mentioned 400 kV and 765 kV Transmission System Project.

The Project involves construction of the following transmission lines.

Name of the Transmission Element	Completion Target	Conductor per phase
765 kV D/C Transmission Line from 765/400 kV Substation at Jharsuguda (Sundergarh) – 765/400 kV Raipur Pooling Station (304.95 Kms as per check survey)	40 months from effective date (i.e. 8 th August, 2019)	Hexa Zebra ACSR Conductor or equivalent AAAC. The transmission lines to be designed for a maximum operating conductor temperature of 85°C for both ACSR as well AAAC.
400 kV Transmission Line from IB Thermal Power Station (OPGC) 400 kV substation – 765/400 kV D/C Jharsuguda Substation (51.35 Kms as per check survey)	July, 2017	Triple Snowbird ACSR Conductor or equivalent AAAC. The transmission lines to be designed for a maximum operating conductor temperature of 85°C for both ACSR as well AAAC.

As per TSA the effective date is 8th April, 2016 i.e. the date of signing of Share Purchase Agreement.

The project has been awarded under tariff – based competitive bidding process wherein annual tariffs have been quoted for the next 35 years. OGPTL, the TSP has entered into Transmission Service Agreements (“TSA”) with the Long Term Transmission Customers (LTTCS) on 20th November, 2015. TSA has been signed with seven LTTCS.

The contracts of Engineering, Supply, Erection and Civil Works have been executed separately between Odisha Generation Phase II Transmission Limited (Owner) and Sterlite Power Grid Ventures Limited (Contractor) on 11th April, 2016. The scope of work includes:

- i. Laying of 765 kV D/C Hexa Zebra Conductor Transmission Line from 765/400 kV Raipur Pooling Station at Bhilai to 765/400 kV Jharsuguda Station (Sundergarh). (approximately 304 km)

- ii. Laying of 400 kV D/C Triple Snowbird Conductor Transmission Line from OPGC (IB Thermal Power Station) to 765/400 kV Jharsuguda Pool Station. (approximately 51.96 km)

The effective date of the contract was 08.01.2016. The “Completion Date” for 400 kV D/C Transmission Line is 30th June, 2017 and 765 kV D/C Transmission Line is 6th June, 2019. The EPC SCOD is 3 months prior to the TSA and CERC order schedule COD, accommodating a sufficient cushion for any un – anticipated interruptions.

Back to back contract for the EPC works for both, the 400 kV D/C and 765 kV D/C Lines, was placed to M/s. L&T ECC.

The construction works for 400 kV D/C Transmission Line from IB Thermal Power plant to Jharsuguda Pooling Station, of line length 51.35 kms, is physically complete. CEA had conducted the site inspection on 25th July, 2017 and accorded the energization letter vide letter dated 23rd August, 2017. The POSOCO letter dated 4th January, 2018, states that 400 kV D/C Ckt – I & Ckt – II from IB (OPGC) to Jharsuguda, has successfully completed the 24 hours trial – run test on 20th December, 2017. IE observes that the SCOD as per TSA for 400 kV D/C line was on July, 2017, however due to delay in completion of 400 kV Bays at PGCIL 765/400 kV Pooling Station at Jharsuguda, under the purview of PGCIL, the line got charged during December, 2017.

The construction for 765kV D/C Transmission progress of various activities as on 14th November 2018 is given in the table below.

Activity	Total Target	Cumulative Progress till 14.11.2018		Balance
		Plan (L2)	Actual	
Total Foundation (No)	782	782	782	-
Tower Erection (No.)	782	782	782	-
Final Stringing (km)	304.95	304.95	304.95	-

The construction works are 100% physical complete for both lines as on 14th November 2018.

Project Company has received all the pre – requisite Permits and Clearances like Approval under Section 68, 164 and Section 63 of EA Act, 2003, Transmission License, Stage – 1 Forest Clearance for Odisha and Chhattisgarh section, PTCC, Civil Aviation, Defence and Crossings for successful commissioning and operation of 400 kV D/C & 765 kV D/C Transmission Lines.

The O&M Contract for both 400 kV D/C and 765 kV D/C Line is awarded to M/s. JBS Enterprise Private Limited. The O&M works for 400 kV Line started from 10th March, 2017, while the works for 765 kV Line shall start after the commissioning of the same.

As per the specification provided by the Project Company, the Transmission lines and Towers have been designed, installed and tested in accordance with International Standards and Indians Standards. The design has also met statutory requirements such as the Indian Electricity Rules, Indian Factory Act and Indian Electricity Grid Code etc. IE is of the opinion that the final design and specifications of equipment/ systems installed in the Transmission Line are in line with the technical specification and the drawings & documents reviewed and approved by the Project Company and Owner's Engineer.

All the transmission line assets are designed as per IS:802 Part 1 & 2 with a reliability factor of 1.0 which ensures the reliability period of the transmission line for 50 years and for the Substation Equipment for 35 years. As per the TSA, the Term of Applicability of the TSA is 35 years from the Schedule COD of the Project. Hence, IE confirms that the Transmission Assets are technically designed and are reliable as per the TSA.

The life extension of the asset beyond 35 years can be assessed based on the Residual Life Assessment (RLA) results, Load Studies and the Technological advancements after 35 years of Project Operation. Maintenance records like checklist for patrolling (Civil & Electrical works), monthly patrolling program, monthly patrolling actual log – book of line defects, Emergency patrolling report of tripping, monthly project progress etc records are being regularly maintained and monitored.

The actual availability has been considered at 99.25% against a target availability of 98%. IE is of the view that 99.25% availability is achievable with proper maintenance planning. IE is of the view that O&M expense is reasonable considering Sterlite experience in maintaining multiple Transmission lines.

2. INTRODUCTION

2.1. Background

Odisha Generation Phase II Transmission Limited (OGPTL) is a Special Purpose Vehicle incorporated for providing grid connectivity for “Common Transmission System for phase – II Generation projects in Odisha and Immediate Evacuation System for OPGC (1320 MW) Projects in Odisha”. Central Electricity Authority, Government of India had notified PFC Consulting Limited (wholly owned subsidiary of PFC Limited) as the Bid Process Coordinator (BPC) for the purpose of selection of bidder as Transmission Service Provider (TSP) for the aforementioned transmission system through tariff based competitive bidding process.

Indigrd Trust (IT) has appointed Tractebel Engineering Pvt. Ltd. (TEPL) as Independent Engineer (IE) to undertake Technical Due Diligence study for the above mentioned 400 kV and 765 kV Transmission System Project.

2.2. Definition

Project	: 765/400 kV Jharsuguda Substation – 765/400 kV D/C Raipur Pooling Station. Around 304.95 Kms. (referred as “ Bigger Line ”) 400 kV IB (TPS) substation – 765/400 kV Jharsuguda Substation. Around 51.35 kms (referred as “ Smaller Line ”).
SPV	: Odisha Generation Phase – II Transmission Ltd. (OGPTL)
Sponsors	: Indigrd Trust
Lender’s Engineer	: Tractebel Engineering Pvt. Ltd.

2.3. Scope of Service

The scope of services of IE has been detailed as follows:

- Assessment of technical terms of the EPC contract including the Technical requirements/specifications (System parameters)
- Insights on the EPC contractor based on general industry experience and review of warranties and guarantees in the contracts
- Testing and Maintenance Records
- Outage/ tripping records since commissioning
- Construction schedules and if any Penalties levied
- Operation & Maintenance Philosophy and Arrangements
- Review of status all of clearances, permits
- Major ROW issues, Court Cases, pending Insurance claim etc.

2.4. Basis of Report

This Due Diligence Report is prepared by IE based on its assessment of work at site during the site visits, discussions with representatives of the Project Company, Contractors, review of the documents/ information provided by the Project Company.

Following Documents are received from the Project Company:

- EPC Contracts
- Transmission Service Agreement
- Share Purchase Agreement
- Technical Specification
- Route Survey Report
- L 2 schedules
- Tower Schedules
- Project Progress Report
- Updated status of permits and clearances

2.5. Risk Categories

Based on the detailed review of the technical documents/ information provided, the IE proposes to identify in this Report, issues if any and the associated risks for the Project. Accordingly, three Risk Categories have been assigned as indicated in Table 2.1 below:

Table 2.1 – Risk Categories

Risk Category	Risk Category	Risk type
Risk Category –A	Development Risk	Matters which are dependent on external factors/ agencies and can affect the development/ schedule of the Project.
Risk Category –B	Technology Risk	Matters that are related to technical aspects of the Project which can affect performance/ availability significantly.
Risk Category –C	Operational Risk	Matters related to O&M which can lead to poor performance/ lower availability

DISCLAIMER

IE has made no search of any public records nor independently validated the information provided by Project Company with any external source, and save for the reviewed documents listed above, IE has not examined any other documents relating to the matters of the Project Company for the purpose of this Report.

IE's findings is strictly limited to the matters stated herein and is not to be read as extending by implication to any other matter. It is given as on the date of writing this Report solely for the benefit of the Lenders and may not be disclosed to or relied upon by anyone else without IE's prior consent, provided that, this opinion may be disclosed to the auditors or any professional advisors of any of the Addressees or to any regulatory authority (as may be required by such regulatory authority) or otherwise pursuant to a court order or legal process.

3. DESCRIPTION OF PROJECT

3.1. Background

Odisha Generation Phase II Transmission Limited (OGPTL) is a Special Purpose Vehicle incorporated for providing grid connectivity for “Common Transmission System for phase – II Generation projects in Odisha and Immediate Evacuation System for OPGC (1320 MW) Projects in Odisha”. Central Electricity Authority, Government of India had notified PFC Consulting Limited (wholly owned subsidiary of PFC Limited) as the Bid Process Coordinator (BPC) for the purpose of selection of bidder as Transmission Service Provider (TSP) for the aforementioned transmission system through tariff based competitive bidding process.

As per the tariff based bidding process Sterlite Grid 3 Limited was selected as TSP vide Letter of Intent dated 6th January, 2016 to establish the Transmission System as mentioned in the Table below on build, own, operate and maintain basis and to provide transmission services on a long term basis to the Long Term Transmission Customers (LTTCs).

Name of the Transmission Element	Completion Target	Conductor per phase
765 kV D/C Transmission Line from 765/400 kV Substation at Jharsuguda (Sundergarh) – 765/400 kV Raipur Pooling Station (304.95 Kms as per check survey)	40 months from effective date (i.e. 8 th August, 2019)	Hexa Zebra ACSR Conductor or equivalent AAAC. The transmission lines to be designed for a maximum operating conductor temperature of 85°C for both ACSR as well AAAC.
400 kV Transmission Line from IB Thermal Power Station (OPGC) 400 kV substation – 765/400 kV D/C Jharsuguda Substation (51.35 Kms as per check survey)	July, 2017	Triple Snowbird ACSR Conductor or equivalent AAAC. The transmission lines to be designed for a maximum operating conductor temperature of 85°C for both ACSR as well AAAC.

Note:

- Effective date is the date of signing of the Share Purchase Agreement i.e. 8th April, 2016.
- CTU (PGCIL) would provide 2 nos. 765 kV line bays at each Jharsuguda Substation and Raipur Pooling Station for termination of Jharsuguda – Raipur 765 kV D/C Transmission Line.
- CTU (PGCIL) would provide 2 nos. of 400 kV line bays (GIS) at Jharsuguda substation of PGCIL for termination of OPGC – Jharsuguda 400 kV D/C Transmission Line.
- CTU (PGCIL) would provide 2X240 MVAr switchable line reactor along with NGR at Jharsuguda (sundergarh) end on Jharsuguda – Raipur Pool 765 kV D/C Line.

- CTU (PGCIL) would provide 2X240 MVar switchable line reactor along with NGR at Raipur Pool end on Jharsuguda – Raipur Pool 765 kV D/C Line.
- 2 nos. 400 kV line bays at OPGC generation switchyard are to be provided by the generation developer (OPGC).

The key details of the project have been shown in below table 3:1:

Table 3.1 – Key details

SCOD	:	August, 2019 as per TSA
Route Length	:	Around 304.95 Kms (765 kV D/C, Bigger Line) (23.26 kms of Forest stretch) Around 51.35 Kms (400 kV D/C, Smaller Line) (7 kms of Forest Stretch)
Transmission Service Agreement tenor	:	35 years from Scheduled COD

3.2. Transmission and Sale of Power

The project has been awarded under tariff – based competitive bidding process wherein annual tariffs have been quoted for the next 35 years. OGPTL, the TSP has entered into Transmission Service Agreements (“TSA”) with the Long Term Transmission Customers (LTTCs) vide Agreement dated 20th November, 2015. TSA has been signed with seven LTTCs.

S. No.	Name of Long – Term Transmission Customers
1.	North Bihar Power Distribution Company Limited
2.	South Bihar Power Distribution Company limited
3.	Jharkhand Bijli Vitran Nigam Limited
4.	Damodar Valley Corporation
5.	GRIDCO Limited
6.	Energy and Power Department, Govt. of Sikkim
7.	West Bengal State Electricity Distribution Company Limited.

3.3. EPC Contract

The contracts of Engineering, Supply, Erection and Civil Works have been executed separately between Odisha Generation Phase II Transmission Limited (Owner) and Sterlite Power Grid Ventures Limited (hereinafter referred as “SPGVL” or “EPC Contractor”) on 11th April, 2016. The scope of work includes:

- Laying of 765 kV D/C Hexa Zebra Conductor Transmission Line from 765/400 kV Raipur Pooling Station at Bhilai to 765/400 kV Jharsuguda Station (Sundergarh). (approximately 304.95 km)

- Laying of 400 kV D/C Triple Snowbird Conductor Transmission Lines from OPGC (IB Thermal Power Station) to 765/400 kV Jharsuguda Pool Station. (approximately 51.35 km)

SPGVL (EPC Contractor) has further subcontracted the Engineering, Procurement and Construction of both the Bigger and Smaller Lines on M/s. Larsen and Toubro Limited (hereinafter referred to as “Sub – Contractor”) vide Letter of Awarded dated 13th January, 2016.

The sub – contracts for Supply, Civil and Erection Works for Bigger Line was separately signed on 23rd June, 2016 respectively. The Project Start date for the sub – contractor was 1st February, 2016 for the Bigger Line and for the smaller line the Supply, Civil and Erection Contracts were separately signed on 11th July, 2016.

3.4. Current Status of the Project

3.4.1. 400 kV D/C Transmission Line from IB Thermal Power Station to Jharsuguda Pooling Station

The construction works for 400 kV D/C Transmission Line from IB Thermal Power plant to Jharsuguda Pooling Station, of line length 51.35 kms, is physically complete. CEA had conducted the site inspection on 25th July, 2017 and accorded the energization letter vide letter dated 23rd August, 2017. The POSOCO letter dated 4th January, 2018, states that 400 kV D/C Ckt – I & Ckt – II from IB (OPGC) to Jharsuguda, has successfully completed the 24 hours trial – run test on 20th December, 2017.

3.4.2. 765 kV D/C Transmission Line from Raipur Pooling Station to 765/400 kV Jharsuguda Pooling Station

The construction progress of various activities as on 14th November, 2018 is given in the table below.

Activity	Total Target	Cumulative Progress till 14.11.2018		Balance
		Plan (L2)	Actual	
Total Foundation (No)	782	782	782	-
Tower Erection (No.)	782	782	782	-
Final Stringing (km)	304.95	304.95	304.95	-

The construction works are 100% physical complete for both lines as on 14th November 2018.

4. EPC CONTRACT

The contracts of Engineering, Supply, Erection and Civil Works have been executed separately between Odisha Generation Phase II Transmission Limited (Owner) and Sterlite Power Grid Ventures Limited (Contractor) on 11th April, 2016. The scope of work includes:

- Laying of 765 kV D/C Hexa Zebra Conductor Transmission Line from 765/400 kV Raipur Pooling Station at Bhilai to 765/400 kV Jharsuguda Station (Sundergarh). (approximately 304.95 km)
- Laying of 400 kV D/C Triple Snowbird Conductor Transmission Lines from OPGC (IB Thermal Power Station) to 765/400 kV Jharsuguda Pool Station. (approximately 51.35 km)

4.1. Supply Contract

The Supply Contract dated 11th April, 2016 has been placed on M/s Sterlite Power Grid Ventures Ltd., Dadar & Nagar Haveli-396230 for Design, Manufacturing, Procurement and Supply of all the equipment/materials for the above facilities under Odisha Generation Phase II Transmission Limited (OGPTL) Project.

