

Name of the Project:-

Construction of 110kV SC line on DC towers to construct 1X10MVA, 110/11kV sub-station at Kuppagade Village in Soraba Taluk Shivamogga District for a distance of 11.648Kms in the new corridor.

To Supply the good quality of power supply to the publics who were residing around the kuppagade village, presently Power supply is feed from 110/11kV Kotipura(Anavatti) sub-station. The length of the 11kV lines are upto 39.5Kms & are passing through dense forest area, causing a lot interruption. The % Voltage regulations for all the four feeders feeding the area are ranges from 34.33 to 54.54%. To avoid line losses and improve voltage condition and also minimize to interruption in and around Kuppagade area.110/11kV sub-station along with 110kV line is proposed to be established at Kuppagade village.

KPTCL is registered company under the company Act 1956 was incorporated on 01.08.1999 and is a company wholly owned by the Government of Karnataka, it operates under the license issued by Karnataka Electricity Regulatory Commission. KPTCL is mainly vested with function of transmission of power in the entire state of Karnataka and also construction of station and transmission lines and maintenance of 400/220/110/66kV stations.

We as a responsible organization is utilizing all available technological resources (GIS and GPS etc.) to optimize route alignment with emphasis on avoidance of forest, national parks wild life sanctuary another ecological sensitive areas even to the extent of adopting more circuitous routes and setting up of state of the art sub-stations en-route, However in few cases use of forest area becomes unavoidable due to site conditions and overall topography of the area.

Justification for Transmission line routes identified for execution:-

Alternative Three feasible routes were studied based on preliminary / walkover survey and keeping in view the length of the line , No's of angle points, power line crossing, Statutory clearance from air ports, Reserved forests, National / State Highways, River & Railway crossings, Villages, Towns, Scattered habitat, Parallelism to the existing power line etc.

Upon detailed study, the proposed route is found to be the generally feasible with minimal infringement with the existing permanent features and least inconvenience to the habitat at large. Further, the selection of the route alignment is as per transmission line practice and as per Indian Standards.

Transmission line projects are environmentally friendly and do not involve any disposal of solid effluents and hazardous substances in land, air and water. The constructional features of 110kV

Transmission line such that it is not affecting the environment as its not dividing the existing forest because of long spans between the towers. Layout of transmission line follows along the forest road /

forest block boundary thus involving minimum tree felling and also allowing free movement of birds due to high tower heights. A very small space is required for the construction of the tower foundations. The tower foundation are under the ground and small portion are elevated plinth.

110kV line between Tapping from 110/11kV sub-station to Proposed Kuppagadde sub-station land very closer & near to forest land. Hence un-avoidable circumstances 6.073276Ha land of forest to be utilized.

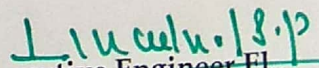
The length of the 110kV proposed line from tapping from existing thogarsi sub-station to proposed 110/11kV sub-station at kuppagade village is 11.648Kms with corridor of 22 meters width, in which 2.76058Kms of forest land including cultivation land of 2.52058Kms with least length of 0.240Kms of forest tree land to be utilized.

In this area, Government or private lands are not available to take up 110kV line with convenient approach to transportation of heavy tower, line related materials for construction of 110kV transmission line.

In future, convenient & approaching of 110kV line required to rectify the 110kV line defects / fault's to maintain good condition & fault free 110kV transmission line for a long period, also continuous 110kV line inspection to maintain un-interrupted power supply to surrounding areas.

Benefits from the Project:-

Proposed 110kV line connected to proposed Sub-station is essential for development of nation, to increase agriculture food grains (such as vegetables and agriculture production) also to develop rural industries in that surrounding areas, reduce the un-employment problem in the rural areas and to avoid young generation moving from rural areas.


Executive Engineer El.,
Major Works Division, KPTCL,
Shivamogga-577201.