

Media Release

AESL Commissions 2500 MW Green Evacuation 400 kV System in Tamil Nadu

The transmission line will support India's decarbonization efforts

Ahmedabad, 27 October 2023: Adani Energy Solutions Ltd., the largest private sector power transmission company in India, has announced the successful commissioning of the Karur Transmission Ltd (KTL) project. The project includes the establishment of the 400/230 kV, 1000 MVA Karur Pooling Station and an associated transmission line spanning 8.51 circuit kilometers (CKM) in Tamil Nadu.

With a transformation capacity of 1,000 MVA, this project will facilitate the evacuation of power from renewable sources in the Karur/Tiruppur Wind Energy Zone. Additionally, it will strengthen the Southern Regional grid and support the integration of renewable energy sources on a large scale.

The Karur/Tiruppur Wind Energy Zone is a key wind corridor in Tamil Nadu, with significant capacities in wind energy and several under-construction wind farms. AESL was awarded this project to ensure the smooth evacuation of up to 2500 MW of green power produced in the region. This project aligns with India's decarbonization goals, supporting the country's aim to achieve 500 GW of green energy by 2030. It will provide industrial, commercial, and residential consumers with enhanced access to reliable and clean energy.

AESL secured this project through the Tariff-Based Competitive Bidding (TBCB) route in December 2021 for a period of 35 years, covering the build, own, operate, and maintain basis.

Despite numerous challenges, AESL executed this project in a fast-track mode, taking into consideration the topological challenges while minimizing ecological impact. Several innovative approaches were employed during the execution, including the use of high-boom RMC machines for concreting work, high-boom lifts and cranes for tower erections, and the implementation of advanced cybersecurity endpoint solutions through the latest SCADA system. The project also involved round-the-clock work in multiple shifts, allowing for enhanced progress. AESL's execution prowess was displayed through the erection of two 48-MT towers in under 24 hours each, significantly surpassing the usual rate of 5-6 MT/day.

Furthermore, AESL successfully completed critical tasks such as the shutdown of the 400 kV D/C Pugalur-Pugalur (HVDC) line and the erection of tower structures under the constraints of the existing transmission line. The construction phase encountered challenges related to foundations, which were overcome through the execution of stringing over coconut trees while adhering to all safety measures.

The completion of the KTL project further solidifies AESL's position as India's leading power transmission company. AESL has a portfolio of operational transmission projects and several others in various stages of construction.

