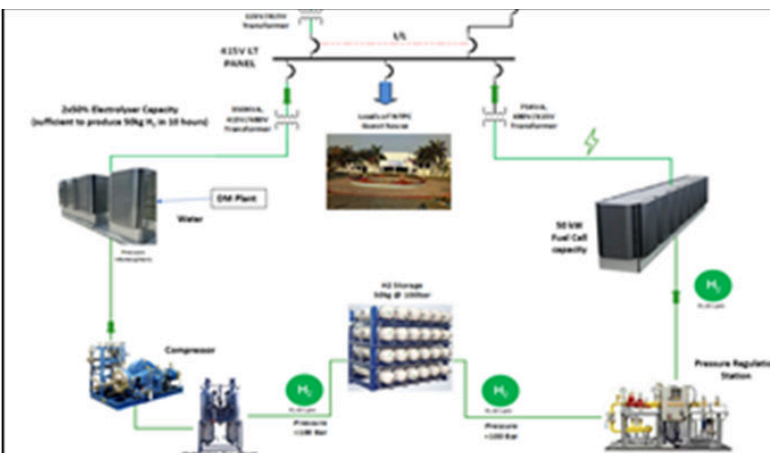


# The project will be one of world's largest Green Hydrogen Microgrid Project



New Delhi, December 15th, 2021: NTPC Ltd, India's largest integrated energy company 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 and one of world's largest. 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.

NTPC Ltd present installed capacity is 67,907.5 MW (including 13,425 MW through JVs/Subsidiaries) comprising of 47 NTPC stations (23 coal-based stations, 7 gas-based stations, 1 hydro station, 1 small hydro, 14 solar PV and 1 wind-based station) and 26 joint venture stations (9 coal based, 4 gas based, 8 hydro, 1 small hydro 2 wind and 2 solar PV).