

DETAILED PROJECT REPORT AND JUSTIFICATION FOR LOCATING THE PROJECT IN FOREST LAND

PROJECT: LILO of one ckt of Narendra (Existing)- Narendra (New) 400 kV D/C quad line at Xeldem by Goa Tamnar Transmission Project Limited (GTTPL)

The project is a part of “Additional 400 kV feed to Goa and Additional system for Power Evacuation from Generation Projects Pooled at Rajgarh (Tamnar) Pool”. PFC Consulting Limited (A Wholly owned subsidiary of Power Finance Corporation Limited) on behalf of Ministry of Power (GoI) to construct the transmission projects in Goa, Karnataka & Chhattisgarh state for “Additional Feed of 400 kV to Goa State.

S.No.	Name of Project Element
A)	Additional 400 kV Feed to Goa
i.	LILO of one ckt of Narendra (Existing)- Narendra (New) 400 kV D/C quad line at Xeldem.
ii.	Xeldem-Mapusa 400 kV D/C (Quad Line)
iii.	Establishment of 2X500 MVA, 400/220 kV substation at Xeldem along with its 220 Kv interconnection with existing system.
B)	Additional System for power evacuation from generation projects pooled at Raigarh (Tamnar) pool.
i.	Dharamjaygarh pool section B- Raigarh (Tamnar) pool 765 kV D/C Line.

The project is being implemented through the Special Purpose Vehicle (SPV) named Goa-Tamnar Transmission Project Limited which shall be the complete owner and operator of the project. This project is part of National Grid Development.

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 400 kV Transmission 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 approx.). 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 45 – 50 Mtrs. The minimum ground clearance for lower most conductors is 8.84 Meters and spacing between the phase conductors is (4 Mtrs) as well. A very small space is required for the construction of tower foundations (20 X 20 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 400 kV D/C Narendra (Karnataka) – Xeldem (Goa) Transmission Line is starting from Narendra village in Dharwad District on Karnataka by tapping the existing 400 kV Narendra line of PGCIL by LILO and terminating at 400/220 kV substation at Xeldem in Goa. The line will be passing through Dharwad, Belgaum and Uttara Kannada District in Karnataka and North and South Goa District of Goa.

“As per Hon’ble Supreme Court order dated 07th April 2022 on CEC report no 6 of 2021 that the project proposal in respect of Karnataka part should also be suitably amended so as to make use of 110/220 kV line corridor which will ensure that the commitment given by Power Grid and CEA to the Karnataka Government that no further transmission line shall be laid in the area is not violated. The modification that has been proposed by the CEC would be in the interest of forest and wildlife in the ecologically fragile and biodiversity in these parts. Finally, CEC recommended that direction should be given to the Ministry of Power, Government of India, Goa State Electricity Department and GTTPL to redraw and modify the alignment of additional 400 kV line corridor between Narendra (existing) – Sangod (new) in the State of Goa and Karnataka”.

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Taking the above into consideration, GTTPL has made necessary modifications in the Forest & Wildlife proposals and submitted to the concerned forest authorities on 20.07.2022 for further processing. While scrutinizing the modified proposals, DFO Dandeli raised a query and asked to utilize the existing corridor of 110/220 kV line in its entirety within Dandeli Wildlife Sanctuary.

Query raised by the DFO, Dandeli vide EDS dated 05.09.2022 is reiterated below:

“Since the Central Empowered Committee has made the recommendation in its report No. 6 of 2021 that “the project proposal in respect of Karnataka part will require to be suitably amended so as to make use of existing 110/220 kV line corridor”, it is hereby requested to update the proposal submitted to follow the 110/220 kV alignment in its entirety within Dandeli Wildlife Sanctuary as per the direction of Hon’ble Supreme Court in its order dated 7th April 2021”.

In response to the above query, suitable justification for finalizing the proposed alignment as per CEC recommendation was submitted to the DFO Dandeli on 10.10.2022. Karnataka forest department then asked to seek clarification from the Hon’ble CEC on its recommendation for modification in the route w.r.t. Karnataka. Accordingly, Hon’ble CEC was approached through the Karnataka State Government for required clarification.

Hon’ble CEC in the meeting held on 13.04.2023 clarified that “CEC has not examined any of these proposed alignments in the State of Karnataka. In fact, examination by the CEC was limited to the State of Goa only”. Hon’ble CEC further clarified that, “a decision as to the most appropriate alignment for the proposed 400 kV transmission line in Karnataka will require to be taken by the State Govt. of Karnataka after considering the technical feasibility of drawing 400 kV line upto Narendra, the extent of forests involved and the number of trees to be cut in each of the three alignments and the impact of each of these options on the wildlife and ecology of the area”.

Finally, keeping all above into consideration, DCF Dandeli suggested a route and asked to explore the technical feasibility for finalization of the route. Accordingly, the best possible route was finalized and submitted to DCF Dandeli for review and concurrence. DCF Dandeli gave final concurrence on the route on 26.05.2023 and asked to submit the revised proposal. Based on suggestion, we had done survey on suggested route and identified the forest area for further submission the forest diversion proposal for necessary amendment in existing proposal. Area statement showing comparison of old and new routes as given below:

Description	Alternate Route 1 (As per suggested by Forest Dept. Karnataka)	Alternate Route 1 (Old Route)
Bee Line Length	76.212 Km	75.642 Km
Line Length	85.724 Km	77.64 Km
Forest Length	31.006 Km	31.887 Km
Wildlife Length	6.962 Km	6.61 Km
Total Forest & WL Length	37.968 Km	38.497 Km
Forest Area (Ha)	142.626 Ha	146.679 Ha
Wildlife & NP Area	32.026 Ha	30.412 Ha
Total Forest & WL Area	174.652 Ha	177.091 Ha
Density of Forest Area	Moderate Dense	Moderate Dense



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LEGAL FRAMEWORK

The prior approval of the Government of India under section 68 of the Electricity (Supply) Act. 2003 for the subject project has been obtained vide MoP's letter dated 15-06-2017. It is proposed to execute the transmission scheme as per the provisions contained in Indian Electricity Act. 2003 and the rules made there under and the Electricity (Supply) Act. 1910 and 1948, in so far as these are applicable.

ENVIRONMENT RISK

Transmission Line projects are environment friendly and do not involve any disposal of solid effluents and hazardous substances in land, air and water. Moreover, in forest area trees are felled only below each conductor to facilitate stringing. On completion of construction, only one strip is maintained for O & M purpose. Therefore, the loss of forest is restricted to some selected areas only. However as per the requirement of Forest (Conservation) Act. 1980, approval of Ministry of Environment & Forest, Govt. Of India for diversion of forest land shall be taken before construction of line in forest area. Compensatory Afforestation shall be done in double the degraded forest land to compensate the loss of vegetation, due to diversion of forest.



Date: 25-08-2023

Place: Dharwad

Signature :

Name in Block Letter: Nitin Agrawal

Designation : Chief Manager

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