CONTENTS

HEDGE POLICYDOCUMENT

I. Basic Concepts in Hedging

What is Hedging?

Hedging means taking a position in the futures market that is opposite to a position in the physical market with the objective of reducing or limiting risks associated with price changes. Similarly, any position in the futures market against the export or import commitments with a view to reduce / limit the price risk would be considered as hedging.

Futures contracts have been used as financial offsets to cash market risk for more than a century. Hedgers are interested in transferring risk associated with the physical asset. They use commodity futures to reduce or limit the price risk of the physical asset. Hedging is an insurance used to avoid or reduceprice risks.

Commodity futures markets provide insurance opportunities to commercials, merchants, importers, exporters, producers and processors, against the risk of price fluctuation. In the case of a trader, an adverse price change brought about by either supply or demand change, affects the total value of his commitments. Larger the value of his inventory, larger the risk to which he is exposed. Hedging allows a market participant to lock in prices and margins in advance and reduce the potential for unanticipated loss or competitive disadvantage. A hedge involves establishing a position in the futures market that is equal and opposite of a position in the physical market. The principle behind establishing equal and opposite positions in the cash and futures markets is that a loss in one market should be offset by a gain in the other market. Hedging works because cash prices and futures prices tend to move in tandem, converging as the futures contract reaches expiration.

The degree of effectiveness of a hedge is determined by the percentage of the actual gain or loss incurred in a futures transaction. Though most hedges reduce risks related to price variations, they do not eliminate them altogether.

Example 1: If an electric cable manufacturer has fixed price commitment for purchase of copper as raw material, which would be utilized to manufacture electric cables made of copper, there is a risk of fall in price of copper and therefore eventually, the risk of fall in price of the copper made electric cables. The manufacturer would like to reduce his risk by hedging his exposure in Copper on the futures market.

Example 2: An importer of Crude Palm Oil would like to mitigate his import risk of price changes and exchange rate fluctuations by taking a position in futures market

In the above cases, the profit / loss incurred on account of price movement in the underlying market is offset by the loss /profit in the futures market thereby reducing / mitigating the adverse price movements.

Selling hedge or Short hedge

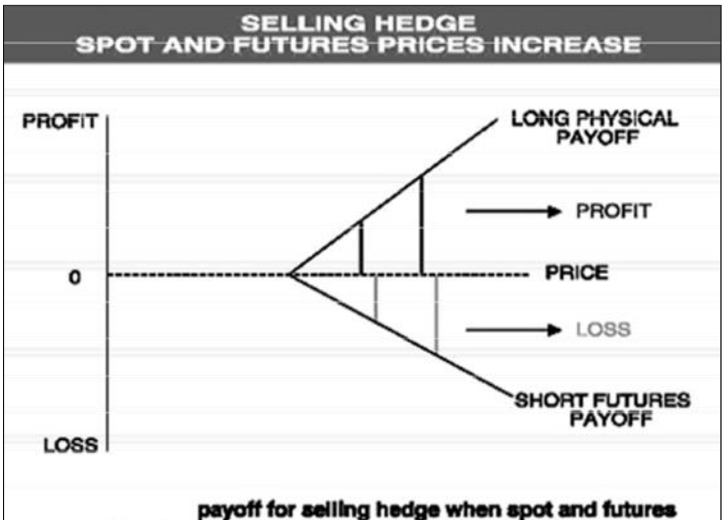
Selling hedge is also called Short hedge. Selling hedge means selling a futures contract to hedge a cash position. Selling hedge strategy is used by manufacturers, processors and others. who have exposure in the physical market.

Uses of selling hedge strategy.

