APAR completes its TACSR Dog Conductor stringing for GETCO

Meeting the growing demand of conductors in Power Sector

Tomorrow’s Progress Today
APAR completed its TACSR Dog Conductor stringing for GETCO – 66 kV Transmission Line

Gujarat Energy Transmission Corporation Limited (GETCO) was set up in May 1999 and is registered under the companies Act, 1956. The Company was promoted by erstwhile Gujarat Electricity Board (GEB) as its wholly owned subsidiary in the context of liberalization and as a part of efforts towards restructuring of the Power sector.

The 66 kV line is connecting Gondal Substation to Hadamtala substation of GETCO. The Hadamtala S/S is feeding to industrial zone and infrastructure development undertaking of the State Government has been the driving force behind scores of industrial ventures since 1978. One of the prime objective of was to cater increasing power demand of industrial areas and provide reliable Power.

The Line is passing through one of the most challenging area from Right of Way (ROW) point of view.

Gondal circle office of GETCO, put up proposal to Head office for Up-rating of existing line or set up new transmission line parallel to existing line. It was around 2011-12, wherein as a country, power industry was getting matured in terms of High Performance Conductors/ New Generation Conductor. We (Apar) was executing couple of projects for supply of ACSR type conventional conductor to various transmission line of GETCO. Apar was being called by former MD-Mr. S K Negi to work our most economical, feasible and time saving solution. Apar took this as a challenge and immediately carried out walk-over survey of the said transmission line. Apar’s engineering team collected Tower spotting data from GETCO’s Head office.

However, Apar’s management took this as an challenge and completed supply and line work within the stipulated time.

The competence of Apar’s HPC conductor installation was evident from this project. This project proves the feasibility of a reconductoring projects in the most congested lines where one line can be on live condition while replacing the other circuit with the high performance conductor which will take over the maximum capability of both the circuits fitted with conventional conductor over the single circuit. The stringing of the ACCC conductors on the existing 66 kV transmission lines and working to a common set of goals has meant that Apar has a qualified talent pool, experience in network design, project management, network implementation and network maintenance.
• What we learnt?

In coming years, India will need to expand energy supplies and transmission capacity in a way that is sustainable. The scale of the challenge is enormous and requires the pursuit of all economic options to achieve success in the realm of efficient transmission of energy. Sustainable development mandates emphasis on new technologies. There are several promising technologies on the horizon that could help modernize and expand the electric delivery system including High Performance Conductors. High Performance conductors can mitigate growing congestion and ROW problems of electricity networks. While energy efficient T&D will reduce line losses, advanced conductors can reduce losses and increase capacity, in many cases without requiring expensive upgrades to the transmission structures.

• The Apar got Pioneer advantage and firsthand experience

Apar had a significant experience in implementation of projects for Government incumbents, utilities and enterprises. This first project gave enough confidence and then after Apar has never looked back, till date we have completed more than 50 Re-Conductoring projects in India.

• End-to-end project implementation

Apar ensured complete control over the value chain and delivers end-to-end project management services. Due to learnings received from this project, Apar worked on some of key areas, looking to up-coming demand of New Generation Conductor in Power Transmission, such as recruitment of experienced professionals, Technology ties ups abroad, training of project team by industry experts, sourcing latest software such as PLS-Cadd, SW rate, CCP etc.

• Solution development for newer applications

As a result today, Apar continues to enhance its portfolio taking into account the end to end solution needs evolving from client applications.