4.1.1. Scope of Work

The scope of work is to be carried out by the Contractor pursuant to the terms of this Contract comprises of the complete scope as mentioned in the RFP (Request for Proposal under tender no. OGPTL/EPC/15-16/001), subsequent amendments, clarifications and minutes of meetings, it includes but is not limited to the following:

- Design, Fabrication, proto-assembly, proto – witnessing and supply of all types of 400kV D/C and 765 kV D/C transmission line towers, including river crossing towers (wherever applicable) including fasteners, step bolts, hangers, D – shackles etc., as per Owner's design/ drawings.
- Mandatory Spares as specified in the tender documents and its subsequent amendments and clarifications
- Supply of all types of tower accessories like phase plate, circuit plate (where ever applicable), number plate, danger plate, anti – climbing device, Bird guard (where ever applicable).
- Supply of Insulators, Insulator Hardware's for the 400kV D/C and 765 kV D/C transmission line.
- Supply of Zinc rich primer and enamel paint.
- Supply of Earth wire & Earth wire Accessories, ACSR Conductor (Zebra and Snowbird) & Conductor accessories, OPGW & OPGW Accessories and Spacer Damper for 400kV D/C and 765 kV D/C transmission line.
- Project Insurance as indicated in the GCC and subsequent amendments to the tender documents. (Transit Insurance for the Contractor's supplied items of the complete Project will be in the scope of Contractor).

- All other misc. items not specifically mentioned in the Specifications but are required for the successful commissioning of the transmission line, unless specifically excluded in the Contract required for completion of job, shall deemed to be included in the Contract Value and in the scope of the Contractor.

IE noted that the scope of Supply covered in the contract is found to be in order and fulfils requirement of the scheme as per RFP.

4.1.2. Responsibility for Completeness

Any scope of supplies (including the above scope of works) which has not been specifically mentioned but is required, in the opinion of the Owner under the purview of the Contract, for the completion of the work and/or for safe, trouble free, normal operation shall be supplied by the Contractor at no extra cost or time to the Owner, unless expressly excluded in the supply Contract. Such work shall not be cause for delay or reason to seek extension of time from the Owner.

Any approval by the Owner at any stage for any works by sub – Contractors appointed by the Contractor or their representative/employees/agents shall not relieve the Contractor of its obligations under the Supply Contract. In case of sub –contracting, the Contractor shall continue to be liable for all the compliances under the Contract and shall be Single Point of Contact (SPOC) to the Owner on behalf on any sub - Contractor(s) which Contractor engages.

The performance of the sub – supplier/sub-Contractors of the Contractor or their representative/employees/agents shall not relieve the Contractor of its obligations under the Contract.

IE noted that the responsibility for completeness of the scope of work covered in the contract will benefit the Owner towards the smooth completion of the Project.

4.1.3. Effective Date of Contract

The effective date of the contract is 08.01.2016.

The period from the Effective date to the Operational Acceptance and handing over of the Facilities shall be referred as the “Contract Period”.

The “Operational Acceptance” shall be considered after 1 month from COD.

The “Completion Date” for 400 kV D/C Transmission Line is 30th June, 2017 and 765 kV D/C Transmission Line is 6th June, 2019.

IE found that the schedules are well within the schedules of TSA and CERC order.

4.1.4. Guarantees

The Advance Guarantee ("AG") shall initially be kept valid up to Completion Period of the complete transmission line. The validity of the AG shall be extended by the Contractor from time to time till the actual date of Completion of the Facility in accordance with the Contract.

Project Company informed that advance payment Guarantee for defect liability period is considered in the form Corporate Guarantee.

The Performance Guarantee ("PG") shall be for a sum equivalent to 10% of the Contract Value and shall be submitted in two parts: (a) During the execution of Contract till Operational Acceptance. (b) During the Defect Liability period.

Project Company informed that Performance Guarantee for defect liability period is considered in the form Corporate Guarantee.

The Performance Guarantee for the performance of Contract during execution shall be valid up to Operational Acceptance date under this contract. This Guarantee shall be returned on submission of PG for the Defect Liability Period of Twenty Four (24) months.

IE is of the view that Defect Liability Period of Twenty Four (24) months is as per Industry practice.

The Contractor understands and accepts that the submission of the Guarantees are the integral part of the Contract and any delay on this account will lead to the breach of the Contract and would expose Contractor to other actions available under this Contract and in law.

4.1.5. Contractors' Covenant to Supplies for 765 kV and 400 kV D/C Transmission Line

In consideration of the payments to be made by the Owner to the Contractor as provided in the Agreement, the Contractor covenants with the Owner to supply the equipment/ materials in conformity in all respects.

Contractors Covenant to design assemble and witness the proto of each tower.

The contractor hereby represents and undertakes to indemnify the Owner for any loss such as theft, transit loss, excess utilization loss (optimum use) for which the Owner have made the payments on behalf of the Contractor.

For Tower Design for Manufacturing & supply of towers, the Contractor shall provide structural drawings, shop drawings & Bill of materials of all type of transmission line towers and its extension, river crossing towers/ special towers.

4.1.6. Liquidated Damages

Time being the essence of the Contract, in the event the completion schedule (set out in the contract are not met, Owner shall be entitled to levy liquidated damages on the Contractor as mentioned in the subsequent articles:

If the Contractor fails to achieve the following due to reasons attributable to him:

Overall Completion of work on the completion date as defined in the contract, the Contractor shall pay to Owner a sum calculated @1% of the Contract Value for each week of delay or part thereof subject to a maximum of 10% of the Contract Value as liquidated damages for such default and not as penalty, without prejudice to the Owner's other remedies available under this Contract.

4.1.7. Insurance

The perils required to be covered under the transit insurance shall be as mentioned in clause 30 of GCC and shall include but not be limited to cover for fire and allied risks, miscellaneous accidents, loss or damage in transit, theft, pilferage, riot and strikes and malicious damages, civil commotion, weather conditions, accidents of all kinds etc. The scope of such insurance shall be adequate to cover the replacement/reinstatement cost of the equipment for all risks up to and including delivery of goods and other costs till the equipment is delivered at Site.

The insurance policies to be taken should be on 110% of the Contract Value plus value of Owner Supplied Material and incorporating 40% escalation clause. Notwithstanding the extent of insurance cover and the amount of claim available from the underwriters, the Contractor shall be liable to make good the full replacement/rectification value of all equipment/materials and to ensure their availability as per project requirements. Without limiting any of his obligations under the Contract, the Contractor, at its cost, shall arrange, secure and maintain all insurance as may be pertinent to the Facility and obligatory in terms of law to protect its interest and interests of the Owner against all perils detailed herein, within Thirty (30) days after the start of the work.

4.1.8. Defect Liability

The Contractor shall be liable to remedy or compensate the Owner for the remedy of any defect, imperfection, deficiency, shortcoming or any other fault in the Items or the material(s) or in the execution of the works or a breach of any obligations under the scope of work of this contract (collectively called "Defects") in accordance with this clause.

The Defects Liability Period for Element shall be twenty four (24) months from the date of Taking Over of such Element.

If during the Defects Liability Period any Defect is found, the Contractor shall promptly, in consultation and agreement with the Owner regarding appropriate remedy of the Defects and at the cost of the Contractor, repair, replace or otherwise make good such Defect as well as any damage to the Element caused by such Defect and losses suffered by the Owner thereby and shall ensure that the Element is in accordance with the requirements of this Contract.

The Owner shall give the Contractor a notice stating the nature of any such Defect together with all available evidence thereof, promptly following the discovery thereof. The Owner shall afford all reasonable opportunity for the Contractor to inspect any such Defect.

If the repair, replacement or making good is of such a character that it may affect the efficiency of any Element, the Owner may give to the Contractor a notice requiring to tests the defective part of such Element and the same shall be made by the Contractor, whereupon the Contractor shall carry out such tests at its own risk and cost.

If such defective part fails the tests, the Contractor shall remedy the Defect or carry out such replacement or make good (as the case may be) until that part of the material(s) passes such tests.

4.1.9. Contractor's Responsibilities

It is understood that the Contractor has duly inspected the location of supplies, its surroundings and has satisfied themselves as to all technical, commercial and general condition affecting the work and materials necessary for carrying out the Works, the means of communication, and in general all risks and contingencies influencing or affecting the Scope of Work. The Contractor shall not be entitled to any extension of the Completion Schedule or to any adjustment of the Contract Value on grounds of misinterpretation or misunderstanding under this clause and the Agreement.

For all technical clarifications, the Contractor shall report to Owner's Project Manager. All works under this Contract shall be carried out under his instructions.

The Contractor shall prepare a Quality Assurance Plan and get approval by the Owner, which will form the basis for stage wise inspections and final inspections and preparation of respective protocols. Notwithstanding the aforesaid, at any stage of execution, Owner shall be free to inspect the quality of material supplied and can ask the necessary modification if the Owner is of the opinion that the current work does not meet the quality standards.

The Contractor shall submit detailed activity-wise bar chart for approval of Owner. The Contractor shall also submit monthly progress report and other documents as required from time to time by the Owner.

4.1.10. Latent Defects

At the end of the Defects Liability Period, the Contractor's liability in respect of Defects ceases except for Latent Defects. The Contractor's liability for Latent Defects shall be applicable during the Latent Defects Liability Period, which shall be for a period often (10) years from the expiry of the Defects Liability Period and the terms shall be as per the GCC.

4.1.11. Contractor's/ Owner's representation and warranties

The Contractor hereby warrants to the Owner that the Scope of Work will be carried out uninterrupted without any delay and that it shall otherwise perform its obligations under this Contract as per the terms of GCC in this regard.

The Owner hereby warrants to the Contractor that it shall meet its obligations, commitments under this Contract as per the terms of the GCC in this regard and be responsible for its scope of work.

4.2. Erection Contract

The Erection Contract dated 11th April, 2016 has been placed on M/s Sterlite Power Grid Ventures Ltd., vide contract No. OGPTL/2016-17/ERE/001

The Erection Contract is for construction of 765 kV D/C Transmission Line from 765/400 kV Raipur Pooling station to 765/400 kV D/C Jharsuguda Pooling Station and 400 kV D/C Transmission lines from OPGC (IB Thermal Power Station) to 765/400 kV D/C Jharsuguda Pooling Station.

4.2.1. Scope of Work

The scope of work to be carried out by the Contractor pursuant to the terms of this Contract comprises of the complete scope of services as mentioned in the RFP (Request for Proposal under tender no OGPTL/EPC/15-16/001), subsequent amendments, clarifications and minutes of meetings occurred between the parties for the project which forms an integral part of this Contract. It includes but is not limited:

- ✓ Erection works and necessary site preparation including mobilization, right of way, forest clearance if any, and provision of all Labour, materials, consumables, tools and plants as required for the Erection Works of transmission lines of the size and scope of the Project, other construction services and management for the Project and the remedy of defects within agreed Defect Liability Period. The detailed scope of the Works shall be as per the Technical Specifications of the Owner, and subsequent amendments, which forms integral part of this Contract.
- ✓ The Contractor has carefully studied the technical parameters of the equipments/ materials to be erected under this Contract and agrees that the service rendered by it shall be fit for the said purpose.
- ✓ The Contractor shall also be responsible for stringing and associated works for the 765 kV D/C Transmission Line from 765/400 kV Raipur Pooling station to 765/400 kV D/C Jharsuguda Pooling Station and 400 kV D/C Transmission lines from OPGC (IB Thermal Power Station) to 765/400 kV D/C Jharsuguda Pooling Station .
- ✓ All statutory approvals related to PTCC, Road, Railway, Civil aviation, river, shut down, electrical inspectorate and any other agency, Land Acquisition, ROW clearance and related issues including crop/tree compensation payment/clearance etc. is in Contractor's scope. Any approvals from RLDC/CTU/LTCC/SLDC shall be in the scope of the Contractor including all related documentation and paperwork for the same.
- ✓ Project Insurance as indicated in the GCC and subsequent amendments to the tender document (OGPTL/EPC/15-16/001). (EAR insurance of the complete Project will be in the scope of Contractor).
- ✓ EHV Crossings:
 - Arranging the Shutdown activities for crossings of the EHV/ HVDC/ HV/LT etc. from the state utilities, PGCIL, private transmission lines, RLDC shall be in the scope of the Contractor. Including all paperwork.
 - Compensation for loss of revenues during the shutdown period for working on EHV crossings demanded by the utilities/PGCIL/ private transmission line owner shall be borne by the Contractor.
 - The Contractor shall ensure compliance with all the relevant acts, laws, rules, regulations, guidelines at its own cost and expenses and furnish all certificates in support of the compliance done for further submission with the concerned authorities.
- ✓ Apart from the activities listed above, the Contractor shall also undertake the following activities within the Forest:
 - Contractor shall undertake the work of tree cutting, its transportation etc. and liaising for the construction of foundations, erection & stringing. The deforestation charges to be paid to the forest authorities for the construction of line through the forest shall be in Owner's scope.

- Complete Detail Survey, Check Survey, erection & stringing in forest area is in the scope of the Contractor.
- Expediting & assistance in preparation of Application case for the forest shall be in the scope of Contractor. Any liaising work for forest application is included in Contractor's scope
- ✓ Detail Survey and Check Survey of the route.
- ✓ Terminating the transmission lines at the respective substation gantries.
- ✓ Testing and commissioning of the erected transmission.
- ✓ The Contractor shall submit to the Owner all complete as built drawings, O&M manuals, detailed tower profile etc. before Operational Acceptance.
- ✓ All other misc. items not specifically mentioned in the Specifications and/or BOQ but are required for the successful commissioning of the transmission line, unless specifically excluded in the Specifications required for completion of job, shall deemed to be included in the contract Value and in the scope of the Contractor.
- ✓ The Contractor shall be responsible for the complete integration of material supplied for the project. (Owner's and Contractor's supplied) and its installation/erection at site.

IE observed that the scope of work covered in the Contract is in order.

4.2.2. Responsibility for Completeness

Any scope of work/services (including the scope of works as mentioned in this contract) ("Works") which has not been specifically mentioned but is required, in the opinion of the Owner under the purview of this Contract, for the completion of the work/services and/or for safe, trouble free, normal operation shall be rendered at no extra cost or time to the Owner, unless expressly excluded in this Contract. Such work shall not be cause for delay or reason to seek extension of time from the Owner.

Any approval by the Owner at any stage for any works by sub – Contractors appointed by the Contractor or their representative/employees/agents shall not relieve the Contractor of its obligations under this Contract. In case of sub contracting, the Contractor shall continue to be liable for all the compliances under this Contract and shall be Single Point of Contact (SPOC) to the Owner on behalf on any sub Contractor (s) which Contractor engages.

The performance of the Sub-Contractors of the Contractor or their representative/employees/agents shall not relieve the Contractor of its obligations under the Contract.

4.2.3. Contractor's Covenant to Erection Works for 400 kV and 765 kV D/C Transmission Lines

In consideration of the payments to be made by the Owner to the Contractor as provided in the Agreement, the Contractor covenants with the Owner to complete the Works in conformity in all respects with the provision of the Contract.

Contractor shall submit to the Owner on quarterly basis, documents pertaining to statutory compliances viz. ESI, EPF etc., without any failure.

Contractor shall submit to the Owner on quarterly basis cash-flow statement, stock statement pertaining to work progress in the specific quarter along with progress report of the Project.

Preparation of the forest application for the forest approval shall be in the Contractor's scope.

Approval from RLDC/CTU/LTTC/SLDC in the scope of Contractor, also all related documentation and paper work for the same shall be done by the Contractor.

Arranging the Shutdown activities for crossings of the EHV/ HVDC/ HV /LT etc. from the state utilities, PGCIL, private transmission lines, RLDC shall be in the scope of the Contractor.

Compensation for loss of revenues during the shutdown period for working on EHV crossings demanded by the utilities/PGCIL/ private transmission line Owner shall be borne by the Contractor.

ROW resolution and Crop/Tree Compensation shall be in the scope of Contractor. Contractor shall depute their best team for obtaining and resolving ROW Clearances & Other issues /Tree/Crop compensation. Contractor's team shall ensure that there is no time and cost escalation in the project on account of this activity. Contractor shall speedily resolve all ROW issues. ROW resolution and Crop/Tree Compensation shall be reimbursed plus facilitation charge by the Owner on submission of documents.

4.2.4. Effective date and Completion Schedule

The Effective Date of Erection Contract is 08/01/2016. ("Effective Date").

The period from the Effective Date to the Operational Acceptance and handing over of the Facilities shall be referred to as the "Contract Period" herein. The "Operational Acceptance" (As mentioned in GCC of RFP) shall be considered after One (1) month from the COD.