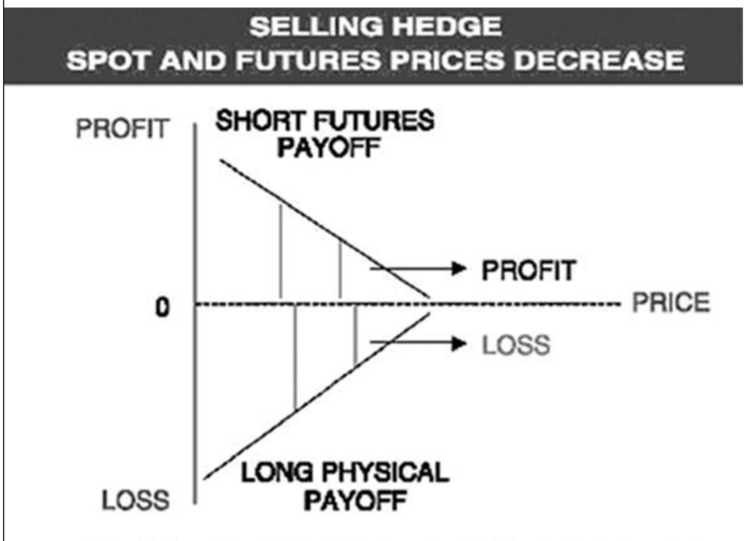
- To protect the price of finished products.
- To protect inventory not covered by forward sales.

Short hedgers are merchants and processors who acquire inventories of the commodity in the spot market and who simultaneously sell an equivalent amount or less in the futures market. The hedgers in this case are said to be long in their spot transactions and short in the futures transactions.

For example: A tea masala manufacturer requires cardamom and other spices for the manufacture of end product. He may either have an unsold inventory of cardamom, or he may have bought it for later delivery. Since the manufacturer owns the commodity, he would suffer losses if prices drop. By hedging, the manufacturer can optimize his inventory levels while managing his production levels. To hedge, the manufacturer would have to sell the futures contracts. Now if prices drop, the cash market loss will be offset by a gain in the futures contract. When the manufacturer sells his inventory at the lower cash market price, he will simultaneously lift his hedge by buying back the futures contracts at the lower price. The loss in the cash market will be compensated by gain in futures' contract.



payoff for selling hedge when spot and futures prices increase



Payoff for selling hedge when spot and future prices decrease

Hypothetical example:

In April 2018, Mr. Ramesh, a Mumbai based gold Jeweller buys 2 Kg of gold in the spot market at a price of Rs. 30800 per 10 gm as raw material to make Jewellery from it. Mr. Ramesh wants to protect the reduction in the price of gold till the Jewellery is ready for sale in May 2018. For the above purpose Mr. Ramesh sells 2 contracts (1 kg. each) of Gold June futures at the price of Rs. 30900 per 10 gm

In May 2018, Mr. Ramesh sells 2 Kg of Jewellery at the reduced spot price of Rs. 30700 per 10 gm and squares off his Gold June futures open short position at Rs. 30800 per 10 gm. The above transactions have resulted in a profit of Rs.100 per 10 gm in Gold June futures contract and a loss of Rs.100 per 10 gm in the spot transaction, thereby protecting the price of the finished material i.e Jewellery at Rs. 30800 per 10 gm.

In the above example, we have assumed basis to remain unchanged

Basis is the difference between the spot price and the relevant futures price of Gold

Selling hedge with basis risk:

When future price increases more than that of the spot price due to widening of basis, the hedger incurs a larger loss on short futures position and a smaller profit on the corresponding cash position. But when the spot price increases more than that of the futures price due to narrowing of basis, the hedger incurs a smaller loss on the futures position and a larger profit on the corresponding cash position. In order to ensure that an effective hedge is made, historical data should be used to arrive at an optimal hedge ratio.

Hedge ratio

Hedge ratio is the ratio of the number of futures contracts to be purchased or sold to the quantity of the cash asset that is required to be hedged.

