

Live-Line Reconductoring with Zero Shutdown

LOCATION
Bengaluru, India



DOUBLING POWER TRANSFER CAPACITY

Driven by our core values of 'innovation' and 'social impact', Sterlite Power recently heralded in a pioneering new technology in India - Zero Shutdown Reconductoring, to address transmission congestion challenges. This unique project was successfully completed with the reconductoring of a 66 kV transmission line connecting Bengaluru's Electronic City under 'Live-line conditions.'

The line from Naganathapura substation connecting to Malgudi in Bengaluru was uprated with no shutdown on the line during project execution. This ensured that it was business as usual for consumers with no loss of revenue for the utility. This was the first case of reconductoring in live-line conditions in India.

THE CHALLENGES

Rapid urban evolution has spurred exponential demand for power. Ageing infrastructure and lack of space to set up greenfield projects is a key constraint in expanding power transmission to meet this growing demand.

ACHIEVEMENTS

The project doubled power transfer capacity of the transmission line. Uninterrupted power was ensured during execution and changeover by using bypass technique on the towers, using 'bare-hand' and 'hot-stick' methods. The high-performance conductor installed in the lines provides better clearance from the ground and nearby buildings. We believe this revolutionary new solution can be scaled up and customised to address the needs of states in India with similar challenges.

WHAT WE DID

Developed a unique and innovative solution that enabled reconductoring without causing any disruption in power supply to the local population and industry. The transmission asset was upgraded without shut down. Sterlite Power has successfully completed India's first live-line reconductoring project in Electronic City, Bengaluru, for Karnataka Power Transmission Co. Ltd. (KPTCL).