The Contractor agrees that time is the essence of this Contract. The Contractor shall ensure that the entire Scope of Work shall be completed by 30th June, 2017 for 400 kV D/C Line and 6th June, 2019 for 765 kV D/C Transmission Line, which shall also be referred to as "Completion Date". The period from the Effective Date of the Contract to the Completion Date shall be referred as "Completion Period".

IE found that the schedules are well within the schedules of TSA and CERC order.

4.2.5. Guarantees

The Advance Guarantee ("AG") shall initially be kept valid up to Completion Period of the complete transmission line. The validity of the AG shall be extended by the Contractor from time to time till the actual date of Completion of the Facility in accordance with the Contract.

Project Company informed that Advance Guarantee is in the form of Corporate Guarantee.

The Performance Guarantee ("PG") shall be for a sum equivalent to Ten Percent (10%) of the Contract Value and shall be submitted in two parts:-

- ✓ During the execution of Contract till Operational Acceptance.
- ✓ During the Defect Liability period.

Project Company informed that Performance Guarantee is in the form of Corporate Guarantee.

The Performance Guarantee for the performance of Contract during execution shall be valid up to Operational Acceptance date under this contract. This Guarantee shall be returned on submission of PG for the Defect Liability Period of Twenty Four (24) months.

4.2.6. Liquidated Damages

Time being the essence of the Contract, in the event the completion schedule as set out in this contract are not met, Owner shall be entitled to levy liquidated damages on the Contractor as mentioned in the subsequent articles.

If the Contractor fails to achieve the following due to reasons attributable to him:

- ✓ Overall Completion of work on the completion date as defined in this contract, the Contractor shall pay to Owner a sum calculated @ 1% (One percent) of the Contract Value for each week of delay or part thereof subject to a maximum of 10% of the Contract Value as liquidated damages ("Liquidated Damages") for such default and not as penalty, without prejudice to the Owner's other remedies available under this Contract.

The Owner may without prejudice to any other method of recovery, deduct the amount of such damages from any amount due or becoming due to the contractor or from any securities / guarantees under this contract. The payment deduction of such damages shall not relieve the Contractor from its obligation to complete the works and remedy the defects in the works or from any other of its obligations and liabilities under the Contract.

IE observes that 400 kV Transmission Line is commissioned and charged while 765 kV line is ready for commissioning, the CEA Electrical Inspector visit is complete, hence no implication of LD.

4.2.7. Site Requirement

Keeping in view of the project time lines and to meet the milestones, the Contractor shall follow the below aspects diligently during the execution of works at site.

Separation of ROW resolution team and work execution team is required to be put in place for making the work front available continuously for smooth execution of the work. The Contractor shall be dealing & liaising with the relevant Govt. authorities/ private entities as and when required for ROW resolution. The Construction Manager shall be enabled suitably with sufficient team and resources. Detailed plan of forming the teams for execution of the things shall be submitted by the Contractor to the Project Manager of the Owner before commencement of works for acceptance.

Necessary evaluation mechanism of deciding the compensations payable under section 10(d) & 16(3) of the Telegraph Act, 1885 shall be devised, right in the beginning of the Project. Contractor shall ensure timely disbursement of compensations, tree or crop, diminution in value of land for the reason of the drawal of overhead power line across the land or any other well in time so as to avoid any public agitation/ unrest for the execution of works. The Contractor's Construction Manager at site shall be adequately enabled/empowered for doing all the needful in this matter. The Owner shall be provided the record of the compensations released for maintaining as a licensee for reference as may be sought by various authorities. Separate team for disbursing the compensation payments shall be engaged without mixing the responsibilities with execution team members.

For all ROW issues, and compensations to be paid as per section 10(d) & 16(3) of the Telegraph Act, 1885 for crop/tree cutting or any other or related compensations for the total line length, the Contractor shall take the complete responsibility of the same upto 6 months after the Operational Acceptance of the line, after which the Contractor shall submit an indemnity bond to the Owner regarding these payments and any unresolved issues.

Safety and security of the work place and work men will have to be ensured by the Contractor for smooth execution of the works. Necessary preventive and proactive measures shall be put in place by the Contractor as per the directions of the Project/ site in charge from time to time based on the site conditions.

Separate teams shall be engaged for enumeration, preparation of documentation & submission of tree cutting applications to the concerned officers for approval shall be arranged much in advance as directed by the site in charge. A suitable program in this respect shall be submitted by the Contractor for acceptance by the site in charge. Clearance of the corridor be done well in advance before initiating the stringing works so as to maintain no damages happen to the conductors during stringing.

Detailed planning of executing the EHV power line crossings shall be done much in advance considering the inputs of seasonal load flows and staggering days. The plan shall be submitted to the site in charge for acceptance. All EHV crossings outage be arranged by the EPC turnkey Contractor as per requirement. All other power line crossings LT/11kV/33kV outages should be timely arranged by the Contractor so that it does not hamper planned stringing schedule even if it amounts to providing temporary arrangements like cable bypass etc. for uninterrupted works.

Any issues from time to time during the course of execution as directed by the Project Manager in the interest of the Works for faster execution shall be implemented by the Contractor diligently.

The Contractor can demobilize its erection gangs upon completion of the work only after approval of the Owner; however the site establishment shall not be demobilized as Contractor is required to provide relevant and specialized manpower for the smooth and efficient COD of the line.

4.2.8. Service Level Agreement

It is recognized and understood between Contractor and Owner that deployment of qualified and experienced manpower as per the project management chart is necessary and essential to execute the Scope of Work as per specified standards and the time schedule and key human resources as approved by the Owner such as Project Manager, Construction Manager, line in-charge etc. will be continuously deployed during execution of contract.

Penalties for Safety non-compliance/ non addressal of Quality Non- Compliance report are as mentioned below:

Description	Grace Period	Penalty
Availability of TSE Machine of suitable tonnage in working condition & its related man-power	15 days from resource mobilization schedule	Rs.10,000 per day per machine
Delay in Labour Payments	15 days from the due date	Rs. 200 per day of delay per labour
Project Manager/ Construction Manager	6 Weeks from Resource mobilization schedule	Rs.5000/- per day line
Safety Non Compliance to be addressed	30 days from Non Compliance Report	As per the EHS SOP
Quality Auditing by the surveillance team on a random manner basis	15 days from Non Compliance Report	Rs.5000/- per NCR per incident on Non rectification
Steel Drums of Conductors to be returned to main stores	Within 30 days of its use	Rs.20,000/-per drum

The provision of this Article does not stop Owner to initiate any other action for Safety non – compliance/ non addressal of Quality Standards against the Contractor as available under this Contract and in law.

4.2.9. Insurance

The Contractor shall take necessary insurance policies for an appropriate value so as to cover all risks required as per statute as well as may be required by the Owner. The said insurance policies shall also cover fire and allied risks, miscellaneous accidents workman compensation risks, loss or damage in transit, theft, pilferage, riot and strikes and malicious damages, civil commotion, weather conditions, accidents of all kinds, comprehensive risks during transportation, handling, storage, erection and commissioning. Besides, the Contractor shall also take an "All Risks" insurance, Third Party Liability insurance, Personal Accident Insurance in respect of Contractor's Supervisory Personnel and workmen and such other insurance as required as per.

The Owner shall be the principal beneficiary of the policy along with the Contractor and shall reserve the exclusive right to assign the policy.

In the event of loss or damage, the Contractor shall be solely responsible to lodge the claims and settle the same. The Contractor shall proceed with repair or replacement of the goods without waiting for settlement of the claim. It is further clarified that neither extension of completion schedule nor any extra claim shall be admissible on account of insurance.

Copy of such insurance policies shall be submitted to Owner prior to commencement of the work

Without limiting any of his obligations under the Contract, the Contractor, at its cost shall arrange, secure and maintain all insurance as may be pertinent to the Works and obligatory in terms of law to protect its interest and interests of the Owner against all perils detailed herein within Thirty (30) days from the notification of the Award.

The Contractor shall take the insurance for 110% of complete contract Value and Owner issue material with 40% escalation.

4.2.10. Contractor's Responsibility during Execution

It is understood that the Contractor has duly inspected the land and other places over which the Scope of Works have to be executed and/or the Facilities are to be installed ("Site") and its surroundings and has satisfied themselves as to all technical, commercial, ROW and general condition affecting the Site and the Works including the nature of the ground and sub-soil, the extent and nature of the work and materials necessary for carrying out the Scope of Works, the means of communication, and in general all risks, ROW issues and contingencies influencing or affecting the Scope of Work. The Contractor shall not be entitled to any extension of the Completion Schedule or to any adjustment of the Contract Value on grounds of misinterpretation or misunderstanding under this clause.

The Contractor shall employ local labour to the maximum extent possible.

For all technical clarifications, the Contractor shall report to Owner's Project Manager. All Works under this Contract shall be carried out under his instructions.

The Contractor shall prepare a Quality Assurance Plan and get approval by the Owner, which will form the basis for stage wise inspections and final inspections and preparation of respective protocols. Notwithstanding the aforesaid, at any stage of execution, Owner shall be free to inspect the quality of material supplied and can ask the necessary modification if the Owner is of the opinion that the current work does not meets the quality standards.

The Contractor shall submit detailed activity-wise bar chart for approval of Owner. The Contractor shall also submit monthly progress report, daily labour report and other documents as required from time to time.

4.2.11. Defect Liability

The Contractor shall be liable to remedy or compensate the Owner for the remedy of any defect, imperfection, deficiency or any other fault in the Work or the Element(s) or in the execution of the works or a breach of the requirements of this Contract (collectively called "Defects") in accordance with this clause.

The Defects Liability Period for each Element shall be twenty four (24) months from the date of Taking Over of such Element.

The Defects Liability Period of twenty four (24) months is in line with Industry practice.

If during the Defects Liability Period any Defect is found, the Contractor shall promptly, in consultation and agreement with the Owner regarding appropriate remedy of the Defects and at the cost of the Contractor, repair, replace or otherwise make good such Defect as well as any damage to the Element caused by such Defect and losses suffered by the Owner thereby and shall ensure that the Element is in accordance with the requirements of this Contract.

The Owner shall give the Contractor a notice stating the nature of any such Defect together with all available evidence thereof, promptly following the discovery thereof. The Owner shall afford all reasonable opportunity for the Contractor to inspect any such Defect.

If the repair or making good is of such a character that it may affect the efficiency of any Element, the Owner may give to the Contractor a notice requiring that such Element and the same shall be made by the Contractor, whereupon the Contractor shall carry out such tests at its own risk and cost.

If such defective part fails the tests, the Contractor shall remedy the Defect or carry out such replacement or make good (as the case may be) until that part of the material(s) passes such tests.

If the Contractor fails to commence the work necessary to remedy such Defect or any damage to the material(s) caused by such Defect within fifteen (15) days) or if after having so commenced fails to remedy the Defect in the manner satisfactory to the Owner, within a reasonable period of time, the Owner may, following notice to the Contractor, proceed to carry out such work either by itself or through any other person at the risk and costs of the Contractor. In addition to its obligation to remedy Defects hereunder, the Contractor shall also be responsible for all costs incurred by the Owner in connection with such Defects including all costs of dismantling any Items, clearing it from the Site and returning such Items to the Contractor and such costs shall be paid to the Owner by the Contractor or may be deducted by the Owner from any amount due to the Contractor.

If any part Element cannot be commercially used by reason of such Defect and/or failure in making good of such Defect, the Defects Liability Period of such Element shall be extended by a period equal to the period during which such Element or such part cannot be used by the Owner because of any of the aforesaid reasons. Upon rectification of the Defects in an Element by repair, such repaired Element shall have the Defects Liability Period extended by a period mentioned in this clause, from the time of such repair of such Element.

4.2.12. Latent Defects

At the end of the Defects Liability Period, the Contractor's liability in respect of Defects ceases except for Latent Defects. The Contractor's liability for Latent Defects shall be applicable during the Latent Defects Liability Period, which shall be for a period of ten (10) years from the expiry of the Defects Liability Period and other terms shall be as per the GCC.

IE is of the view that Latent Defect Liability Period of ten (10) years from the expiry of the Defects Liability Period is good for the Project and Owner.

4.3. Civil Contract

The Civil Contract dated 11.04.2016 has been placed on M/s Sterlite Power Grid Ventures Ltd., for Civil works for Construction of 765 kV D/C Transmission Line from Raipur to Jharsuguda and 400 kV D/C Transmission Line from OPGC (IB TPS) to Jharsuguda associated with Odisha Generation Phase II Transmission Limited.

4.3.1. Scope of Work

The scope of work broadly covers the following:

1. Civil work for construction as per requirement, necessary site preparation including mobilization of manpower, machineries, Labour, materials, consumables, tools and plants, as required for the construction of transmission lines of the size and scope of the Facility and handing over of the Facility which shall be complete in all respects, arranging complete ROW and Statutory Approvals, if any and also other construction services and management for the Facility.
2. The scope also includes the remedy of defects within agreed Defect Liability Period for the 400 kV D/C Transmission lines as per the technical specifications, subsequent amendments, agreed conditions of this Contract and correspondences and the recorded minutes of meeting occurred between the parties.
3. Design, Classification and Casting of foundation for different types of tower and casting of foundation for tower footings as per foundations drawings.
4. All statutory Approvals related to PTCC, Road, Railway, Civil aviation, river, shut down, electrical inspectorate and any other agency, ROW including crop/ tree compensation payment/ clearance etc. is in Contractors scope.
5. Project Insurance as indicated in the GCC
6. Forest:
 - Forest clearance is in Contractor's scope. Contractor shall undertake the work of tree cutting, its transportation etc. and liasioning for the construction of foundations for the purpose of laying of line. The deforestation charges to be paid to the forest authorities for the construction of line through the forest shall be in the scope of the Contractor.
 - Complete Detailed Survey, Check Survey & Casting of Foundation for tower footing as per foundation drawings, in forest area is in the scope of the Contractor.
 - Expediting & assistance in preparation of Application case for the forest shall be in the scope of Contractor. Any liaising work for forest application shall be in Contractor's scope.
7. EHV Crossing
 - Arranging the Shutdown activities for crossings of the EHV/ HVDC/ HV/LT etc. from the state utilities, PGCIL, private transmission lines, RLDC shall be in the scope of the Contractor. Including all paperwork.
 - Compensation for loss of revenues during the shutdown period for working on EHV crossings demanded by the utilities/PGCIL/ private transmission line owner shall be borne by the Contractor.

- The Contractor shall ensure compliance with all the relevant acts, laws, rules, regulations, guidelines at its own cost and expenses and furnish all certificates in support of the compliance done for further submission with the concerned authorities.
8. The Contractor shall be solely responsible for the complete integration of materials supplied for the project as per the pre – defined parameters of this Contract including any modifications, if any.
 9. The contractor shall submit to the Owner all complete as built drawings, O&M manuals, detailed tower profile etc. before Operational Acceptance.

IE observed that the scope of work covered in the contract is in order.

4.3.2. Effective Date and Completion Schedule

The effective date of this contract is 08.01.2016.

The period from the Effective Date to the Operational acceptance and handing over of the Facilities shall be referred to as the “Contract Period”. The “Operational Acceptance” shall be considered after 1 month from COD.

The Contractor shall ensure that the entire Scope of Work shall be completed by 30th June, 2017 for 400 kV D/C Transmission Line and by 6th June, 2019 for 765 kV D/C Transmission Line, which shall be referred to as “Completion Date”.

Regarding the 765 kV D/C Transmission Line, LIE observed the civil contract has been placed to M/s. L&T ECC and the works have started. Till 19th June, 2016 around 223 foundations were complete at site. The scheduled COD for sub – contracts is October, 2017, hence there a cushion for the SPGVL to accommodate any un – anticipated interruptions.

IE found that the schedules are well within the schedules of TSA and CERC order.

4.3.3. Advance Guarantee

The Advance Guarantee shall initially be kept valid up to Completion Period of the complete transmission line. The validity of the AG shall be extended by the Contractor from time to time till the actual date of Completion of the Facility in accordance with the Contract.

Project Company informed that the Advance Guarantee is in the form of Corporate Guarantee.

4.3.4. Contract Performance Guarantee

The contractor has to submit an unconditional and irrevocable Contract Performance Bank Guarantee for a sum equivalent to 10% of the Contract Price and shall be submitted in two parts:

- During the execution of Contract till Operational Acceptance
- During the Defect Liability period

Project Company informed that the Performance Guarantee is in the form of Corporate Guarantee.

The PG for the performance of Contractor during execution shall be valid up to Operational Acceptance date under this contract. This Guarantee shall be returned on submission of PG for the Defect liability Period of 24 months.

