



NTPC Limited

(A Government of India Enterprise)
CORPORATE CENTRE

Press Release

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NTPC Awards India's first Green Hydrogen Microgrid Project

NTPC Limited has awarded project of 'Standalone Fuel-Cell based Micro-grid with hydrogen production using electrolyser' at NTPC Simhadri (Andhra Pradesh). This will be India's first Green Hydrogen based Energy Storage Project. It would be a precursor to large scale hydrogen energy storage projects and would be useful for studying and deploying multiple microgrids in various off-grid and strategic locations of the country.

The hydrogen would be produced using the advanced 240 kW Solid Oxide Electrolyser by taking input power from the nearby Floating Solar project. The hydrogen produced during sunshine hours would be stored at high pressure and would be electrified using a 50 kW Solid Oxide Fuel Cell. The system would work in a standalone mode from 5 PM to 7 AM.

This unique project configuration is designed in-house by NTPC. This unique project for India would open doors for decarbonising the far-off regions of the country like Ladakh, Jammu & Kashmir (J&K) etc., hitherto dependent on diesel generators. The project is in-line with the vision of the Hon'ble Prime Minister for becoming carbon neutral by 2070 and making Ladakh a carbon-neutral territory.