ΔCP	Change in cash price
ΔFP	Change in futures price
σΔCP	Standard deviation of ΔCP
σΔFP	Standard deviation of ΔFP
P	Coefficient of correlation between ΔCP & ΔFP
HR	Hedge ratio

Hedge Ratio (HR) that minimizes the variance is
$HR=\rho*(\sigma\Delta CP/\sigma\Delta FP)$

Hypothetical Example

On 5th March 2018, Mr. Vinod, a Mumbai based gold Jeweller buys 8 Kg of gold in the cash market as a raw material to make Jewellery from it. Mr. Vinod wants to protect himself from a decline in the prices of gold till the Jewellery is ready for sale in 45 days. He decides to hedge by selling futures contract of gold. The standard deviations of the change in the cash price of gold and change in futures price of gold over the last 45 day period is 0.88 and 0.64 respectively. The coefficient of correlation between the change in cash price and the futures price of gold for 45 days is 0.83. Standardised futures contract size of gold is 1 kg.

The optimal hedge ratio is 0.83*0.88/0.64 = 1.14

Mr. Vinod should sell 1.14*8/1=9.12 kgs or sell 9 (rounded off) gold futures contracts to hedge the physical exposure of 8 kgs. of gold.

A hedge limit can also be taken if there is an exposure in an underlying whose price movement is co-related with similar contract(s) traded in derivatives market.

eg Underlying exposure is in RBD Palm Oil and the historical trend of price movement of RBD Palm Oil and Crude Palm Oil are co-related, then hedge limits can be taken in Crude Palm Oil contracts.

Similarly, if the underlying is same, the hedger can participate in any of the contract variants available on the Exchange platform.

e.g. GOLD,GOLDMINI, GOLDPETAL, GOLDGUINEA. Other examples of this could be SILVER and other mini contracts in SILVER.

Rolling over the Hedge Positions

If the time period required for a hedge position is later than the expiration date of the current futures contracts, the hedger can roll over the hedge position. Rolling over the hedge position means closing out the existing position in one futures contract and simultaneously taking a new position in a futures contract with a later expiry date. If a person wants to reduce or limit the risk due to fall in prices of the finished material to be sold after 6 months and if futures contracts up to 2 months are liquid, then he can roll over the short hedge position three times till the date when the actual physical sale takes place. Every time the hedge position is rolled over, there is a possibility of basis risk but at the same time it limits or reduces the price risk.

Hypothetical Example

In January 2018 Mr. Malhotra, a Mumbai based gold Jeweller buys 10 Kg of Gold in the spot market at a price of Rs. 30400 per 10 gm as raw material to make Jewellery from it. Mr. Malhotra wants to protect himself from the reduction in the price of raw gold till the Jewellery is ready for sale in August 2018. In January 2018, Mr. Malhotra also sells 10 June Gold futures contracts (each of 1 Kg) at Rs. 30300 per 10 gm, which he closes out in February just before the expiration date at Rs. 30100 per 10 gm for a profit of Rs. 200 per 10 gm. In February 2018, Mr. Malhotra sells 10 April gold futures contracts at Rs. 30100 per 10 gm, which he closes out in June just before expiration date at Rs. 30500 per 10 gm for a loss of Rs.400 per 10 gm. In June2018 Mr. Malhotra sells 10 August gold futures contracts at Rs. 30550 per 10 gm, which he closes out in August before the expiration date at Rs. 30050 per 10 gm for a profit of Rs.500 per 10 gm. In the above futures transaction Mr. Malhotra makes a profit of Rs.300 per 10 gm whereas Mr. Malhotra sells Jewellery for a spot price of Rs. 30000 per 10 gm in August 2018 thus incurring a loss of Rs. 400 per 10 gm. So Mr. Malhotra managed to reduce the net loss to Rs.100 per 10 gm by rolling over the hedge position for 7 months.

Advantages & Limitations of Hedging

Advantages:

1. Hedging reduces or limits the price risk associated with the physical commodity.
2. Hedging can be used to protect the price risk of a commodity for long periods by rolling over contracts.
3. Hedging makes business planning more flexible without interfering with routine business operations.
4. Hedging can facilitate low cost financing

Limitations:

1. Hedging cannot eliminate the price risk associated with the physical commodity in totality due to the standardized nature of futures contract.
2. Because of basis risk, hedging may not provide full protection against adverse price changes.
3. Hedging involves transaction costs, though costs are quite minimal compared to benefits.
4. Hedging may require closing out a futures position before it becomes near month contract.