4.3.5. Liquidated Damages

If the Contractor fails to achieve the following due to reasons attributable to him:

Overall Completion of work on the completion date, the Contractor shall pay to Owner a sum calculated @ 1% (One percent) of the Contract Value for each week of delay or part thereof subject to a maximum of 10% of the Contract Value as liquidated damages for such default and not as penalty, without prejudice to the Owner's other remedies available under this Contract.

The Owner may without prejudice to any other method of recovery, deduct the amount of such damages from any amount due or becoming due to the Contractor or from any securities/guarantees under this Contract. The payment deduction of such damages shall not relieve the Contractor from its obligation to complete the works and remedy the defects in the works or from any other of its obligations and liabilities under the Contract.

IE observes that 400 kV Transmission Line is commissioned and charged while 765 kV line is ready for commissioning, the CEA Electrical Inspector visit is complete, hence no implication of LD.

4.3.6. Insurance

The scope of insurance shall be adequate to cover for fire and allied risks, riot and strikes and malicious damages, civil commotion, weather conditions, accidents of all kind, miscellaneous accidents, theft, pilferage, comprehensive risk during transportation, handling, storage, erection and commissioning etc. besides, the Contractor shall also take an "All Risks" insurance, Third Party Liability Insurance, Personal Accident Insurance in respect of Contractor's Supervisory Personnel and workmen and such other insurance as required as per statute.

It is mentioned in the contract that the value of the insurance policy shall be as per the GCC.

4.4. Overall Observation

IE has reviewed the clauses pertaining to Force Majeure, Arbitration and Termination and found the same to be in order.

IE found the other provisions are in line with other Transmission line project contracts and are in order.

IE found that if the Project is delayed by 180 days beyond schedule COD as per TSA reasons solely attributable to Project Company, the maximum LD imposed as per TSA is Rs 106.85 Crores.

If the Project is delayed beyond schedule COD as per EPC Contract reasons solely attributable to EPC Contractor, the maximum LD recovered as per EPC Contract (combined Supply, Erection and Civil works contract) is Rs 104.30 Crores.

IE found that there is a shortfall of Rs 2.55 crores. The contingency in the Project Cost is adequate to cover the same. **(Risk Category – A)**

IE observed that Provisional Acceptance and Financial Acceptance is not envisaged in the EPC Contract. However, once the Transmission line is commissioned and approved by the concerned Authority is obtained, the Provisional Acceptance achieved. The Final Acceptance can be achieved as per the payment terms.

Based on the experience, IE is of the view that the main reason for delay in Transmission line is due to the following

- Delay in obtaining of Forest Clearance
- Delay in obtaining RoW clearance
- Schedule of other permits and clearances like PTCC, Power line crossing, Railway crossing, NH crossing etc

IE observed that EPC Contractor has taken responsibility for obtaining RoW and all permits and clearances, which is beneficial for the Owner in achieving the SCOD.

5. DESIGN PHILOSOPHY

5.1. Technical requirements for Transmission Line

The Tower shall be fully galvanized using mild steel or/and high tensile steel sections. Bolts and nuts with spring washer are to be used for connection.

IS Steel section of tested quality in conformity with IS 2062:2006, grade E 250 (Designated Yield Strength 250 Mpa) and/or grade E 350 (Designated Yield Strength 350 Mpa) are to be used in towers, extensions, gantry structures and stub setting templates. The contractor can use other equivalent grade of structural steel angle sections and plates conforming to latest International Standards. However, use of steel grade having designated yield strength more than that of EN 10025 grade S355 JR/JO (designated yield strength 355 Mpa) is not permitted. The steel used for fabrication of towers shall be manufactured by primary steel producers only.

Towers shall be designed as per latest revision of IS-802 considering wind zone as per IS – 875. In addition to design conditions & stipulations in present IS – 802, tower design wind pressure under security condition shall be 75% of full wind pressure for suspension towers. As per CEA's technical standards for construction of lines Regulation 2010, Transmission Service Provider (TSP) may adopt any additional loading/ design criteria for ensuring reliability of the line, if so desired and/ or deemed necessary.

The Project Company has followed the CBIP guideline in classifying the different types of Transmission towers. The quantity of each tower type & associated extensions has been finalized based on the survey and route profiling.

IE is of the view point that the towers are designed for Reliability, Security & Safety Conditions as per IS: 802 and CBIP Manual 323 (latest) to take care of broken wire, dead end and anti-cascading effects. In line with the prevailing practices in the country, the Project Company has considered the use of a combination of MS and HT steels in the structural materials to achieve optimum tower designs with minimum weights.

The conductor configuration shall be as below:

Line configuration	ACSR Conductor specified	Equivalent AAAC conductor based on 53.5% conductivity of Al Alloy	Stranding details of AAAC Conductor	Sub – Conductor or Spacing
400kV D/C (Triple Snowbird)	Snowbird: Stranding 42/3.99mm – Al + 7/2.21 mm Steel, 525.2sqmm, Aluminium area 30.56 mm dia.	31.95mm diameter; 604 sq.mm Aluminium alloy area	61/3.55mm	457 mm
765 kV D/C (Hexa Zebra)	Zebra: Stranding 54/3.18 mm – Al + 7/3.18 mm – Steel, 428 sqmm,	28.71 mm diameter, 487.5 sqmm Aluminium Alloy area	61/3.19 mm	457 mm

Aluminium Area 28.62
mm

Note: The transmission lines shall have to be designed for a maximum operating conductor temperature of 85 deg C for both ACSR as well as AAAC.

The required phase to phase spacing and horizontal spacing for 765 kV D/C line shall be governed by the tower design as well as minimum live metal clearances for 765 kV voltage levels respectively under different insulator swing angles.

a) For 765 kV Transmission Line

The minimum live metal clearances for 765 kV D/C line shall be as follows:

- i) Under stationary conditions

From tower body: For 765 kV D/C: 6.1 m

For 765 kV S/C: 5.6 m

- ii) Under swing conditions

Wind pressure Condition	Minimum electrical clearance
Swing angle corresponding to 2 years return period	4.4 mts
Swing angle corresponding to 50 years return period	1.3 mts

However, the phase to phase spacing for 765 kV line shall be less than 15 mts.

b) For 400 kV Transmission Line

The minimum live metal clearances for 400 kV D/C line shall be as follows:

- i) Under stationary conditions

From tower body: 3.05m

- ii) Under swing conditions

Wind pressure Condition	Minimum electrical clearance
Swing angle (22°)	3.05 mts
Swing angle (44°)	1.86 mts

However, the phase to phase spacing for 400 kV line shall be less than 8 mts

The minimum ground clearance for 765 kV transmission lines shall be 15 mts so that maximum electric field does not exceed 10 kV/m within the ROW and does not exceed 5 kV/m at the edge of the ROW as per International guidelines.

The minimum ground clearance for 400kV D/C transmission lines shall be 8.84m. The minimum mid span separation between earthwire and conductor shall be 9.0m. Shielding angle shall not exceed 20 deg for 400 kV D/C line

The minimum mid span separation between earthwire and conductor shall be 9.0m for 765 kV D/C transmission line. Shielding angle shall not exceed 10 deg for 765 kV D/C line.

The switching impulse withstand voltage (wet) for 765 kV line shall be 1550 kVp.

The switching impulse withstand voltage (wet) for 400kV line shall be 1050 kVp.

The Fault current for design of line shall be 50 kA for 1 sec for 765 kV.

The Fault current for design of line shall be 50 kA for 1 sec for 400 kV.

Minimum level of pollution for design of lines shall be medium pollution (creepage of 20mm/kV as per IEC - 60815). For locations in light/ medium pollution areas, porcelain/glass insulators shall be used while for locations coming in areas with higher pollution level, antifog type insulators with higher creepage distance or silicone rubber polymer insulators depending on the level of pollution shall be used.

In order to meet the requirement for grid management and operation of substation, Transmission Service Provider (TSP) shall conform to the following requirements.

For Jharsuguda (Sundargarh) – Raipur Pool 765/400 D/C line (Hexa Zebra Conductor)

- a. On Jharsuguda (Sundargarh) – Raipur Pool 765/400 D/C line (Hexa Zebra Conductor) transmission line, one OPGW containing 24 Fibres is to be installed by the TSP in place of conventional earth wire during the construction of line for grid management and substation operation purpose by CTU. The installation of OPGW shall be done from gantry of Jharsuguda (Sundargarh) Substation up to gantry of 765 kV Raipur pooling Station and shall be terminated in a Joint Box by TSP at both the ends. These Joint Boxes shall be installed at a height of around 10m above ground and shall conform to IP66.
- b. All these fibres of the OPGW shall be utilized for grid management purpose. The maintenance of the OPGW shall be the responsibility of TSP.

For OPGC – Jharsuguda (Sundargarh) 400 kV D/C (Triple Snowbird Conductor)

- (i) On OPGC – Jharsuguda (Sundargarh) 400 kV D/C (Triple Snowbird Conductor) transmission line, one OPGW containing 24 Fibres is to be installed by the TSP in place of conventional earth wire during the construction of line for grid management and substation operation purpose by CTU. The installation of OPGW shall be done from gantry of Jharsuguda Substation up to gantry of 400 kV OPGC Substation and shall be terminated in a Joint Box by TSP at both the ends. These Joint Boxes shall be installed at a height of around 10m above ground and shall conform to IP66.
- (ii) All these fibres of the OPGW shall be utilized for grid management purpose. The maintenance of the OPGW shall be the responsibility of TSP.

IE is of the view that the technical design specifications is in line with Industry standards. IE found that each major equipment component envisaged above has been operating commercially under similar conditions and there is no expected system degradation.

5.1.1. Tower Design and Tower Type Test

For all the Transmission Lines elements of the Project, following types of towers have been used –

- DA type
- DB type
- DC type
- DD type

Following parameters are consider for Tower Design, and accordingly the critical loadings are identified to conduct the Tower Type Testing:

1. Wind Zone
2. Conductor Type
3. Conductor Bundle
4. Voltage Level
5. Span between the Towers

Accordingly, w.r.t to 765 kV Transmission Line, following were the consideration –

1. Wind Zone – test was conducted for WZ 2
2. Conductor Type – Zebra
3. Conductor Bundle – Hexa bundle
4. Voltage Level – 765 kV Voltage level
5. Span between the Towers – avg. span of 400 mts

The test was carried out by Gammon India Limited during August, 2011. The entire tower type test was carried out successfully.

The type test was conducted considering a factor of safety of 1.02 with the following conditions:

1. Reliability (Normal condition) – this test is carried out for 0°/ 30°/ 45° wind incidence, with 100% wind velocity and implication of Transverse, Vertical and Longitudinal Forces. Load is being applied in steps of 50%, 75%, 90%, 95% (with a waiting period of 2 minutes at each step) and 100% (with a waiting period of 5 minutes).
2. Security (Break – Wire Condition) – under this condition 75% of wind velocity as per Tower design is considered. For suspension tower 1 Ground Wire and 1 Conductor is broken. For tension towers – 1 Ground wire and 1 conductor or 2 conductors is broken. For the dead – end tower where maximum tension is encountered, 1 Ground wire and 2 Conductors OR 3 Conductors is broken. Under broken condition correspondingly the longitudinal forces increase.
3. Safety condition – is a conventional/ ideal tower condition with no wind velocity and just applying the stringing loads, assuming the loads encountered during execution works to ensure the safety of works.
4. Anti – Cascading – under this condition, all the conductors are intact with 100% loads and no wind velocity, applicable for tension type towers.

5. Narrow Front Wind – under this condition, maximum narrow face wind velocity applicable particularly for suspension towers.
6. Destructive test – based on the above all loading condition, the maximum critical load is identified to conduct the destructive test. Accordingly, the loads were increased beyond 100%. Hence as per Test Certificates, under Reliability condition with maximum vertical load and Full Wind, towers could successfully withstand 100% design loads. The loads were increased in steps of 5% after 100% (i.e. 105%) with holding period of 5 mins. No deformation was seen in tower till 110% further loading was stopped and loads were released.

IE observed from the Type Test Report that both the sides of the tower with various combinations of loads was tested which ensured more factor of safety. IE observed that no critical observation was encountered and could withstand all designed load conditions. IE noted that Tower Deflection on both Transverse and Longitudinal direction was measured and was found to be within limits.

Accordingly, w.r.t to 400 kV D/C Transmission Line, following were the consideration –

1. Wind Zone – test was conducted for WZ 2
2. Conductor Type – Snowbird
3. Conductor Bundle – Triple bundle
4. Voltage Level – 400 kV Voltage level
5. Span between the Towers – avg. span of 370 mts

The test was carried out by Jyoti Structure Limited during July, 2009. The entire tower type test was carried out successfully.

The type test was conducted considering a factor of safety of 1.02 with the following conditions:

- a) Reliability (Normal condition) – this test is carried out for 0°/ 30°/ 45° wind incidence, with 100% wind velocity and implication of Transverse, Vertical and Longitudinal Forces. Load is being applied in steps of 50%, 75%, 90%, 95% (with a waiting period of 2 minutes at each step) and 100% (with a waiting period of 5 minutes).
- b) Security (Break – Wire Condition) – under this condition 75% of wind velocity as per Tower design is considered. For suspension tower 1 Ground Wire and 1 Conductor is broken. For tension towers – 1 Ground wire and 1 conductor or 2 conductors is broken. For the dead – end tower where maximum tension is encountered, 1 Ground wire and 2 Conductors OR 3 Conductors is broken. Under broken condition correspondingly the longitudinal forces increase.
- c) Safety condition – is a conventional/ ideal tower condition with no wind velocity and just applying the stringing loads, assuming the loads encountered during execution works to ensure the safety of works.
- d) Anti – Cascading – under this condition, all the conductors are intact with 100% loads and no wind velocity, applicable for tension type towers.
- e) Narrow Front Wind – under this condition, maximum narrow face wind velocity applicable particularly for suspension towers.

- f) Destructive test – based on the above all loading condition, the maximum critical load is identified to conduct the destructive test. Accordingly, the loads were increased beyond 100%. Hence as per Test Certificates, under Reliability condition with maximum vertical load and Full Wind, towers could successfully withstand 100% design loads. The loads were increased in steps of 5% after 100% (i.e. 105%) with holding period of 5 mins. No deformation was seen in tower till 110% further loading was stopped and loads were released.

IE observed that the above type test was conducted based on the design of RTCL project, considering 400 kV D/C Twin Moose Conductor with WZ – 4, while 400 kV D/C Line from OPGC to Jharsuguda is designed for Triple Snowbird at WZ – 2.

Project Company calculated the Sag and Tension effect for both the Lines with their respective system design parameters and deduced that both Sag & Tension values for 400kV D/C Triple ACSR Snowbird Transmission line are lesser than the 400kV D/C Twin ACSR Moose line. Hence, same towers designed for WZ – 4 with 400m span can be utilized in this line of WZ – 2 with reduced span of 370m.

IE observed from the Type Test Report that both the sides of the tower with various combinations of loads was tested which ensured more factor of safety. IE observed that no critical observation was encountered and could withstand all designed load conditions. IE noted that Tower Deflection on both Transverse and Longitudinal direction was measured and was found to be within limits.

5.2. Tower Foundation

The Foundation Design Calculations and drawings have been developed as per Indian standards / CBIP Manual on Transmission Tower Line for Soil types Normal Dry Soil, Wet Soil, Fully submerged Soil, Partially submerged Soil, Dry Fissured Rock & Wet Fissured Rock. Conventional RCC Spread type foundations have been adopted. For foundation design calculation tower leg extension provision for 3M, 6M & 9M have been adopted. The foundation designs are based on actual soils met during the construction and Standard type of foundations classifications of soils as per CBIP Manual on Transmission Lines. M20 grade concrete and Fe415/500 grade reinforcement steel adopted for RCC foundations.

The bay extension civil & structural works are small in magnitude when compared to Transmission line works and attended as per the PGCIL/ TS Transco specifications to match with existing designs.

IE observed that the designs for both Transmission line towers (wind zone – 2 & Wind zone – 4) and its foundation adopted for the above lines are meeting Indian standards and as per the good Industry Standards.

The Project is technically viable with the deployment of above materials as envisaged in the report

5.3. Quality Assurance and Safety Aspects

5.3.1. Quality Control

The Project Company is adhering to the Quality Assurance Program which is in line with the industry standards and practices and is complying with the requirements of the Indian and International Standards. IE observed that, during execution of work, the Project Company has adopted appropriate measures to keep a strict vigil in implementing the Field Quality Plan & Material Quality Plans and in supervising the construction work. The Material Quality Plans (MQP) of different components were reviewed by the IE and opines that the requisite tests and inspections are in line with Indian and International standards at various stages of the manufacturing process. This includes stringent quality control via Raw Material Inspection, In – process Inspection, Final Inspection and Testing and Checks conducted during Packing & Despatch. IE is satisfied with the QAP followed for implementation of the Project.

