

Project Ganga: Excellence in Project Execution and Product Innovation

This project truly tested our mettle and challenged us to push our boundaries, resulting in unique process execution and significant product innovation that will change the way transmission lines are built across long-span river crossings and hilly terrains. We specially develop a customised solution—the ACCC ULS Ganga—which which was successfully strung across one of the longest spans on a river crossing, near Lakhisarai, to restore the disrupted 400kV Purnia – Biharshariff (PB) transmission line.



THE CHALLENGES

Difficult site conditions that required multiple mobilisations, climate change and frequently changing course of the Ganga River were hampering restoration efforts of the PB line. With towers washed away in a previous instance, there were no support structures in the middle of the river. Laying pile foundation would have been expensive, difficult and time consuming. It would have also disturbed the delicate ecosystem in the river and affected livelihoods of locals who were dependent on the river for survival. To implement our long-span solution, man, machine and material had to be moved on barges and ferries. Work was undertaken on floating

platforms. Wind speeds were a critical factor and work had to be stopped frequently with winds blowing close to 30 miles per hour.

WHAT WE DID

We restored the PB transmission line that was pending for almost 2 years, utilising unique process and product innovation. The use of long-span stringing avoided the cost of drilling expensive pile foundations and saved the ecosystem in the riverbed from any major disruption. The solution developed for this project can be adapted for other long span transmission lines over river crossings and hilly terrains across the country.

Achievements

Sterlite Power's ingenuity resulted in a unique process of stringing and a solution with the development of a carbon composite core ultra-low sag conductor –'ACCC ULS Ganga'. Even the hardware accessories and tools were specially designed for this project. The new conductor addressed the main concern of keeping the sag low during stringing, while transferring the same power capacity.