

Justification for locating the project in the forest area:

Line No. – 1:-

The Length of the transmission Line-1 is 1.1726 Km covering a total corridor area of 3.166 ha; which includes **Revenue Forest of 1.549 ha** and non-forest land of 1.617 ha. This line does not involve with DLC & R.F./ P.F. The number of angle point (AP) is 7 and 4 numbers of tangent tower (TP) points are to be erected. This line is passing through high tension line and in undulated land area. The estimated cost is about 2.9251 Crores (Rupees Two Crores Ninety Two Lakhs & Fifty One Thousand) only.

Line No. – 2:-

The Length of this transmission Line is 0.649452 Km. The total proposed area in the corridor is 1.072 ha (due to overlapping of the diverted forest area of 0.681 ha, the proposed area reduced to 1.072 ha); which includes **Revenue Forest of 0.827 ha** and non-forest land of 0.245 ha. There is no involvement of DLC Forest, Reserved Forest/ Protected Forest. 5 numbers of angle points (AP) and 1 tangent tower are to be erected within the corridor. This line is passing through mainly in plane area. The estimated cost is 1.521131 crores (Rupees One Crore Fifty Two Lakhs and Eleven Thousand Three Hundred Ten) only. **This transmission line alignment requires minimum forest land of 0.827 ha for diversion from Tower No: 71 to 73.**

Line No. – 3:-

The Length of the transmission Line-3 is 1.414 Km and covers a corridor area of 3.818 ha. Out of the total corridor area, the **Revenue Forest land is 3.471 ha** and non-forest land 0.347 ha. The corridor does not involve with DLC Forest, R.F./ P.F. area. The number of angle points (AP) are 6 and 6 (Six) numbers of tangent towers to be erected. This line is passing through mainly in undulated land with high tension line. The estimated cost is Rs. 3.53,63,000.00 (Three crores Fifty Three Lakh & Sixty Three Thousand) only.

a. Justification for selecting Line 2:-

This Forest Diversion Proposal (FDP) is formulated to avoid the crossing of existing 132 KV power line of Odisha Power Transmission Corporation Limited (OPTCL), a Govt. of Odisha undertaking organisation over the proposed MGR railway line of M/s Odisha Power Generation Corporation Limited (OPGCL); a Govt. of Odisha undertaking organisation.

The existing 132 KV Transmission Line (Budhipadar –Jorabaga line) is required to be diverted from Loc- 71 to 73 to facilitate the transport of coal and other required material through the proposed MGR railway system of M/s OPGC Ltd. For the purpose, walk over survey was conducted by OPTCL and three alternative lines were identified. The detail description about the forest area and other techno-commercial information involved in three alternative Lines are compared in **TABLE - A**. The Transmission line can't take frequent turn because of limitation of maximum 60° turn and other technical constraints. After avoiding human settlements, hilly terrain, forest, plantation, local ponds, etc; alternate **Line - 2** is considered to be of the best alternative transmission line, since there is no scope to avoid the forest land covering the barest minimum area of **0.827 ha (less than 1.00 ha)** and

due to other techno-economic reasons. This line – 2 is also not hampering any irrigated land, private land and also requires very less amount for diversion of existing line.

Table –A :-

COMPARATIVE STATEMENT OF ALTERNATIVE TRANSMISSION LINES (LINE No: 1, 2 & 3).					
Sl. No.	Description	Line – 1	Line – 2 (Proposed)	Line -3	Remarks
1.	Transmission Line Length in Km.	1.1726	0.6495	1.414	Line – 2 is very less in length.
2.	Number of Angle Points (AP).	7	5	6	Line – 2 is with minimum AP Towers.
3.	No. of Tangent Towers.	4	1	6	Line -2 is with minimum Towers.
4.	Involvement of R.F./ P.F. (ha).	Nil	Nil	Nil	No involvement of RF/PF in the Lines.
5.	Involvement of Revenue Forest (ha).	1.549	0.827	3.471	Barest minimum Forest in Line – 2.
6.	Involvement of DLC Forest (ha).	Nil	Nil	Nil	Nil
7.	Involvement of Non- Forest (ha)	1.617	0.245	0.347	Absence of Irrigated & Private land in Line – 2.
8.	Involvement of Hilly/ Ravine area.	Passing through High tension line.	No undulated Land.	Passing through High tension line.	No undulated land in Line – 2.
9.	Estimated Cost in Crores.	2.9251	1.5211	3.5363	Less expenditure for Line – 2.
10.	Displacement of Villagers.	Nil	Nil	Nil	Nil
11.	Crop Density.	> 0.4	< 0.3	> 0.4	Less in Line – 2.
12.	Involvement of Wild Life Centaury.	Nil	Nil	Nil	Nil
13.	Involvement of National Monuments.	Nil	Nil	Nil	Nil
	TOTAL AREA IN HA.	3.166	1.072	3.818	


 Deputy General Manager (El.)
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