5.3.2. Safety Aspects

Safety practices have been followed by the Project Company as per their Safety Standards which is in line with the industry standards and practices. IE is of the opinion that the safety rules and norms have been followed in the Project. During the execution of the project, all stores were properly fenced and provided with adequate lights. Safety equipment / accessories were used by site workers.

5.4. Useful Life of Asset

The review of the Technical documents pertaining to the project by IE including the Technical Specifications, Type Test Certificates and Quality Plan of the different equipment/ components of Transmission Lines confirm the quality of components and technical suitability of Transmission Lines.

All the transmission line assets are designed as per IS:802 Part 1 & 2 with a reliability factor of 1.0 which ensures the reliability period of the transmission line for 50 years and for the Substation Equipment for 35 years. As per the TSA, the Term of Applicability of the TSA is 35 years from the Schedule COD of the Project. Hence, IE confirms that the Transmission Assets are technically designed and are reliable as per the TSA.

The life extension of the asset beyond 35 years can be assessed based on the Residual Life Assessment (RLA) results, Load Studies and the Technological advancements after 35 years of Project Operation.

5.5. Technical Guarantee

Typically contract for Transmission Project does not envisage any performance guarantee parameters. However, the project has been implemented in line with the technical specifications with proper quality checks.

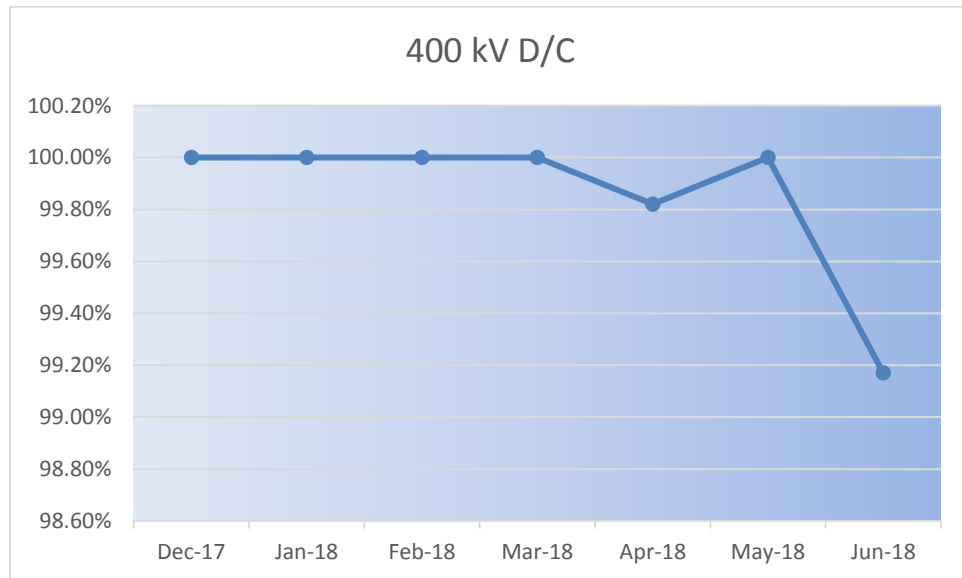
The Certificate for approval for Energization from CEA ensures the completeness and technical acceptability of the project. IE observed that 400 kV D/C Transmission Line from IB Thermal Power Station to Jharsuguda Pooling station has obtained the CEA approval vide letter dated 23rd August, 2017.

The CEA inspection for 765 kV D/C Transmission Line is due shortly.

5.6. Availability of Transmission Lines

Normative availability of each element has been considered as 99%. This is in line with CERC Notification. The target availability of the project as per Transmission Service Agreement is 98%.

The Project Company has submitted the monthly availability data for the 400 kV D/C Transmission Line from IB Thermal Power Station to Jharsuguda Pooling station, from December, 2017 to June 2018 and is indicated in the Graph below:



IE observed that the Project Company has planned proper O&M procedures and an effective O&M organization set – up to maintain the availability of the Transmission Lines. IE observed that the Availability is maintained more than 99%. IE is of the view that with prudent maintenance practices and deployment skilled manpower, maintaining 98% availability is achievable.

5.7. Assessment of Technology Risk

Based on the technical assessment of the project, IE does not foresee any Technology risk.

6. TIME SCHEDULE AND PROJECT PROGRESS

6.1. Schedule as per TSA

As per TSA, the scheduled COD of the project is 40 months from the effective date of TSA.

As per TSA conditions the effective date is 8th April, 2016.

IE found that the scheduled COD for the overall Project is 8th August, 2019 which is 40 months from effective date.

6.2. Schedule as per EPC Contracts

The schedule completion date as EPC Contract is 30th June, 2017 for 400 kV D/C Transmission Line and 6th June, 2019 for 765 kV D/C Transmission Line.

6.3. Schedule as per CERC tariff order 31.05.2016

The scheduled completion target as per CERC order dated 31st May, 2015 is as mentioned below:-

Name of the Transmission Element	Completion Target	Conductor per phase
765/400 kV D/C Substation at Jharsuguda (Sundargarh) – 765/400 kV D/C Raipur Pooling Station (304.95 Kms as per check survey)	40 months from effective date	Hexa Zebra ACSR Conductor or equivalent AAAC. The transmission lines to be designed for a maximum operating conductor temperature of 85°C for both ACSR as well AAAC.
IB Thermal Power Station (OPGC) 400 kV substation – 765/400 kV D/C Jharsuguda Substation (51.35 Kms as per check survey)	July, 2017	Triple Snowbird ACSR Conductor or equivalent AAAC. The transmission lines to be designed for a maximum operating conductor temperature of 85°C for both ACSR as well AAAC.

IE observed that the main EPC Contract SCOD for 765 kV transmission line is 3 months prior to the TSA and CERC order schedule COD, accommodating a sufficient cushion for any un – anticipated interruptions.

6.4. Present Progress Status

6.4.1. 765 kV D/C Transmission Line from Raipur Pooling Station to 765/400 kV Jharsuguda Pooling Station:

The construction progress of various activities as on 14th November, 2018 is given in the table below.

Activity	Total Target	Cumulative Progress till 14.11.2018		Balance
		Plan (L2)	Actual	
Total Foundation (No)	782	782	782	-
Tower Erection (No.)	782	782	782	-
Final Stringing (km)	304.95	304.95	304.95	-

6.4.2. 400 kV D/C Transmission Line from IB Thermal Power Station to Jharsuguda Pooling Station:

The construction works for 400 kV D/C Transmission Line from IB Thermal Power plant to Jharsuguda Pooling Station, of line length 51.35 kms, is physically complete. CEA had conducted the site inspection on 25th July, 2017 and accorded the energization letter vide letter dated 23rd August, 2017. As per the POSOCO letter dated 4th January, 2018, stating that 400 kV D/C Ckt – I & Ckt – II from IB (OPGC) to Jharsuguda, has successfully completed the 24 hours trial – run test on 20th December, 2017. ***IE observed that due to the delay in completion of the GIS substation (PGCIL), Jharsuguda Pooling Station, under the purview of PGCIL, the 400 kV OGPTL line could not get charged as per the SCOD i.e. August, 2017.***

The construction works are 100% physical complete for both lines as on 14th November 2018.

7. PROJECT MANAGEMENT ARRANGEMENT

7.1. Project Organization

This section presents the Project Organization arrangement adapted during the execution of the project.

The 400 kV D/C OPGC (Jharsuguda) Sundergarh Transmission Line is commissioned and is operational. The O&M philosophy and activities carried out for the Line is indicated herewith.

The Main Hub office and store for the line is at Jharsuguda where the O&M Team is stationed. The common services such as Accounts, Commercial, Safety, and Quality are catered from the Hub office. The Line has a sub – hub at OPGC, Banaharpali end, wherein two technicians along with one Supervisor is deployed.

IE opines that the Project Company has taken adequate measures for management of the complete project by allocating separate teams at separate location for supervision of the transmission line.

7.2. Organization Set – up and its Adequacy

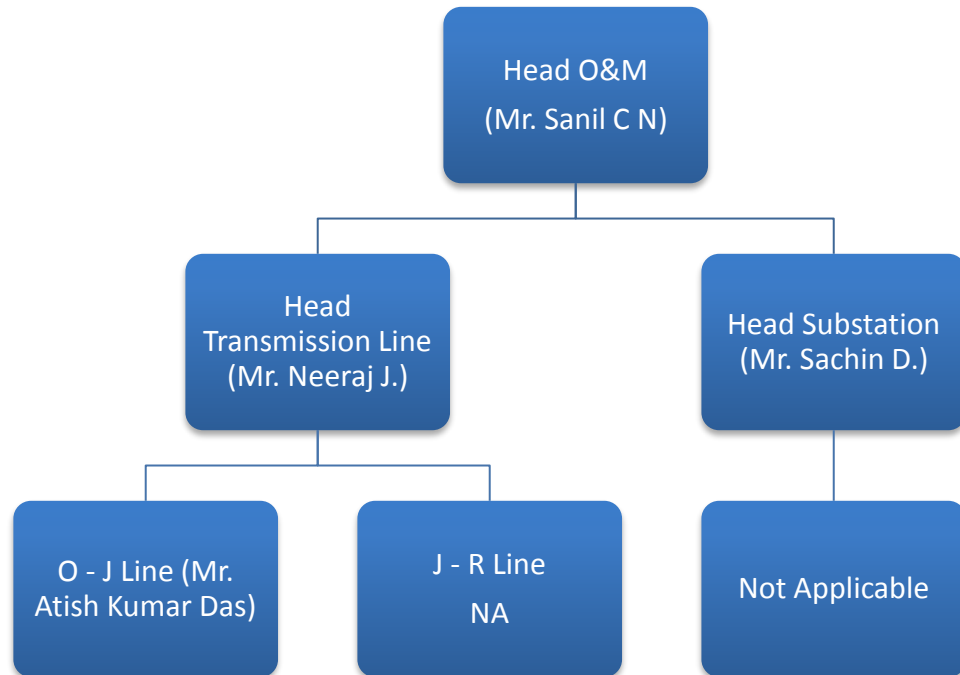
The Head (O&M) of Sterlite Power Grid Ventures Ltd. shall be responsible for the Operation & Maintenance for OGPTL and other projects of SPGVL.

The operation and maintenance of the transmission lines is done by the O&M contractor. Supervision of operation and maintenance work being carried out by the contractor is done by the SPGVL in-house team.

For trouble free operation and proper maintenance, SPGVL is taking up the following measures:

- a) Routine, Periodic, Preventive & Predictive maintenance shall be done by O&M contractor as per guide lines provided by SPGVL and under the supervision of SPGVL team.
- b) Close monitoring of agency, maintaining data and analysis to reduce down time shall be done by SPGVL Team.
- c) Mandatory spares shall be provided by SPGVL to the contractor. However, the contractor at his own cost, shall make provision of all other spares and consumables as may be required for O & M during the contract duration.
- d) Break down / Emergency shall be handled jointly by O&M contractor, SPGVL O&M & EHS (Environment, Health & Safety) Team

7.2.1. Organization Chart for O&M of Transmission Line



OGPTL has outsourced the maintenance works of 400kV D/C OPGC (Jharsuguda) Sundergarh Transmission Line to M/s. JBS Enterprise Private Limited, vide Work Order dated 21st February, 2016, for maintenance works of 765 kV D/C Jharsuguda – Raipur Transmission Line (304.95 kms) and 400 kV D/C Triple ACSR Snowbird OPGC – Jharsuguda Transmission Line (51.35 kms). As per the Contract the effective date for the works shall be the actual date of Site Mobilization. As informed by the Project Company the effective date 10th March, 2017. The Contract shall remain valid for a period of 36 months i.e. Three years from effective date, further extension of 2 years will depend on the performance of the Contractor.

The brief scope of the contractor includes –

- i. Routine patrolling and maintenance
- ii. T&P
- iii. Stores
- iv. Vehicles
- v. Transportation of material
- vi. Security of stores
- vii. Insulator cleaning
- viii. Corridor cleaning (vegetation), cutting of trees
- ix. ROW issues in scope of Contractor
- x. Replacement of mission members
- xi. Tightening of nuts and bolts
- xii. Visual inspection for hot spots
- xiii. Breakdowns
- xiv. Inspection of foundations
- xv. Strengthening of tower foundation and civil works
- xvi. Night Patrolling
- xvii. Thermo vision once in six months
- xviii. Signature analysis as and when required

- xix. Measurement of tower footing resistance
- xx. Mock drill
- xxi. Thorough inspection of the corridor during pre – monsoon and post monsoon
- xxii. Tree cutting if required
- xxiii. Checking of foundation and ground clearance.

At extra cost, the following works shall be covered:

- i. ERS erection
- ii. ROW & compensation
- iii. Spares to be provided by SGL
- iv. Major Breakdowns and failures
- v. Major Civil Works

The Incentive for increase in Availability over the target Annual Availability Value, limited to an overall Annual availability of 99.75 % and no incentive shall be paid over and above 99.75%. The Target Annual Availability shall not be less than 99.0%, during each Financial Year.

IE is of the opinion that the proposed O&M organization set-up is adequate. The division of responsibility of SPGVL O&M personnel for different line sections and the supervision of the O&M contractor by the SPGVL In-house team shall be effective in the smooth and trouble-free operation of the lines. Additionally, the proposal for providing mandatory spares by SPGVL to the contractor shall facilitate in reducing the down-time of the lines.

7.3. Operation and Maintenance Activities

The Operation and Maintenance Activities have been classified under the following heads:

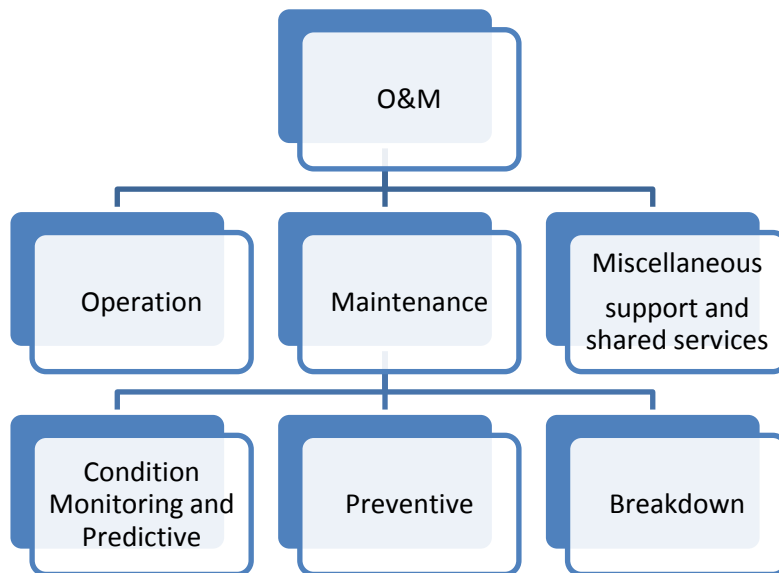


Figure 7.1 – Operation & Maintenance Activities

The day to day operation of the transmission systems is the primary responsibility of the Regional Load Dispatch Centre (RLDC). Consequently, the O&M strategy of OGPTL will focus primarily on the maintenance aspect.

The objective of the O&M strategy is indicated below:

- To achieve the system availability as specified in the TSA at the most economic cost,
- To carry out periodic 'preventive maintenance' so as to maximize the life of transmission lines
- To minimize the down time of the Transmission Lines for maintenance purpose

The maintenance activities are classified as follows to maximize the availability of the Transmission lines.

