Full Title of the Project : Banhardih Coal Block of Patratu Vidyut Utpadan Nigam Ltd File No-FP/JH/MIN/147316/2021 Proposal Date- 18.09.2021

Cost Benefit Analysis

ESTIMATION OF COST OF FOREST DIVERSION

SL. NO.	PARAMETERS	REMARKS
1.	Ecosystem service losses due to proposed forest diversion.	Ecosystem service losses due to diversion of forest land are equal to the Net Present value (NPV) of the forest land being diverted as prescribed by the Central Government (MoEF&CC). Approximately Rs 74,03,44,784/-(7403 lakh) will be the cost towards NPV for diversion of 515.32 Ha forest land (NPV @ Rs 14,36,670/-per Ha).
2.	Loss of animal husbandry productivity, including loss of fodder.	NOT APPLICABLE
3.	Cost of human resettlement.	Estimated on the basis of SIA report and present market value (Govt rate) of the land. (Rs. 38982 LAKH)
4.	Loss of public facilities and administrative infrastructure (roads, buildings, schools, dispensaries, electric lines, railways, etc.) on forest land or which would require forest land, if these facilities were diverted due to the project.	NOT APPLICABLE
5.	Possession value of the forest land diverted.	30% of NPV that is Rs. 22,20,94,815/-(2220 Lakh)
6.	Cost of Suffering to oustees.	12969 LAKHS
7.	Habitat fragmentation cost.	50% of NPV that is Rs. 37,01,58,026/-(3701 lakh)
8	Compensatory afforestation and soil moisture conservation cost.	Estimated Cost of Compensatory afforestation & Soil Moisture conservation @Rs 801422 /Ha. Hence total cost is Rs 801422x 515.32= 41,29,88,800/-(4130 lakh)
	TOTAL	Rs 69405 Lakhs

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SUBODH JOHN PURTI

Sr. Manager (Civil/Coal Mine)
PATRATU VIDYUT UTPADAN NIGAM LTD.
(A Subsidiary of NTPCLtd. in Joint Venture with JBVNL)
Patratu, Dist.-Ramgarh-829119

Full Title of the Project : Banhardih Coal Block of Patratu Vidyut Utpadan Nigam Ltd File No-FP/JH/MIN/147316/2021

Proposal Date- 18.09.2021

BENEFIT OF FOREST DIVERSION

SL. NO.	PARAMETERS	REMARKS
1.	Increase in productivity attributed to the specific project.	Rs. ₹ 283566 lakhs
2.	Benefits to the economy due to specific project.	Rs. ₹ 4529799 lakhs
3.	No. of population benefited due to specific project.	4300 Nos.
4.	Economic benefits due to direct and indirect employment due to the project.	Rs 564192 Lakhs
5.	Economic benefits due to compensatory afforestation.	Rs.12857 Lakhs (Calculated as per Standard Compensatory Afforestation Restoration Factor (SCARF) adjustment Rate of Rs 0.499 Lakhs/Ha for Dry Deciduous forest land proposed to be diverted and the benefits from such CA accruing over next 50 years based on study report of IIFM.
	TOTAL	Rs. 5390414 lakhs

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COST BENEFIT ANALYSIS / RATIO

1.	Total loss per annum due to loss of timber, fire wood and minor forest produce and environmental loss due to loss of forest.	Rs 69405 Lakhs
2.	Total benefit to the economy due to the project.	Rs. 5390414 lakhs
3.	Hence, the cost-benefit ratio of the mining project is (Loss: Benefit)	1:77 (Approx)

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