

## **765 KV DC HEXA Khandwa - Dhule Transmission Line - Maharashtra**

### **Justification for Locating the Project in Forest Land**

Three alternative route corridors were identified largely by maximizing linear sighting opportunities, such as following existing roadways and power line corridors, negotiation with river, railway, road, electric power and telephone line crossing and least crossing of notified/ reserved forest areas. All efforts have been made to provide minimum numbers of angle points and utmost care have been fixed of on the ground with possible angle of diversion. Rivers are mainly crossed with right angle and a minimum span. Crossings are located on high bank and are out of the maximum flood level. Similarly, power line crossing have been fixed as close as possible to the right angle but not less than the 60 degree crossing.

The line passes through the state of Madhya Pradesh and Maharashtra. The line passes through Khargone & Barwani Districts of Madhya Pradesh and Dhule District of Maharashtra. Every effort has been made to avoid forestry but it not possible to completely avoid the forest. The total Bee line length in Dhule District of Maharashtra is 4.091 Km. The line length of alternative-1(Proposed) is 6.626 Km, Alternative -2 is 6.955 Km and Alternative -3 is 7.170 Km. The length of forest land in Alternative – 1 is 3.204 Km, Alternative – 2 is 3.231 Km and in alternative -3 is 3.374 Km. Taking 67 m as right of way for 765 KV Transmission line, it is evident that Alternative –1 involves the minimum forest land and also having minimum damage of trees.

The alignment with minimum crossing of the forest has been selected as the proposed alignment. The route having minimum length has been selected as the final proposed alternative alignment. After detailed analysis, it is observed that the alternative -1 has the least route length and has minimum crossing in terms of rail, road and existing power lines. Alternative -1 also is the best in terms of approachability for construction as well as maintenance. Keeping the above points in consideration, we propose alternative - 1 to be taken as the final proposed route alignment.

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 765 kV 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 (45 – 50 Mtrs). The height of lower most conductor from the top of the tree is more than 9.0 Meters. A very small space is required for the construction of tower foundations (15 X 15 Mtrs). The tower foundations are under the ground (3.5 Mtrs) and a small portion of 0.50X0.50 meters are

elevated as plinth. The comparative statement of alternate route considering all necessary parameters are given as follows: -

**KHARGONE TRANSMISSION LIMITED**  
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**Comparative Statement for 3 Alternative Routes**

<b>Sl.no</b>	<b>Description</b>	<b>Alt-I (Proposed)</b>	<b>Alt-II</b>	<b>Alt-III</b>
1	Bee Line Length	4.091 Kms.	4.091 Kms.	4.091 Kms.
2	Line Length	6.626 Kms.	6.955 Kms.	7.170 Kms.
3	Angle Points	8 Nos.	13 Nos.	13 Nos.
4	Forest Length	3.204 Km.	3.231 Km.	3.374 Km.
5	Forest Area (Ha.)	21.466 Ha.	21.647 Ha.	22.605 Ha.
6	Defense Area (Military Area)	NIL	NIL	NIL
7	Wild Life Sanctuaries / National Parks	NIL	NIL	NIL
8	Communication Lines	NIL	NIL	NIL
9	Tree density	Low	medium	medium
10	Places of historical / cultural / religious / tourist importance	NIL	NIL	NIL
11	Social Issues	NIL	NIL	NIL

Yours Sincerely,  
**For Khargone Transmission Limited**



**Shrishail Shirur**  
**Project Head**