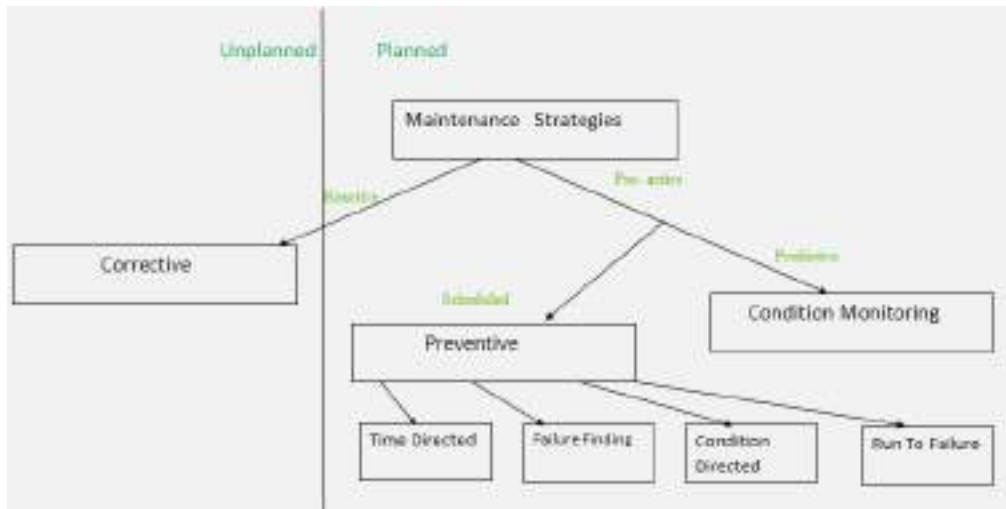


Figure 7.2 – Maintenance Strategy

7.3.1. Routine Maintenance (Preventive Maintenance)

OGPTL shall adopt proven practices such as regular patrolling of the lines, periodically removal of vegetation over growth, thermo-vision scanning, live line washing, on-line insulator failure detection and hot line maintenance techniques etc. Project Company plans to maintain a team of trained manpower along with adequate spares to swiftly attend to unforeseen eventualities/ natural calamities.

The patrolling frequency as followed by the Project Company is indicated below:

S. No.	Type of Patrolling	Visit Plan
1	Ground Patrolling	Monthly
2	Night Patrolling	45 Days
3	Monkey Patrolling	2 Month
4	Ground Patrolling (critical location)	Weekly
5	Emergency Patrolling	Immediate

OGPTL shall carry out regular maintenance of each of the Transmission Lines suiting to the nature of terrain, environment, surroundings, etc so as to achieve the desired level of performance. The following are examples of routine maintenance activities:

- Routine ground patrols to inspect structural and conductor components. Such inspections generally require either an all-terrain vehicle (ATV) or pickup and possibly additional support vehicles travelling on access and service roads and may rely on either direct line-of-sight or binoculars. In some cases, the inspector may walk the ROW. Follow – up maintenance is scheduled depending on the severity of the problem either as soon as possible or as part of routine scheduled maintenance.
- Patrolling in most vulnerable terrain is to be completed on monthly basis. Patrolling sequence is such that each and every most vulnerable location shall be re patrolled in three to five weeks. Photographs of such location are taken using Digital Camera and Hard/Soft copies of the same are preserved to have the history of location.
- 100% Transmission Line towers and Spans are checked by concerned Lineman/ technician/ Engineer once in patrolling cycle. 20% Transmission Line Towers, spans in normal and vulnerable sections and all vulnerable towers are checked by concerned Transmission Line Maintenance In – Charge in each patrolling cycle of Three/four months.
- Climbing surveys may be necessary to inspect hardware or make repairs. Personnel generally access these structures by pickup, ATV, or on foot.
- Structure or conductor maintenance typically occurs manually. The maintenance vehicle may be located on or off a road, and no-to-minimal grading is necessary to create a safe work area.
- Cathodic protection surveys to check the integrity and functionality of the anodes and ground beds. These surveys typically require personnel to use an ATV or pickup and make brief stops.
- Routine cyclical vegetation clearing to trim or remove tall shrubs and trees to ensure adequate ground-to-conductor clearances. Vegetation clearing cycles vary from 3 to 5 years or as needed (dependent upon the vegetation present). Personnel generally access the area by pickup, ATV, or on foot; use chainsaws to clear the vegetation; and typically spend less than half a day in any one specific area. In some cases vegetation may be cleared using mechanical means.
- Removal of individual trees or snags (hazard trees) that pose a risk of falling into conductors or structures and causing outages or fires. Personnel generally access hazard trees by truck, ATV, or by foot from an access or service road, and cut them with a chainsaw or similar tool. Any felled trees or snags are left in place as sources of large woody debris or as previously directed by the land management agency. Felled green trees are limbed to reduce fire hazard.
- Rusting of tower parts: At some places, it was observed that rusting of tower parts/stubs have occurred due to direct contact of wet soil with tower parts. Therefore, it was ensured that the mandatory clearance from top of the coping of each leg and present ground level was maintained.
- Norms for tower top patrolling:- Tower top patrolling of the lines was carried out in case of repeated tripping/ auto – reclosure (twice or more in same section/area) to find the untraceable faults during ground patrolling and in stretches having component failure history/ to examine pollution level on Insulators.
- Ground patrolling after line faults:- Emergency ground patrolling of the line to be carried out for +/-5% towers both sides of the faulty tower indicated by online fault locator to trace the fault. In case of permanent faults, off-line fault locator were utilized by Maintenance Engineer to correlate the finding of on-line fault locator.

- Norms for Thermovision scanning:-Thermovision scanning of the lines to be carried out after three month of the charging and noticed defects were attended on priority. Subsequent Thermovision scanning of high capacity lines (quadruple conductor) and highly loaded lines (90% or above of SIL rating) were carried out at every five year interval. Hotspots identified through Thermovision scanning were attended by HLM/ Earliest Opportunity.
- Norms for Punctured Insulator Detection:- PID scanning of Transmission lines having Insulator decapping incidents irrespective of age were carried out immediately to ascertain the healthiness of Insulators. However PID of Lines which are 15 years old were carried out irrespective of decapping incidents. Defective Insulators were replaced on priority.
- Condition Monitoring of Polymer insulators:- Condition monitoring of Polymer Insulators were carried out using Corona camera.
- Procedure for Transmission Line Patrolling:- Transmission Line maintenance Engineer prepares a program of transmission line patrolling/ Maintenance for the lines under his/her jurisdiction to complete patrolling cycle as per operation system norms and maintenance activities planned during the month and send copies to concerned employee and Delhi (O & M). Patrolling/ Maintenance of Transmission Line was carried out as per the plan.
- Checklist for Ground patrolling: Formats for the ground patrolling were filled up by the person who has patrolled the section immediately after patrolling and submitted to line In charge on daily basis.

7.3.2. Corrective Maintenance

Corrective maintenance activities are relatively large-scale efforts that occur infrequently, may result in more extensive vegetation clearing or earth movement and associated activities. Such activities shall be scheduled in the Maintenance Schedule for Transmission Lines. The following are examples of corrective maintenance:

- a) Non-cyclical vegetation clearing to remove saplings or larger trees in the ROW.
- b) Structure or conductor maintenance in which earth must be moved, such as the creation of a landing pad for construction or maintenance equipment.
- c) Structure (e.g., cross-arm, insulator, structure) replacement.

7.3.3. Tripping Details

Project Company furnished the tripping details, the route cause analysis and corrective action plan, as indicated in the table below –

400 kV D/C OPGC – Sundergarh	Event Date	Event Time	Restoration Date	Restoration Time	Loss hrs.	Reasons/ RCA
Ckt – 2			11/24/2017	3:26:00 PM		Idle charged from Jharsuguda end
Ckt – 1			12/5/2017	18:55		Anti – Theft charging from Jharsuguda end

400 kV D/C OPGC – Sundergarh	Event Date	Event Time	Restoration Date	Restoration Time	Loss hrs.	Reasons/ RCA
Ckt – 2	11/30/2017	9:50	12/5/2017	18:10		Anti – Theft charging from Jharsuguda end
Ckt – 1	12/15/2017	12:36	12/15/2017	18:22	5:46:00	Outage for reconnecting the jumpers in order to facilitate the first time charging of OPGC switchyard
Ckt – 2	12/15/2017	12:37	12/15/2017	18:24	5:47:00	Outage for reconnecting the jumpers in order to facilitate the first time charging of OPGC switchyard
Ckt – 1	19.12.17	17:30	19.12.17	19:05		First time synchronization from OPGC End
Ckt – 2	19.12.17	17:30	19.12.17	19:22		First time synchronization from OPGC End
Ckt – 2	1/24/2018	16:00	1/25/2018	17:45	25:45:00	Shutdown availed by Sundergarh PGCIL for construction work near ICT.
Ckt – 1	2/22/2018	8:30	2/23/2018	21:35	37:05:00	For overhead crossing of 765kV Raipur-Sundergarh line
Ckt – 2	2/22/2018	8:30	2/23/2018	21:37	37:07:00	For overhead crossing of 765kV Raipur-Sundergarh line
Ckt – 1	4/28/2018	19:32	4/28/2018	22:04	2:32:00	Phase to earth fault. Fault not recorded at OPGC end.
Ckt – 1	4/29/2018	18:27	4/29/2018	21:14	2:47:00	
Ckt – 2	4/29/2018	18:30	4/29/2018	21:18	2:48:00	B – Phase to ground fault and Trying to charge the line at 21:18 hrs SOTF operated
Ckt – 2	4/29/2018	21:18	4/30/2018	9:46	12:28:00	B – Phase to ground fault and Trying to charge the line at 09:46 hrs on 30-04-18 and SOTF operated. One conductor snapped in B phase
Ckt – 2	4/30/2018	9:46	5/2/2018	12:55	51:09:00	B-Phase to earth.SOTF acted.Regarding line charging clearance mail has been sent at12:11 hrs on 02-05-18
Ckt – 2	6/7/2018	14:10	6/7/2018	18:10	4:00:00	Shutdown availed by OPGC for communication checking
Ckt – 1	6/8/2018	12:30	6/8/2018	15:45	3:15:00	Shutdown availed by OPGC for digital protection panel communication.
Ckt – 2	6/8/2018	12:30	6/8/2018	16:38	4:08:00	Shutdown availed by OPGC for digital protection panel communication.
Ckt – 1	6/11/2018	15:26	6/11/2018	16:37	1:11:00	Phase to Earth fault.
Ckt – 2	7/15/2018	12:32	7/22/2018	10:58		Due to voltage regulation

400 kV D/C OPGC – Sundergarh	Event Date	Event Time	Restoration Date	Restoration Time	Loss hrs.	Reasons/ RCA
Ckt – 1	7/22/2018	10:44	7/24/2018	14:58		S/d Availed by OPGC for isolator sparking issue resolving
Ckt – 1	7/17/2018	18:11	7/17/2018	19:02		S/d Availed by OPGC for isolator sparking issue resolving

IE observed, that the major reason for the tripping of the line was due to Phase to Earth Fault. O&M Team should do the Root Cause Analysis and pan and implement the mitigative measures for the same. Regular cutting of trees in the Corridor below the Transmission Line needs to be done after taking proper shutdown of the line.

7.3.4. Emergency situations

Most of the activities, such as routine patrols, inspections, or scheduled maintenance, are planned in advance as per the O&M procedures. However, there will be an occasional need for emergency response in cases where safety and property are threatened, to prevent imminent damage to the transmission line and ancillary facilities, or to restore service in the event of an outage. Such activities which need to be addressed immediately shall be identified in the Maintenance Schedule for Transmission Lines. The following are examples of Emergency situations:

- a) Failure of conductor splices.
- b) Damage to structures or conductors from wildfire, high winds, ice, or other weather related conditions.
- c) Line or system outages or fire hazards caused by trees falling into conductors.
- d) Breaking or imminent failure of cross-arms or insulators, which could, or does, cause conductor failure.
- e) Damage to structures or conductors from vandalism

In the case of an emergency where life or substantial property is at risk or there is a potential or actual interruption in service, the Companies will promptly respond to the emergency and conduct any and all activities, including emergency repair requiring heavy equipment access to the structures or other ancillary facilities, needed to remedy the emergency and will implement feasible and practicable Environmental Protection Measures (EPMs).

7.3.5. Consumption of Spares

The List of Spares has been furnished to the IE. The details of the inventory available at store is indicated below –

Table 7.1 – Consumption of Spares

S. No.	Material Handed Over from Sterlite to JBS	Qty.
1	Pipe Type Earthing (in nos.)	2
2	DT fitting	1
3	120 KN 'Single "I" Suspension Pilot Insulator String	4

S. No.	Material Handed Over from Sterlite to JBS	Qty.
4	Counter Weight 25Kgs – (8 Nos = 1 set).	9
5	T-Connector Bolted Type (in nos.)	14
6	T-Connector Comp. Type (in nos.)	12
7	Twin Spacer Damper (in nos.)	0
8	Twin Rigid Spacer 457 mm (in nos.)	3
9	Vibration Damper for 7/3.66 mm Earthwire (in nos.)	5
10	Flexible Copper Bond for Earthwire (in nos.)	1
11	120 KN Polymer Insulator (in nos.)	1
12	160 KN Polymer Insulator (in nos.)	1
13	ACSR Conductor Bit (in m)	606
14	GS. Earthwire 7/3.66 mm Bit (in m)	90
15	Extension Link (in nos.)	6
16	Empty Conductor Drum (in nos.)	5
17	Empty OPGW Drum (in nos.)	4
18	120 KN Single "I" Suspension Pilot Insulator String	
18.1	Arking Horn (in nos.)	2
18.2	Yoke Plate (in nos.)	3
18.3	Suspension Clamp (in nos.)	3
18.4	20MM Dia D-Shackle (in nos.)	3
18.5	Corona Control Ring (in nos.)	3
19	Conductor & OPGW	
19.1	ACSR Zebra/ Snowbird Conductor (in m.)	0
19.2	OPGW Cable (Without Tested) (in m.)	2.25
20	OPGW Hardware Fitting	
20.1	Single Tension/Dead End Clamp (in nos.)	10
20.2	Single Suspension Assembly (in set.)	1
20.3	Joint Box (in nos.)	0
20.4	Down Lead Clamp (in nos.)	34
21	Tower	
21.1	DA+0 (in set.)	5
21.2	DB+0 (in set.)	1
21.3	DC+0 (in set.)	1
21.4	DD+0 (in set.)	1
22	Hardware Fitting	
22.1	MSCJ For Moose (in nos.)	146
22.2	Repair Sleeve for Moose (in nos.)	18
22.3	T-Connector (in nos.)	18
22.4	MSCJ for Earthwire (in nos.)	2
22.5	Repair Sleeve for Earthwire (in nos.)	12
23	Template	
23.1	DA+0-9 (in set.)	1
23.2	DB+0-9 (in set.)	1
23.3	DC+0-9 (in set.)	1
23.4	DD+0-9 (in set.)	1

The stores are provided with necessary Tools and Equipments along with nuts and bolts. The spares recommended by the Project Company are sufficient and in line with standard practices. However, there few recommended spares, which should be available at store for the O&M services –

- a. Lug for CP earthing
- b. Bird Guard
- c. Grading Rings
- d. PG Clamp
- e. Down lead clamp for OPGW
- f. Repair sleeve for ACSR
- g. Twin Rigid Spacer for Jumper
- h. Jumper cone
- i. Dead End with AL & Steel
- j. Vibration Dampers for Earthwire
- k. Flexible Copper Bond
- l. Mid Span Joint for Earthwire
- m. Dead End for Earthwire
- n. CC ring for suspension and tension
- o. Arcing horn for suspension & Tension
- p. Twin Spacer Damper
- q. Clamp cap/ keeper spacer
- r. T – Connector (open type)

7.4. Standard Operating Procedures

The Standard Operating Procedures (SOP) for Operation and Maintenance of the Transmission lines have been laid down by the Project Company. The Standard Operating Procedures elaborate the General Safety Precautions to be followed during the operation and maintenance of the transmission lines. It also includes the detailed procedure and working instructions for the following activities:

- a) Steps to be taken in case of Tower collapse
- b) Method employed to overcome failure of Jumpers
- c) Preventive Maintenance of Tower Foundation
- d) Maintenance Earthing of Transmission Lines
- e) Patrolling of Transmission Lines

The Standard Operating Procedures include the Maintenance Schedule of the Transmission lines and Checklist for Ground Patrolling. It also includes the various standard formats to be filled in during the operation and maintenance of the lines.

- a) Monthly Patrolling Programme
- b) Ground Patrolling report
- c) Tower Climbing Patrolling Report
- d) Log Book of Line Defects
- e) Emergency Patrolling Report on Tripping/ Auto re – closure of Transmission Lines
- f) Summary of Line Defects for the Month
- g) Shut Down Nature Defects
- h) Non-Shut down Nature Defects

- i) Details of Tree cutting
- j) Inspection Report for Major Maintenance/ Breakdown works
- k) Live Line Puncture Insulator Detection
- l) Thermovision scanning
- m) Insulator Washing/ cleaning

7.5. Implementation of the O&M Procedures

For proper implementation of the O&M Procedures, the following initiatives are being taken by the Project Company:

- a) Use of separate IT (Information Technology) based tool is being put in place for O&M, to computerize all the formats for the purpose of storage for easy access and for centralization of the information.
- b) To promote knowledge sharing within the team, a Knowledge management portal is already in place.
- c) Document management system in “WRENCH” software is already implemented for storage and retrieval of documents like engineering drawings, tower schedules, commissioning reports etc.
- d) Regular training programs are being held to train the personnel on the latest techniques for effective maintenance of the transmission lines and safety measures to be adopted during maintenance.