II. <u>Policy and Guidelines</u>

A. Policy

a) The hedge limit to be granted by the Exchange to the bona fide hedgers shall be in addition to the normal position limit allowed to it. Such hedge limit is non-transferrable and shall be utilized only by the Hedger to whom the limit has been granted and not by anyone else.

b) This hedge limit granted for a commodity derivative shall not be available for the near month contracts of the said commodity from the date of applicability of near month limit.

c) Hedge limits for a commodity shall be determined on a case to case basis, depending on applicant's hedging requirement in the underlying physical market based upon his/its Export or import commitments/ Stocks held/ Past track record of Production or Purchase or Sales/ Processing capacity and other factors as the Exchange may deem appropriate.

d) Exchange shall grant hedge limits to the applicant on verification of documentary evidence of the underlying exposure and ensuring that the hedge limit granted is genuine and does not have the potential to disturb the equilibrium of the market of that particular derivative contracts.

e) The hedge limit may also be made available in respect of the short open position acquired by an entity for the purpose of hedging against the stocks of commodities owned by it and,

   i. pledged with the Scheduled Commercial Banks/Co-operative Banks or
   ii. lying in any Government Entity's warehouse/ WDRA Approved warehouses or
   iii. lying in any other premises (warehouse, factory etc.), provided the premises is either owned by the hedger or taken on lease by the hedger in its name.

f) With regard to point (e) above, Exchange shall ascertain that such premises are well equipped with quality control safeguards for storage of the relevant commodity. In order to ascertain this, Exchange shall obtain a certification from the management of the Company / firm to this extent. Exchange may also require a certificate from a third party assayer / warehouse service provider / independent auditor. Further, relevant Bank Certificate/Warehouse Receipt, as the case may be, provided by the Hedger shall be subject to verification regarding ownership of the stocks etc., by the Exchange.

g) At any point of time during the hedge period, hedging positions taken in derivatives contracts by hedger, across multiple Exchanges/ Contracts, shall not exceed his/its actual/anticipated exposure in the physical market, even if there is a usable hedge limit available as per allocation made by the Exchanges to the hedger.

h) The margins for any commodity prescribed by the Exchange for the other market participants shall also be applicable to the hedgers.

i) If under any circumstances a hedger is found availing hedge limit in contrary to the guideline framed by the SEBI/Exchanges or submits false document or fails to inform the Exchange in a timely manner about reduction of underlying exposure based upon which it has been allocated hedge limit by Exchange, it shall be liable for expulsion from membership/prohibition from trading as the case may be. Such action shall be without prejudice to other disciplinary actions including penalties prescribed by the Exchange.

j) A Hedger having availed of benefit of hedge limits, shall preserve relevant records for a period of minimum three years for inspection by SEBI/Exchange.

k) The hedge limit approved by the Exchange shall be valid for a period as mentioned in the approval letter and such hedge limit shall stand cancelled automatically upon expiry of such period without any notice. The Exchange shall review periodically the maximum quantum of hedge limits to be sanctioned to each applicant subject to fulfillment of prescribed conditions. Currently the hedge limit to be sanctioned shall be not more than the applicable client level position limits. For e.g. If the client level positon limits in Cardamom is 160 lots then the additional hedge limit shall not exceed 160 lots.

l) The Exchange shall be disclosing on its website the hedge position allocated to various hedgers, indicating the period for which approval is valid, in an anonymous manner. The disclosure shall be made in the following format:

Sr.	*Name of the Commodity*	*Hedger*	*Long Hedge Limits*	*Short Hedge Limits*	*Date of making application*	*Application Approval Date*	*Approval Start Date*	*Date till Approval is valid*
1.		Hedger 1						
2.		Hedger 2						

B. Guidelines

1. The request for Hedge limit shall be considered only on receipt of all the documents, complete in all respects. The Exchange reserves the right to reject any application or to stipulate any additional conditions or ask for additional documentation before and / or after sanctioning hedge limit.

