

Justification for locating the project in the forest area:

Line No. – 1:-

The Length of the transmission Line-1 is 2.9251 Km covering a total corridor area of 3.166 ha; which includes **Revenue Forest of 1.549ha** and non-forest land of 1.617 ha. This line does not involve with R.F./ P.F. The number of angle points (AP) are 5 and 4 numbers of tower (TP) points are to be erected. This line is passing through high tension line and in undulated land. The estimated cost is about 2.9251 Crores (Rupees Two Crores Ninety Two Lakhs & Fifty One Thousand) only.

Line No. – 2:-

The Length of the transmission Line-2 is 0.6495Km. The total corridor area is 0.728 ha; which includes **Revenue Forest of 0.687 ha** and non-forest land of 0.041 ha. There is no involvement of Reserved Forest/ Protected Forest. The number of angle points (AP) is 4 and no tangent towers are to be erected. This line is passing through mainly in plane area. The estimated cost is 1.5211 crores (Rupees One Crore Fifty Two Lakhs and Eleven Thousand) only. **This transmission line alignment requires minimum forest land for diversion.**

Line No. – 3:-

The Length of the transmission Line-3 is 1.510Km. 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 R.F./ P.F. area. The number of angle points (AP) are 6 and 5 (Five) numbers of tower to be erected. This line is passing through mainly in undulated land with high tension line. The estimated cost is 3.5363 crores (Three crores Fifty Three Lakh & Sixty Three Thousand) only.

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; a Govt. of Odisha undertaking organisation.

This existing Transmission Line (Budhipadar –Jorabaga line) is required to be diverted from Loc- 70 to 74 to facilitate transport of coal through the proposed MGR railway line 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 No. - 2** is considered as the best alternative transmission line, since there is no scope to avoid the forest land covering the barest minimum area of **0.687 ha (less than 1.00 ha)** and due to other techno-economic reasons. This line – 2 is also not hampering any irrigated land and also requires fewer amounts for diversion of line.

TABLE – A.

COMPARATIVE STATEMENT OF ALTERNATIVE TRANSMISSION LINES.					
Sl. No.	Description	Line -1	Line -2	Line -3	Remarks
1.	Transmission Line Length in Km.	1.249	0.6495	1.510	Line – 2 is less in length.
2.	Number of Angle Points (AP).	5	4	6	Line – 2 is with minimum APs.
3.	No. of Tangent Towers.	4	0	5	Line -2 is with minimum Towers.
4.	Involvement of R.F./ P.F. (ha).	Nil	Nil	Nil	No involvement of RF/PF in Line-2 & 3.
5.	Involvement of Revenue Forest (ha).	1.549	0.687	3.471	Barest minimum Forest in Line – 2.
6.	Involvement of DLC Forest (ha).	----	----	----	Nil
7.	Involvement of Non- Forest (ha)	1.617	0.041	0.347	Absence of Irrigated 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	0.728	3.818	


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