The O&M philosophy and methodology being adopted by the Project Company is in line with the widely accepted practices followed for similar projects. The Standard Operating Procedures laid down by the Project Company are comprehensive and include all major aspects required for effective operation and maintenance of the transmission lines.

7.6. O&M Technology

Project Company informed that they are planning to supervise their transmission assets with the drone based asset management technology developed by Sharper Shape Inc. This technology will enable to monitor the critical asset conditions and ensure full economic optimization of resource deployment in maintenance operations. The drone based asset management technology will improve the reliability, resilience and safety of the transmission lines.

OGPTL plans to implement Aerial Surveillance, through Drones. Sterlite has entered into partnership with Sharper Shape (Finland), for Drone based automated transmission line inspection.



Long distance inspection will be provided through drone based technology. The use of drones will increase the uptime of the grid, and also save the environment by conducting preventive maintenance and reducing deforestation along the line corridors.

Based on review of the O&M arrangement, IE observed that the same is in line with the industry practices and addresses all relevant works and obligations including the schedules of preventive and reactive maintenance activities to be performed for reducing the downtime.

7.7. Disaster Management Plan

Due to ever growing expanse of our operating territory and the variety of climatic conditions our transmission lines are subjected to, these lines may fail sometimes due to natural disasters. Failures can occur due to

- High wind loading or floods
- Storm damage
- Earthquake or Rock slides
- Mud slides
- Erosion of foundations
- Corrosion of towers
- Vandalism or sabotage

Total losses resulting from an extended outage of a key transmission line is site specific and can be considerable. Major monetary losses may depend directly or indirectly on the lost revenue due to unavailability of the line and cost of restoration. The total losses may be more than just the direct losses of the utility, especially if the utility is answerable to customers and government entities.

While the cost to rebuild or restore a failed transmission line is inversely proportional to the restoration time, the total losses are directly proportional to the outage time. In almost all cases, it is best to restore the transmission line as quickly as possible.

Therefore, Sterlite Power has derived a well laid out crisis management plan to tackle difficult scenarios arising out of any emergencies such as natural disasters, equipment failures, multiple tripping etc.

7.7.1. Objective and Scope of Disaster Management Manual

The following are the objective and scope of this Manual:

- To improve state of preparedness to meet any contingency;
- To reduce response time in organizing the assistance;
- To identify major resources, man power material & equipment needed to make the plan operational;
- Making optimum use of the combined resources

7.7.2. Inventory Management and Procedures

To perform any unplanned emergency work, critical materials have been identified and have been made available for restoration, for example, standardized conductor sizes in appropriate quantities including all terminations and splices are in stock. Project Company has variety of different types of Transmission towers, one plan that has proved effective is to maintain only tower steel for the heavier types and classes of permanent towers.

Emergency Materials for Transmission Lines –

- Mandatory T & P's (as per SOP's) for each and every activity related to Transmission Lines.
- Conductor of various type used in sufficient quantities.
- Hardware of all types
- Tower members (as per requirement and criticality)

External Resources

In excess to all the internal resources available, special arrangement with the external O & M contractors, agencies etc. has been tied up to provide assistance in case of emergencies.

Storage Locations

In case of any emergencies, inventory of recovery equipment and spares are available at critical locations so that these could be pressed into service within the shortest possible time.

All the required Emergency materials are available in the Stores identified for each and every Transmission lines or in the stores managed by O & M contractors.

Logistics

Arrangements for adequate number of vehicles for movement of people and materials are ensured. Medical facilities around the clock shall be made available to the staff engaged in the restoration activities. Arrangements for drinking water supply shall also be ensured.

Emergency Procedures for restoration of Lines

The various activities in response to an emergency shall include:

- The Central Control Room for monitoring the various lines is at Bhopal Substation. In case on any outages or tripping, it receives the information from the nearest substation and accordingly alerts the Line-in-Charge.

- Upon receiving preliminary information about the damage/tripping, site visit is done by Line in charge along-with the O&M gang located nearer to the location within a maximum of 02 hrs after receiving of information.
- After site visit exchange of information in terms of event description and its severity, takes place among the Head-O&M, Head-O&M (TL), Head-O&M(SS) & the Line-in-Charge and an action plan is worked out and it is communicated to all internal as well as external stake-holders.
- In case of Conductor snapping, upon receiving instructions, Gangs, T & P's and required materials to be mobilized to the site immediately within shortest possible time.
 - Meanwhile, Site survey and damage assessment is carried out by Safety Officer regarding the safe working conditions.
 - Safe working conditions for the Transmission Line Gangs are ensured. Medical facilities in case of emergencies are tied up. Basic amenities like drinking water etc. to be procured.
 - Site preparedness is done before the commencement of work.
 - Restoration Strategy is derived.
 - Restoration work is started immediately as soon as the required materials, T & P's reaches the location.
- In case of Tower failure, after receiving the confirmation from the Line In charge, detailed Damage assessment to be done and action plan to be formulated within 2 days.
 - Identification of resources need and their deployment viz, technical experts, manpower, equipment, spare parts & other material is done.
 - All Heads from O&M, Safety & Quality functions jointly develop a comprehensive disaster management plan and garner support from other internal/external agencies.
 - Restoration Models and Restoration Strategy are derived depending upon the scenario of Tower damage.
 - Restoration-activities are finalized & Restoration-team is formed with resources from various functions as per requirement. Daily log is maintained and control-room for monitoring the situation and for exchange of information internally/externally is created.
 - Site survey and damage assessment to be carried out by Safety Officer regarding the safe working conditions.
 - Safety Plan is finalized and put into action as soon as the assessment is completed.
 - O & M functional Heads to coordinate for any assistance in terms of men & materials.
- Restoration of Transmission Line should be completed within the desired timeline
- All the erection, construction, stringing activities is to be carried out within the stipulated safe working conditions.
- Once the restoration of the Transmission Line has been completed, Post investigation and analysis to be initiated to avoid such instances in the future.

IE observed that various safety measures have been covered in Disaster Management Manual which needs to be adopted to avoid any crisis/ disaster, ways and means to tackle a crisis/ disaster, if it occurs in spite of preventive measures.

8. ENVIRONMENTAL AND SOCIAL ASPECT

8.1. Environmental Impacts and Mitigation Measures

The operation of the transmission line shall have no environment impact and hence, no clearance or mitigation measures are required.

8.1.1. Environment, Health & Safety Assessment

OGPTL has implemented the following procedures to ensure that the Environment, Health & Safety (EHS) aspects are duly taken care of.

8.1.2. Quality, Health, Safety & Environment Scoring System

ENICL follows the QHSE Scoring methodology, wherein Safety Performance Monitoring System is classified in two categories i.e. –

1. Proactive monitoring
 - i. Various safety training as fall from height, electrical safety, fire, first aid training etc.
 - ii. Capturing of near miss incidents
 - iii. Mock drill on fall from height, fire, snake bite, electrocution etc
 - iv. Work place awareness as National safety day celebration, world environment day celebration, tool box talk etc
 - v. Workplace inspection
 - vi. Audit
 - vii. Environmental monitoring
 - viii. Management review meet
 - ix. Operation SOP driven, HIRA, EIA etc
2. Reactive monitoring such as
 - i. Capturing Unsafe acts / unsafe conditions / first aid and analysis for correction
 - ii. Dangerous occurrence and prevention.

8.1.3. EHS Inspection Procedure.

The EHS Inspection Procedure applies to the construction sites. The objective of this instruction is as follows:

- Demonstrate the involvement and commitment of middle managers in safety management
- Deploy common EHS managerial practices within all sites
- Promote the culture and to eradicate deviations and reach 100% compliance level

The EHS Inspection is achieved through

a) Safety Observation Tour (SOT) Process

This is a management process which is used to ensure the application of safety standards, instructions and practices/tools used in a given area. It is an inspection for the frontline engineer & middle management. This is a safety observation visit. The SOT is conducted to check the application of the EHS rules and regulations in the area.

The inspection format is filled by the Engineer & Manager involving channel partner & validated by EHS manager. During SOT, all points are checked in line with the Safety Tour Observation Check List which is provided as a part of the EHS Inspection Procedure. At the end of the SOT, a debrief between the SOT leader and the channel partner of the area visited takes place. All findings are reviewed and a commitment is taken by the channel partner to avoid new occurrences of the deviations found.

b) Intermediary Safety Visit (ISV)

It is a management process which should ensure the application of safety standards, instructions and practices/ tools used in a given area. It is an Intermediary Safety Visit Inspection for the Project Head, Commercial Head and Project Management & Business Head. The objective of the ISV is to make managements commitment visible. Also, the ISV is used to make sure that all the risks are managed, i.e under control. It is used to verify that local standards (workshop, customer site etc) are respected and applied. It helps to identify deviations and unsafe practices. The ISV format is filled and at the end of the ISV, a debrief between the ISV leader and the Line / Station Manager of the area visited take place. All findings are reviewed and a commitment is taken by Line/ Station Manager to implement actions to avoid new occurrences of the deviations found. Any open non compliance follows up & closeout is responsibility of EHS manager through Project Head.

The Project Company submitted sample reports of Safety Observation Tours and EHS Inspection reports for the project.

8.1.4. Work Stoppage or EHS Non conformance Report (NCR) Procedure.

This procedure describes the methods for raising EHS non-conformances at the construction sites with subsequent corrective action. Non-Conformity is any circumstances, material or method within the operation of the construction of Transmission Line which does not comply with the specified requirements contained within the Safe Working Procedure (SOP) and SPGVL EHS manual. This procedure applies to across the SPGVL constriction site.

The responsibility to ensure that the procedure is followed, reported and appropriate records are maintained lies with the Project Head/ Line Manager/ EHS Lead. The responsibility to issue NCR / work stoppages to contractor Line Manager/ Project Manager, EHS Lead in case of any non-conformity, unsafe act/ unsafe condition and recommend corrective and preventive action. When the agreed remedial action is completed, the Engineer/ Line Manager/ Project Manager shall sign off the respective non-conformance report.

IE observed that by this process, the Project Company has been taking adequate measures for ensuring safety at the site.

8.1.5. Review of the status of Environment, Health & Safety Aspects by IE

Upon review of the various EHS documents received from the Project Company, IE is of the opinion that the Project Company is following the EHS Procedures to ensure that the aspects related to Environment, Health and Safety of the project are duly taken care of.

9. PROJECT PERMITS AND CLEARANCES

Following table 9.1 shows the latest status of various Permits and Clearances obtained / to be obtained:

Table 9.1 – Permits & clearances

Sl. No.	Description	Authority	Present Status
1.	Transmission License	Central Electricity Regulatory Commission (CERC)	Recommendation for Transmission License by CERC vide notification dated 30 th June, 2016 has been accorded.
2.	Company Registration	Registrar of Companies	Completed
3.	Environmental Clearance	MoEF	Not Applicable
4.	Forest Clearance	State Govt./ MOEF	Stage 1 Forest Clearance along with Tree Cutting permission received for both 765 kV and 400 kV Transmission Lines.
5.	Wild Life Clearance	State Govt./ MoEF	Not Applicable
6.	Approval under Section 68 of Electricity Act, 2003	GOI, Ministry of Power	Obtained on 3 rd June, 2015
7.	Approval from Gol under section 164 of Electricity Act 2003	GOI, Ministry of Power	Obtained
8.	Transmission Service Agreement (TSA)	OGPTL and LTTCs	Signed on 20 th November, 2015
9.	Approval for adoption of Tariff under Section 63 of EA 2003.	CERC	CERC Order dated 31 st May, 2016
10.	Approval from CERC under Section 17(3)	CERC	Received vide CERC order dated 20 th September, 2016
11.	Power & Telecommunication Coordination Committee Clearance (PTCC)	CEA / Ministry of Power	PTCC for 765 kV line – received PTCC for 400 kV line is received
12.	Railway Crossing	Ministry of Railways	Received
13.	River Crossing	Navigation Authority	Received
14.	Road Crossing	National Highway/ State Road Department	NOC for all the 6 crossings is received
15.	Power Line Crossings	Concerned State Power Utilities / PGCIL	Received
16.	Aviation Clearance	Airport Authority of India	Received on 19 th December, 2016 for 765 kV Line and on 16 th December, 2016 for 400 kV Line.
17.	Defence clearance	Ministry of Defence	Defence Clearance for 400 kV is not applicable. Approval is received vide letter dated 10 th March, 2017 for 765 kV Line.

765 kV D/C Transmission Line

Regarding the NH/ EHV/HVDC/Railway Crossings – There are 58 crossings, out of which, proposals for all the 58 crossings have been submitted and approvals for 53 is received.

S. No.	Name of Proposal	No. of Crossings	Status of Proposal
1.	Power Line Crossing	46	46 proposals approved
2.	Railway Crossing	6	6 proposals approved
3.	NH Crossing	6	6 proposals approved
4.	PTCC Proposal	PTCC received for both Chhattisgarh and Odisha portion	
5.	Forest Proposal	Stage – 1 approval along with Tree cutting Permission for Chhattisgarh portion, vide letter dated 1 st February, 2018 is received. The Stage – 1 approval for Odisha section was received vide letter dated 6 th March, 2018. The Tree cutting permission was received vide letter dated 20 th April, 2018.	

IE observed that Project Company has received all the Permits & Clearances for the commissioning and charging activities.

400 kV D/C Transmission Line

Regarding the NH/ EHV/HVDC/Railway Crossings – There are 21 crossings. Proposal for all the 21 crossings have been submitted and approval for all the crossing and Forest Clearance is received. ***IE observed that Project Company has received all the approvals for operation of 400 kV Transmission Line.***

10. SUMMARY AND MAJOR FINDINGS

- The project comprises of 51.35 kms of 400 kV D/C Triple Snowbird Conductor Transmission Line from OPGC (IB Thermal Power Station) to 765/400 kV Jharsuguda Pool Station and another of around 304.95 kms of 765 kV D/C Hexa Zebra Conductor Transmission Line from 765/400 Raipur Pooling Station at Bhilai to 765/400 kV Jharsuguda Station (Sundergarh)
- 400 kV D/C Triple Snowbird Conductor Transmission Lines from OPGC (IB Thermal Power Station) to 765/400 kV Jharsuguda Pool Station. (approximately 51.35 km), is commissioned and is operational. The CEA letter for approval for energization was received on 23rd August, 2017 and the POSOCO letter indicating the successful completion of trial – run operation was received on 20th December, 2017.
- The SCOD as per TSA for 400 kV D/C line was on July, 2017, however due to delay in completion of 400 kV Bays at PGCIL 765/400 kV Pooling Station at Jharsuguda, under the purview of PGCIL, the line got charged during December, 2017.
- The construction works for 765kV D/C Transmission Lines are 100% complete..
- If the Project is delayed by 180 days beyond schedule COD as per TSA reasons solely attributable to Project Company, the maximum LD imposed as per TSA is Rs 106.85 Crores. However as per EPC Contract, if the Project is delayed beyond schedule COD reasons solely attributable to EPC Contractor, the maximum LD recovered as per EPC Contract (combined Supply, Erection and Civil works contract) is Rs 104.30 Crores.
- IE observed that requisite Permits and Clearances for the commissioning and operation of 400 kV D/C and 765 kV D/C Line are received and well in place.
- Service conditions and system parameters are in line with the TSA and relevant Indian Standards & Practices for similar kind of projects.
- The O&M Contract for both 400 kV D/C and 765 kV D/C Line is awarded to M/s. JBS Enterprise Private Limited. The O&M works for 400 kV Line started from 10th March, 2017, while the works for 765 kV Line shall start after the commissioning of the same.
- Maintenance records like checklist for patrolling (Civil & Electrical works), monthly patrolling program, monthly patrolling actual log – book of line defects, Emergency patrolling report of tripping, monthly project progress etc records are being regularly maintained and monitored.
- IE observed that the reason for majority times of tripping of 400 kV D/C Line was due to Phase to Earth fault. IE opines that proper root cause analysis should be done and mitigative measures to be implemented.

