

**Subject: Inauguration of  $\pm 320$  kV 2000 MW Pugalur-Thrissur HVDC project by Hon'ble PM**



$\pm 320$ kV 2000MW Pugalur (TN)-Thrissur (Kerala) VSC HVDC Project inaugurated by Hon'ble PM, Shri Narendra Modi.

The Hon'ble Prime Minister, Shri Narendra Modi inaugurated POWERGRID's 320 kV 2000 MW Pugalur (Tamil Nadu) - Thrissur (Kerala) HVDC project in presence of Hon'ble Union Minister of State (I/C) (Power, New & Renewable Energy) and Minister of State (Skill Development and Entrepreneurship) Shri R. K. Singh, Hon'ble Governor of Kerala, Mr. Arif Mohammad Khan, Hon'ble Chief Minister of Kerala, Shri Pinarayi Vijayan and senior officials of Ministry of Power, Govt. of India, State Govt. of Kerala and POWERGRID on 19 February 2021. The event was held over a video conference. The Pugalur-Thrissur HVDC system, costing Rs. 5070 crore, is part of the Raigarh-Pugalur-Thrissur 6000 MW HVDC system and enables the transfer of 2000 MW to Kerala through the HVDC station at Thrissur. The state-of-the-art Voltage Source Converter (VSC) technology has been brought to India for the first time by POWERGRID through this project. The VSC technology significantly reduces land requirements compared to conventional HVDC systems and is particularly suitable for Kerala, where land is scarce. It also facilitates the development of a smart grid and improves system resilience under various operating conditions. A unique feature of this project is the combination of overhead line and underground conductor for transmission of power. POWERGRID optimized the right of way requirement through innovative tower design and the use of a cable. Major HVDC equipment like interface transformers and IGBT-based power convertors, AC equipment such as Gas Insulated Sub-station, switchgear, controls, and relay panels have been supplied by factories in India, thereby giving a major boost to the Prime Minister's Make in India program.

A significant part of the design, engineering, testing, and commissioning for this first-time VSC project has been done in India, aligned to the Prime Minister's vision of Aatmanirbhar Bharat.

POWERGRID presently has 264 Sub-stations and 172,104 Ckm and 464,292 MVA of transformation capacity. With the adoption of latest technological tools and techniques, enhanced use of automation and digital solutions, POWERGRID has been able to maintain average transmission system availability >99%.