2. Members shall:

    i. Not put through any trade by a Hedger violating the limit or any of the terms or conditions on which hedge limits are sanctioned.
    ii. Monitor the Hedger's position continuously to ensure that it does not exceed the sanctioned limit.
    iii. Ensure that the Hedger has not kept open the additional hedge limit (granted) in the near month contract.
    iv. Immediately inform the Exchange of any violation of limit or terms and conditions by a Hedger.

3. An Exporter/ Importer availing hedging limit on open position on account of his unfulfilled export/ import commitment should in the event of his not being able to ship the goods during the contract period, either for reason of non-availability of freight or for any other reason, forthwith liquidate his equivalent open position exceeding the limit prescribed specifying reasons to the Exchange. Failure to do so would render him ineligible for availing hedging limit on open position in respect of his export/ import contracts thereafter.

4. If any member / non-member (client hedger)) is found availing hedging limit in any manner without having stock of physical goods / export commitment or submits false document, availing hedging limit on the same stock at two different Exchanges, he shall be liable to expulsion/ debarment and other severe disciplinary measures and penalties. Therefore, the member, while seeking limit on behalf of their clients, shall exercise due diligence on their part during the period of hedge.

5. Hedge limits would be valid till underlying exposure in physical market such as stocks held, Domestic/Import/Export commitments, anticipated sales/purchases are open. Positions established in the hedge code should be liquidated in an orderly manner in accordance with sound commercial practices. The initiation and unwinding of hedge positions should correspond to the underlying position in the physical markets.

6. As the hedge positions are typically larger than the normal client level limits, the member may, in addition to Exchange prescribed margins, also collect additional margins based on the assessment of the risk profile of the client.

7. The approved hedge limit will be valid from the date of sanction for a period as specified in the sanction letter. In case a member / non-member (hedger) intends to avail the additional open position limits beyond the specified date, he will have to approach the Exchange stating the reasons thereof, for extension, at least a month before expiry of the hedge limit sanctioned period, failing which the hedge limit will stand cancelled upon expiry. In such a case member concerned shall square off the additional limit acquired on or before the date of expiry. The Exchange may at its discretion, however, direct the parties concerned to liquidate the approved excess positions before expiry without assigning reasons thereto. All the members and their clients are advised to follow the guidelines while availing additional open position limits.

8. The hedger will be sanctioned hedge limits either for long positions or short positions but not for both in same commodity. Hence the applicant has to state clearly if the application is for long or short position. A fresh application will be needed if the Hedger needs an opposite position in lieu of the existing sanctioned position. Once the hedge limit is sanctioned for opposite position the erstwhile limit already sanctioned stands cancelled.

9. Exchange reserves the right to amend / modify the terms and conditions for sanctioning additional open position at any time without any notice and the member / non-member client (hedger) shall accordingly be bound by them.

III. Application Process and Documentation

a. Documents to be submitted for sanction of Hedge Limits

1. Application Form in the format prescribed in **Annexure- 1.**
2. Write up on Hedge rationale in **Annexure-2**
3. PAN copy of the prospective hedger.
4. Declaration for availing hedge limits in **Annexure-3**
5. Complete details of client seeking Hedge Limits along with copy of PAN of all Directors/Partners/Proprietor/Trustee/Karta in **Annexure-4**
6. A statement containing details of hedge positions taken in derivatives contracts by the hedger in other Exchanges/Contracts for past 6 months or actual period as the case may be in **Annexure-5**
7. In case hedge limit is based on Physical Stock, the following documents are required:
   - A statement containing details of Physical stocks owned by the applicant along with warehouse address duly certified by a practising Chartered Accountant in **Annexure-6**
   - Copies of financial statement of last 2 years certified by a Chartered Accountant
   - Proof of ownership / stock of goods held in the warehouse.
   - Bank certificate in case stock of commodities is pledged with the Scheduled Commercial banks/ Co-operative banks.
8. In case of Domestic/ Export/Import Commitments , the following documents are required:
   - A statement containing summary of Commodity details of outstanding Domestic/Import/Export commitments duly certified by a practicing Chartered Accountant in **Annexure-7**
   - Copies of financial statement of last 2 years certified by a Chartered Accountant.
   - Import/Export documents in the form of invoice or shipping/cargo bills.