Risk Category – C

- IE opines that there no major ROW issues being faced during the O&M of 400 kV Line or during execution of 765 kV Line. The major ROW issue related to 765 kV D/C line are all cleared and works are complete for those section.
- No displacement of people in the process of finalization of Right of Way and execution of the project took place. As such the socio – economic and external environment shall have no impact on the project and vice – versa
- A set of photographs taken during the site visit from 16th to 19th May, 2018 is attached as **Annexure – 3**



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केंद्रीय विद्युत प्राधिकरण
Central Electricity Authority
मुख्य विद्युत निरीक्षणालय प्रभाग
Chief Electrical Inspectorate Division

Telefax: 011-26565183

संख्या: CEI/1/EI/IO(E/NE)/Insp./2017

दिनांक: 22/08/2017

विद्युत केबल के लिए अनुमोदन
किरीच विद्युत प्राधिकरण (सुरक्षा तथा विद्युत आपूर्ति संशोधन) विनियम, 2010 (व्यक्त संशोधित) के विनियमन 43 के अन्तर्गत

Electrical Installation: -

Electrical Apparatus: - 400 kV D/C OPGC-Iharnaguda Transmission line (length-51.35 km).

Inspected by: - Deputy Director, CEI, CEA, New Delhi on 25.07.2017

Location: - M/s Odisha Generation Phase-II Transmission Ltd.

Reference: -

1. Online Application No- B/2017/0227 Dated: 04-07-2017.
2. Our letter No CEI/3/EI/IO(W)/Insp/2017/1638 dated: 03-08-2017 - Insp. Rep.
3. Your letter dated: OGPTL/OJ/EI/29/7/08/01 dated: 22.08.2017 - Compliance Rep.

With reference to the above, approval under regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 (as amended) is hereby accorded for energisation of the above mentioned electrical installation.

The consistent compliance of relevant provisions of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 (as amended) shall be ensured for safety in operation and maintenance of the above electrical installation.

Periodical inspection of the above electrical installation shall be due after 02 years from the date of this inspection under regulation 30 of CEA (Measures relating to safety and Electric Supply) Regulations, 2010 (as amended). This periodicity is subject to change by government notification.

(R K Meena)

Deputy Director &
Electrical Inspector to the GOI.

To:-

Shri T A N Reddy, Odisha Generation Phase-II Transmission Ltd., F-1, The Mka Corporate suites, 1 & 2 Shwari Nagar, Mathura Road, New Delhi-110065.

प्रतिलिपि: उप निदेशक, RIO(E), के.वि.प्रा.

पावर सिस्टम ऑपरेशन कॉर्पोरेशन लिमिटेड
(भारत सरकार का उद्यम)
POWER SYSTEM OPERATION CORPORATION LIMITED
(A Govt. of India Enterprise)
CIN: U40105DL2009GOI188682



पूर्वी क्षेत्रीय भार प्रेषण केन्द्र, 14, गोल्फ क्लब रोड, टॉलिंगुंज, कोलकाता 700033
EASTERN REGIONAL LOAD DESPATCH CENTRE, 14, Golf Club Road, Tollygunge, Kolkata 700033
Tel / दुरभाष: 033 2423 5867/5875 * Fax / फैक्स: 033 2423 5809/5704/5029 * E-mail / ई-मेल: erldc@posoco.in

Certificate Number: ERLDC/Trial Operation/2018/January/02

Date: 04/01/18

Certificate of completion of Trial Operation of Transmission Element

Reference:

- Communication dated 23.11.17 from Transmission licensee to RLDC in Format-I and IA.
- Communication from RLDC dated 24.11.17 to Transmission licensee in Format-II.
- Communication from Transmission Licensee to RLDC dated 23.11.17 in Format III, IIIA, IIIB, IIIC and IIID.
- Provisional approval dated 01.12.17 from RLDC to Transmission Licensee for charging in real time in Format-IV.
- Real time code issued by RLDC on 19.12.17 respectively
- Communication dated 26.12.17 from Transmission Licensee in Format-V after trial operation.

Based on the above reference, it is hereby certified that the following Transmission element has successfully completed the trial operation:

Name of the Transmission Asset:	1. 400KV D/C IB-OPGC-Jhasuguda (sundargarh-PGCIL) Line CKT I 2. 400KV D/C IB-OPGC-Jhasuguda (sundargarh-PGCIL) Line CKT II
Owner of the Transmission Asset :	Odisha Generation Phase II Transmission Limited
Date and Time of Energization for commencement of successful trial run operation	1. 19:05 hrs. of 19.12.2017 2. 19:22 hrs. of 19.12.2017
Date/time of completion of successful trial run operation	1. 19:05 hrs. of 20.12.2017 2. 19:22 hrs. of 20.12.2017

Note:

- Only Line portion (From gantry tower of Jhasuguda SS to Dead End tower at IB-OPGC SS) is owned by DGPTL.
- As no start-up power was drawn by IB-OPGC, power flow of the lines was zero for mentioned trial run period. ERLDC has approved drawl of start-up for IB-OPGC (st-2) with effect from 27/12/17. This certificate is being issued in accordance with Regulation 6.3 (A) (5) of CERC (Indian Electricity Grid Code) Regulations, 2010 to certify successful completion of trial operation of transmission element. Usage of this certificate for any other purpose is prohibited.

Signature

Name and Designation of the
is/हस्ताक्षरकर्ता/ P. MUKHOPADHYAY
कार्यपालक निदेशक / Executive Director
Power System Operation Corporation Ltd.
ERLDC, - Kolkata - 700 033

Place: Kolkata

Copy to:

- Head-Asset Management, DGPTL, D&M Office, A-634, Tulip, New Meenal residency, Ayodhya Bypass Road, Bhopal, M.P.-462023
- MS, ERPC, 14, Golf Club Road, Tollygunge, Kolkata-700033
- ED, NLDC, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016

पंजीकृत एवं केन्द्रीय कार्यालय : प्रथम तल, बी-9, कुतुब इंस्टिट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली - 110016

Registered & Corporate Office : 1st Floor, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110016

Website - www.posoco.in, E-mail : posococo@posoco.in

765 kV D/C Transmission Line



Bhilai Gantry to Loc. 1/0 connection – stringing works are in progress





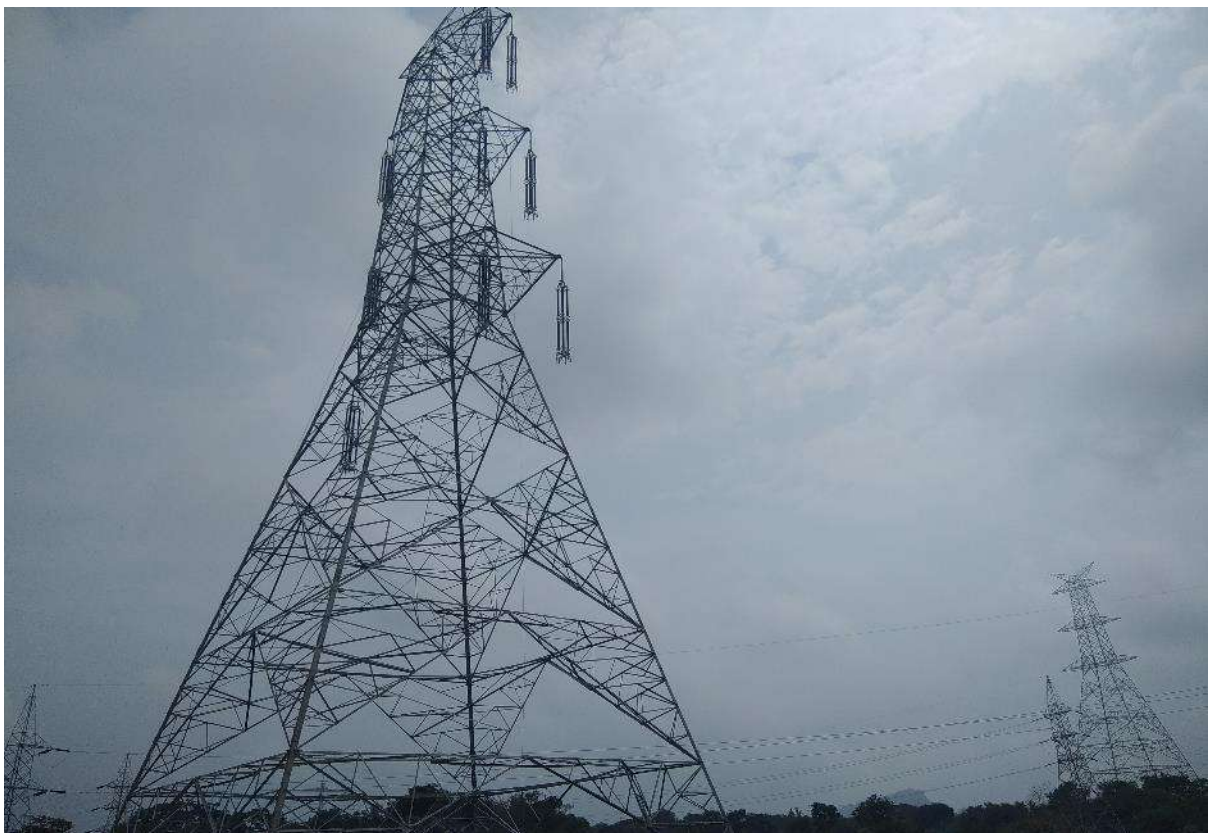
Stretch 1/0 to 4/0 – Stringing complete



Section 2/3 & 3/0 – river crossing stringing complete



Location 104A/0 – Tower erection in progress



Section 105/0 & 106/0 – Stringing works to start



Location 108/3 – Tower erection in progress



108/4 to 108A/0 – Tower erection complete



Location 115/0 – Stringing works are in progress



Stretch 115/6 to 116A/0 – Stringing in progress



Location 128/5 – tower materials are dumped for tower erection in progress in the hills indicated below



400 kV D/C Transmission Line



Sundergarh PGCIL substation – Gantry connection complete



Location 32/0 – Road crossing, Erection and stringing complete



Stretch 32/0 to 33/0 – Stringing complete



Stretch 30/0(DD+18) to 35/0 (DC+0) – stringing complete

At the helm of the Energy Transition, Tractebel provides a full range of engineering and advisory services throughout the life cycle of its clients' projects, including design and project management. As one of the world's leading engineering and advisory companies and with more than 150 years of experience, it's our mission to actively shape the world of tomorrow. With about 5,000 experts and presence in more than 70 countries, we are able to offer our customers multidisciplinary solutions in energy, water and urban.

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ANNEXURE C

AIFMD DISCLOSURES

This document contains either the information required by Article 23(1) if the AIFMD to be made available to Bidders before they invest in IndiGrid or cross-refers to the relevant document that is available and which contains such information. This document refers to, and such be read in conjunction with this Preliminary Placement Document. Terms used but not defined herein shall have the same meanings given to them in this Preliminary Placement Document.

AIFM Directive article	Information to be disclosed	Document and section where disclosed
23(1)(a)	Investment strategy and objectives of the AIF	See <i>“Our Business- Strengths and Strategies”</i> .
23(1)(a)	Information on where master AIF is established and where the underlying funds are established	N/A; IndiGrid is neither a “feeder fund” nor a “fund of funds”.
23(1)(a)	Types of assets in which AIF may invest and any applicable investment restrictions	See <i>“Overview of IndiGrid – Investment Objectives”</i> .
23(1)(a)	The techniques the AIF, or the AIFM on its behalf, may employ and all associated risks	See <i>“Risk Factors”</i> . See <i>“Parties to IndiGrid – the Investment Manager”</i> .
23(1)(a)	Circumstances in which the AIF may use leverage, the types and sources of leverage permitted and the associated risks, restrictions on using leverage and any collateral and asset reuse arrangements	See <i>“Financial Indebtedness and Deferred Payments”</i> . See <i>“Risk Factors”</i>
23(1)(a)	Maximum level of leverage which the AIFM is entitled to employ on behalf of the AIF	See <i>“Financial Indebtedness and Deferred Payments”</i> . The AIFM is entitled to employ a maximum leverage of 49% under the InvIT Regulations
23(1)(b)	Procedures by which the AIF may change its investment strategy or policy, or both	See <i>“Parties to IndiGrid – the Investment Manager”</i> and <i>“Corporate Governance”</i>
23(1)(c)	Description of the main legal implications of the contractual relationship entered into for the purpose of investment including information on: jurisdiction; applicable law; and the existence or not of any legal instruments providing for the recognition and enforcement of judgments in the territory where the AIF is established.	An investor becomes a Unitholder by subscribing for or acquiring Units in IndiGrid and consequently becomes bound by the Trust Deed in such investor’s capacity as a Unitholder. The Trust Deed is governed by the laws of India.
23(1)(d)	Identity of the AIFM and description of its duties	The Investment Manager is the AIFM of IndiGrid. See <i>“Parties to IndiGrid – the Investment Manager”</i>
23(1)(d)	Identity of the AIF’s depository and description of its duties and the investors’ rights	As a non-EEA AIF, IndiGrid is not required to have a depository unless Bidders from certain EEA Member States acquire Units in IndiGrid pursuant to the national private placement regimes in such EEA Member States. The Investment Manager reserves the right to appoint a depository if necessary. The duties of the depository will be owed contractually to IndiGrid, the Investment Manager and accordingly the Unitholders in IndiGrid will have no direct rights against the depository.

AIFM Directive article	Information to be disclosed	Document and section where disclosed
23(1)(d)	Identity of the AIF's auditor and description of its duties and the Bidders' rights	As at the date of Preliminary Placement Document, S R B C & Co LLP will serve as the auditor to IndiGrid. The role of the auditor will be to undertake an annual audit of IndiGrid in accordance with Indian GAAS. The duties of the auditor will be owed contractually to IndiGrid and/or the Investment Manager and accordingly the Bidders in IndiGrid will have no direct rights against the auditor. See "General Information".
23(1)(d)	Identity of AIF's other service providers and description of their duties and investors' rights	See "Parties to IndiGrid"
23(1)(e)	Description of how the AIFM is protected against potential professional liability risks	See "Parties to IndiGrid – the Investment Manager"
23(1)(f)	Description of any delegated management functions by the AIFM, identity of the delegate and description of related conflicts of interest	See "Parties to IndiGrid – the Investment Manager"
23(1)(g)	Description of the AIF's valuation procedure and of the pricing methodology for valuing assets, including the methods used in valuing hard-to-value assets in accordance with Article 19	IndiGrid has appointed Haribhakti & Co. LLP as independent valuer - see "Annexure A – Valuation Report".
23(1)(h)	Description of the AIF's liquidity risk management, including redemption rights of investors	Unitholders may only deal in their Units through trading on BSE or BSE. Unitholders will not have the right to redeem Units or require the redemption of Units by the Investment Manager.
23(1)(i)	Description of all fees, charges and expenses and of the maximum amounts thereof which are directly or indirectly borne by investors	See "Parties to IndiGrid – the Investment Manager"
23(1)(j)	Description of how the AIFM ensures a fair treatment of investors and a description of any preferential treatment or the right to obtain preferential treatment obtained by any investors	The principles of treating Unitholders fairly include, but are not limited to acting in the best interest of IndiGrid and the Unitholders; managing IndiGrid with regard to its objectives, investment policy and its risk profile; ensuring that fair, correct and transparent valuation models are used; preventing undue costs being charged to IndiGrid and Unitholders; taking all reasonable steps to avoid conflicts of interests and, when they cannot be avoided, identifying, managing, monitoring and, where applicable, disclosing those conflicts of interest to prevent them from adversely affecting the interests of Unitholders; and recognizing and dealing with complaints fairly.
23(1)(k)	Latest annual report	Not applicable (at this date, no annual report has been issued in respect of IndiGrid).
23(1)(l)	Procedure and conditions for this issue and sale of Interests	See "Distribution".
23(1)(m)	Latest net asset value of the AIF	See "Annexure A – Valuation Report"
23(1)(n)	Historical performance of the AIF, where available	See "Special Purpose Combined Financial

AIFM Directive article	Information to be disclosed	Document and section where disclosed
		<i>Statements</i>
23(1)(o)	Identity of the prime broker and a description of any material arrangements of the AIF with its prime brokers and the way the conflicts of interest in relation thereto are managed and information about any transfer of liability to the prime broker that may exist	IndiGrid does not have a prime broker.
23(1)(p)	Description of how any changes to liquidity or leverage provisions of the AIF will be disclosed to Bidders	The information required pursuant to Articles 23(4) and 23(5) will be set out in annual reports and notices issued by IndiGrid and notifications issued by the stock exchanges in India and SEBI.
23(2)	Any arrangement made by the depositary to contractually discharge itself of liability and any changes with respect to depositary liability	As a non-EEA AIF, IndiGrid is not required to have a depositary unless Bidders from certain EEA member states acquire interests in IndiGrid pursuant to the national private placement regimes in such Member States. The Investment Manager reserves the right to appoint a depositary if necessary. The duties of the depositary will be owed contractually to IndiGrid and/or the Investment Manager and accordingly the Bidders in IndiGrid will have no direct rights against the depositary.