

Annexure-XXIV

Cost benefit analysis in respect of the proposal for diversion of 23.983 ha. for construction of 2 x 20 MVA, 220/33 KV Grid Substation at Dasapalla by way of drawing 220 KV LILO LINE from the EXISTING 220KV DC line from Bhanjanagar-Meramundali with approximate length 29.774 KM. There is also proposal to install 2 nos. of 20 MVA, 220/33 transformers at Dasapalla. of Odisha Power Transmission Corporation Ltd. (OPTCL),

Total Revenue forest land of the project comprises of Choota Jungle, Jungle, Gramya Gungle, Jungle-1 & Jungle-2 as per revenue records.

The adjoining forest blocks such as Makaraprasad RF, Matia RF, Central RF and Chhadesha RF of Nayagarh Division occur on both north and southern side of the project area.

As per classification under forest types, these above forest blocks fall under Tropical Moist mixed Deciduous type (3B/C2) i.e. Eco class-I. Therefore, the above revenue forests shall have to be categorised as Eco class-I due to its close proximity to the above forest blocks. Although the revenue forests occurring along the ROW are open at some places, it is also dense nearing to the forest blocks. Therefore, this forests have been categorised as dense forests under Eco class-I and according to the MoEF letter F.No. 5-3/2007 FC dt. 5.2.2009 NPV (Net Present Value) shall be Rs. 9,39,000/- per ha. Hence total NPV shall be 23.983 ha. x Rs. 9,39,000/- = **Rs. 2,25,20,037/-**.

Table B – Estimation of cost of forest diversion

Sl. No.	Parameters	Rate in lakhs	Cost in lakhs
1	Eco system services losses due to proposed forest diversion	9.39 lakhs x 23.983 ha.	225.20037
2	Loss of Animal Husbandry Productivity, including loss of fodder	225.20037 x 10%	22.52004
3	Cost of Human re-settlement	-	0.00
4	Loss of public facilities and administrative infrastructure (Roads, Building, Schools, Dispensaries, Electric lines, Railways etc.) on forest land, which would require forest land if these facilities were diverted due to the project	-	0.00
5	Possession value of forest land diverted	225.20037 lakhs x 30%	67.56011
6	Cost of suffering to oustees	-	0.00
7	Habitat fragmentation cost	225.20037 lakhs x 50%	112.60019
8	Compensatory Afforestation and Soil & Moisture Conservation cost	-	60.00692
	Total cost		487.88763

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Table-C: Existing guidelines for estimating benefits of forest diversion in CBA.

Sl. No.	Parameters	Remarks
1	Increase in productively attribute to the specific project.	Anticipated revenue due to reduction in losses of power supply 61.21 lakhs
2	Benefits to economy due to the specific project	Anticipated revenue return due to reduction in losses and sale of additional energy 382.40 lakhs per annum
3	Number of population benefited due to specific project	20,000 nos.
4	Economic benefits of direct and indirect employment due to the project	150 persons x Rs. 311/- on an average wage x 365 working days x 50 years = 8513.625 lakhs
5	Economic benefits due to Compensatory Afforestation	9.39 lakhs x 2.02% x 23.983 ha. x 50 years = 227.452 lakhs
	Total	9184.687 lakhs
	CB ratio	4.879 : 91.847


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