9. In Case Hedge Limit is based on Past track record of Production/ Purchase/Sales/Processing capacity.
   - A statement containing details of month wise actual sales for past two years.
   - A statement showing month wise projected purchases/sales for a period of at least 12 months along with assumptions and methodology applied for such projection.
   - Copies of financial statement of last two years certified by a Chartered Accountant.
   - A statement showing details of installed capacity along with utilized capacity of all the plants during the past two years for the company.

Note: If the applicant entity is in existence for less than 2 years then the above statements will be applicable for the actual period.

b. **Monthly Documents required after sanction of hedge limits:**

* A statement containing details of Physical stocks owned by the applicant along with warehouse address duly certified by a practicing Chartered Accountant in **Annexure-6**
* A statement containing summary of Commodity wise details of outstanding Domestic/Import/Export commitments duly certified by a practicing Chartered Accountant in **Annexure -7**
- Updating of any information provided in any annexures/application.

c. **Documents at the time of renewal:**

* Application Form in the format prescribed in **Annexure- 1**
* Write up on Hedge rationale in **Annexure-2.**
- PAN copy of the prospective hedger.
* Declaration for availing hedge limits in **Annexure-3**
* A statement containing details of Physical stocks owned by the applicant along with warehouse address duly certified by a practicing Chartered Accountant in **Annexure-6**
* A statement containing summary of Commodity details of outstanding Domestic/Import/Export commitments duly certified by a practicing Chartered Accountant in **Annexure-7**

d. **Penal <u>Provisions</u>**

Violation Charges to be levied and other disciplinary actions that would be initiated by the Exchange for non-compliance of provisions governing the hedging limits.

Sr. No.	Nature of violation	Amount of Violation charges
1.	Violation of overall hedge limits as prescribed by the Exchange : To avail hedge limits even when there is no corresponding physical stock held by the hedger or when there is no import / export commitment.	Rs.50, 000/- per instance or Rs. 5,000/- per contract per day whichever is higher.
2.	Submission of forged / fake documents for availing hedge limit	Suspension of membership/debarment of client together with financial penalty as deemed appropriate by the Exchange.
3.	Procedural violation of terms and conditions of approval of Hedge limits as amended from time to time like delay in submission of statement or any other document etc.	Rs.5, 000/- per instance.
4.	Any violation not covered above	As may be decided on case to case basis by the Relevant Authority of the Exchange.

IV. ANNEXURES

Annexure-1

(On Letter Head of Member)

Application Form for sanction of Hedge Limit

Date:

To,
Trading Department
……………….
……………………
………………………

1. **Member Name and Member ID:**
2. **Name of the Client applying for Hedge Code:**
3. **Hedge Code:**
4. **PAN of Client:**
5. **Details of hedge limit required:**

Commodity/ies in which additional open position limit is sought	Hedge limit sought		Period for which the additional open position limit is required
	Long open position (QTY in units)	Short open position (QTY in units)	

6. Hedge limit sought against: (Tick appropriate option)

a) Physical stock ☐
b) Export/Import commitments ☐
c) Past track record of Production or Purchase or Sales ☐
d) Processing capacity ☐
e) Others (Please specify) ☐

7. Details of client codes allotted under the current Member and any other Member: Member ID	Member Name	Client code

For Member

Authorised Signatory

Name & contact No:

Designation:

Signature of Client seeking Hedge:

Name of Client seeking Hedge Limits:

Annexure-2

Write Up on Hedge Rationale
(On Letter Head of Member)

Date:

To,
Trading Department
....
....
....

A. Brief Business Profile of the Hedger Client:

B. Rationale for availing Hedge Limits

For Member

Authorised Signatory

Name & contact No:

Designation:

Signature of Client seeking Hedge:

Name of Client seeking Hedge Limits:

ANNEXURE -3

Declaration for Availing Hedge Limits
(On Letter Head of Member)

I / We,____, hereby declare that:

1. I/We am/are trading through___________________________________(*Name of the applying member*) using the client codes___________.

