

DETAIL NOTE ON PROJECT

BRIEF DETAIL OF 765kV D/C WARORA POOL - WARANGAL (NEW) TRANSMISSION LINE BEING CONSTRUCTED BY WARORA KURNOOL TRANSMISSION LIMITED (WKTL).

The government of India has identified the power sector as a key sector of focus to promote sustained industrial growth. It has embarked on an ambitious mission - "Power for all" backed by extensive reforms to make the power sector more attractive for private sector investment and participation. In this regard "Additional inter regional AC link for import into southern region i.e Warora – Warangal and Chilakaluripeta – Hyderabad – Kurnool 765kV link" consisting of establishment of transmission lines as below:

- 1) Establishment of 765/400kV substation at Warangal (New) with 2x1500 MVA transformers and 2x240 MVAR bus reactors.
- 2) **Warora Pool – Warangal (New) 765kV D/C line** with 240MVAR bus reactor at both end of each circuit.
- 3) Warangal (New) – Hyderabad 765kV D/C line with 240MVAR switchable line reactor at Warangal end of each circuit.
- 4) Warangal (New) – Warangal (existing) 400kV (quad) D/C line
- 5) Hyderabad – Kurnool 765kV D/C line with 240MVAR switchable line reactor at Kurnool end of each circuit.
- 6) Warangal (New) – Chilakaluripeta 765kV D/C line with 240MVAR switchable line reactor at both ends of each circuit.
- 7) 240MVAR Switchable line reactor at Warora pool end in each circuit of Warora pool – Rajnandgaon 765kV DC line.

The Central Government (Power Ministry) has entrusted PFC consulting Limited, with the task of selecting an Independent Private Transmission Company (IPTC) on 100% Private investment for the above scheme vide notification S.O. 418(E) dated 6th Feb, 2015. As per bidding procedure, PFC has invited bids for selection of bidders as prospective IPTC for establishment of transmission in which Essel Infraprojects Limited participated as a bidder.

Subsequently, PFC consulting limited through the process of international competitive bidding (ICB) process selected Essel Infraprojects Limited as successful bidder for implementation of the above project through its shell company i.e. Warora Kurnool Transmission Limited as IPTC on Build, Own and Operate (BOO) Basis and consequently the Letter of Intent (LOI) was being issued (Letter No. 03/ITP-20/15-16/WKTL/LOI dated 29th Feb, 2016. Ministry of power (CEA), Government of India has also accorded approval under section 68(1) of Electricity Act 2003, to implement these lines (Letter No 52/11(PFC,REC)/2015-PSP&PA-II/310-311 dated 22nd March 2016). The transmission line routes have also been notified in Government of India, Gazette (Sec 164) notification No. S.O 2172 dated 27th June 2017.



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 765KV D/C line is such that it is not affecting the environment as it's not dividing the existing forest because of long spans between the towers (400 Mtrs). 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 towers heights 70-75 mtrs. The ground clearance for lower most conductors is 15 meters. The spacing between the phase conductors is maintained as per guidelines which makes the free movement of birds as well. A very small space is required for the construction of tower foundations (25 X 25 Mtrs). The tower foundations are under the ground (3.5 Mtrs) and a small portion of 0.50X0.50 Mtrs are elevated as plinth.

The Warora Pool - Warangal (New) 765kV D/C Transmission Line starting from PGCIL Switchyard located at Warora, Maharashtra and terminating at 765/400KV Warangal(New) Switchyard of WKTL, passing through district of Maharashtra and Telangana. It will create the employment opportunity for local villagers during the construction phase (24 Months) and later on for maintenance of Transmission line, hence affecting the life of village people directly. In indirect as the project is to strengthen the power system in Maharashtra and Telangana, hence would encourage industries in the region resulting employment opportunity.

TRANSMISSION LINE DETAILS:-

765 KV D/C WARORA POOL – WARANGAL (NEW) TRANSMISSION LINE

Sr. No.	Item	Details
1	Total Length of Warora pool - Warangal (New) 765kV D/C Transmission Line	Total Line Length: 324.368Km Length of Line in Telangana:-219.958 Km
2	District details and forest division details through which line is passing in Telangana	District: Komarambheem-Asifabad, Mancherial, Peddapalli, Warangal Forest Division: ASifabad, Bellampally, Paddapalli
3	Area of the Protected forest through which line passes.	Asifabad Forest Division - 14.2842Ha Bellampally Forest Division – 13.7853 Peddapalli Forest Division – 17.0314
4	Total No. of Tower to be erected in Forest area in Telangana.	Affected towers in Forest area -16 Nos.
5	Height of Tower	70- 75 Mtrs
6	Maximum width of Right of Way for 765KV D/C Transmission Line	67 Meters (For 765kV Double Circuit)
7	Minimum Clearance allowed between conductors of transmission lines and Trees	For 765KV, 9 Meters.