2. I/We undertake that I/we shall not violate the hedge limits as sanctioned to me/us and understand that such hedge limits will not be available in the near month contracts.

3. I/We undertake to inform the Exchange, the details of all our positions taken in different capacities and which are required to be clubbed as per guidelines of ....

4. The decision of the Exchange to permit or deny a hedge position, shall be final and binding on the Member / Hedger. The Exchange has the right to inspect the physical stock against which hedge position has been permitted with or without prior intimation and the hedge position limit is subject to review during the specified period. We undertake to extend necessary cooperation during the inspection.

5. The hedge position permitted shall be for the period till which it is approved or revoked by the Exchange, whichever is earlier.

6. No churning of positions shall be carried out.

7. Hedge limit is not sought against the offsetting positions.

8. We understand that we have to seek extension of limit from time to time and if we fail to do so, we will square off the additional open position limit granted to us. We understand that Exchange has the necessary authority to square off the said positions on expiry of the approved period.

9. I / We shall abide by the terms and conditions under which the hedge limits will be sanctioned by the Exchange. We shall also abide by the Rules, Bye-laws and Business Rules of the Exchange.

10. I/We hereby declare that the information given in this form and the Annexure/s hereto are true and correct to the best of our knowledge. We shall intimate the Exchange any material change in the facts mentioned herein above as soon as possible.

Signature of the Client Seeking Hedge Limits	Signature of the Member
Name of the Client: With Stamp	Name of the Member & Signatory With stamp
Place:	Place:
Date:	Date:

Annexure 4

Director's/Partner's Details

(To be filled by the client/member seeking hedge limits)

Name of client applying for hedge limits:
Hedge Code:

Status of Client:

Company.
Partnership Firm (incl. LLP)
HUF
Proprietorship/Individual.
Trust
Others, if any

A. Details of Partners/Directors/Karta/Trustees:

Name:
PAN:
Father's Name:
Address
City: State: Pin Code:
Contact/Mobile No:

B. Details of Firm/Companies/Trust/HUF where the Partners/ Directors / Trustees /Karta hold positions (wherever applicable):

Name of the Entity:

PAN:

Address

City: State: Pin Code:

I/We hereby confirm that the information given in this Annexure hereto are true and correct to the best of our knowledge.

Signature of the Authorised Person of Client Seeking Hedge Limits along with Stamp

Name:

Designation:

Date:

Place:

Annexure-5

Details of Hedge positions held as on Date: ______________

(On letter head of Client)

Hedge Client Name:

Hedge Code:

Indicative Format:

Commodity	Quantity held (in Units)	
	Hedge positions on other Exchanges for past 6 months or actual period.	Cross Hedging positions

I/We hereby declare that the information given in this form and the Annexure/s hereto are true and correct to the best of our knowledge.

Signature of the Authorised Person of Client Seeking Hedge Limits along with Stamp

Date:

Place:

Annexure-6

Statement of Physical stocks owned by the applicant

(To be certified by Chartered Accountant**)**

Hedge Client Name:

Hedge Code:

Commodity	**Hedge Limit (Long/Short)**	**Month End Physical Stock**	**Location of Physical stock**

Stock Position held by Client as on____________________________.

Attached:

- Proof of ownership / stock of goods held in the warehouse
- Bank certificate in case stock of commodities is pledged with the Scheduled Commercial banks/ Co-operative banks

Place:

Date:

Annexure-7

Statement of Commodity wise details of outstanding Domestic/Import/Export commitments.

(To be certified by Chartered Accountant**)**

Member Name and ID:

Hedge Client Name:

Hedge Code: Indicative

Format:

Name of Commodity	Long Physical position			Short Physical position	
	Current stock (in units and Details of Warehouse)	Import commitments (in units)	Total Long (in units)	Export commitments (in units)	Domestic Commitments

Statement of Hedge requirements

Name of the commodity	Long Position (Qty in units)	Short Position (Qty in units)

Place:

Date: