



पतरातु विद्युत उत्पादन निगम लिमिटेड

PATRATU VIDYUT UTPADAN NIGAM LTD.

(A subsidiary of NTPC in Joint Venture with JBVNL)

पतरातु / Patratu

Banhardih/FDP/Form-C/2024

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Banhardih Coal Mining Project

Subodh John Puri

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

DETAILED NOTE: -

Background

Patratu Vidyut Utpadan Nigam Limited (PVUN Limited) A JV Company of NTPC Ltd and Jharkhand Bijli Vitran Nigam Limited (JBVNL) was incorporated on 15.10.2015 to install 4000 MW coal based thermal power plant consisting of 5 units of 800 MW each which is to be implemented in two phases (Phase I : 3 x 800 MW and Phase II : 2 x 800 MW).

Ministry of coal has transferred Banhardih coal block and assigned to PVUNL located in Auranga coal field in Latehar district of Jharkhand State vide order No 103/18/2015 NA on 25.06.2018 for captive use.

The Mining plan of Banhardih was approved by Ministry of coal on 15.07.2021 for an area of 1467.42 Ha and Feasibility report was approved by Board of Directors of PVUNL in its 37th meeting on 23.09.2022. Notification & publication of Section 11(1) under CBA A&D Act for the total projectized area i.e 1467.42 Ha was issued by Ministry of Coal. In addition to above, various developmental activities & statutory clearances for the development & operation of Banhardih Coal Mining project are at advance stage at different level.

Project Schedule & Mining Operation: The coal production capacity has been synchronized with the coal requirement of PVUNL. As per approved Mining Plan of Banhardih Coal Mine, commencement of Mining Operation is envisaged to start financial year 2024-25. As per approved Mining Plan, the total mineable reserves are estimated as 250.50 Mt corresponding to an OB volume of 1173.00 Million Cubic meter (Mcum) at an average stripping ratio of 4.68 cum/tonne. The Average Grade of coal is envisaged as grade G11 (Gross Calorific Value (GCV:4000 - 4300) Kcal/Kg).

It shall reach the rated capacity i.e., 12 MTPA on 7th year of mining operation and production of 12MTPA shall be sustained till 14th year of Mining operation. As per the mining plan, it is envisaged, coal mining through opencast methodology up to a depth of 300 meter from the surface level.

Shovel-Dumper combination in conjunction with conventional drilling and blasting for overburden and inter-burden removal seemed appropriate system of mining. Blasted overburden and inter-burden shall dump at external site during initial years and later accommodated in the voids created in the quarry as internal dump. Bulk reserves are confinement in lower horizons and relatively thinner seam lie in the upper horizon therefore it is proposed to adopt Shovel-Dumper combination in conjunction with conventional drilling and blasting along with the Surface Miner-Dumper combination. Blasting is not required for excavation of coal using Surface Miner. Coal Handling Plant with rapid loading system shall be provided for out bye transportation of coal.

Office: Patratu Vidyut Utpadan Nigam Limited, Patratu, PO: PTPS, Patratu, Distt. Ramgarh, PIN - 829119 (Jh.)
Regd. Office: NTPC Bhawan, Core-7, SCOPE Complex, 7 Institutional Area, Lodhi Road, New Delhi -110003,
email id - ceopatratu@ntpc.co.in, CIN: U40300DL2015GOI286533



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Land Requirement

The total Block area is 1818.10 ha, Mining Plan approved for 1467.42 Ha (Explored – 1049 Ha & Unexplored – 418 Ha). The explored area has been considered for mining operation and unexplored area has been considered for external OB dump and the OB quantity dumped on the external dump shall be re-handled after the end of Mine life. As per the approved Mining plan, the project area of 1467.42 ha is spreading over total 9 villages. The detailed land scheduled is as under:

BANHARDIH COAL BLOCK

Summary for 1467.42ha

Sl. No	Name of Village	Private land (Ac)	Government land (Ac)	Notified Forest		Total Area Ac.	Total Area(Ha.)
				Government Land (GM. Jagal Jhadi) Ac	Forest Land (Ac)		
1	Ate	128.96	78.96	0.00	3.00	210.92	85.39
2	Banhardih	411.82	363.05	13.11	437.93	1225.91	496.32
3	Bari	815.90	470.95	29.73	611.76	1928.34	780.71
4	Barwadih	6.11	5.97	0.00	0.00	12.08	4.89
5	Rampur	8.90	1.16	0.00	0.00	10.06	4.07
6	Surli	17.54	6.15	0.00	21.29	44.98	18.21
7	Tota	0.00	0.82	0.00	14.81	15.63	6.33
8	Jagaldaga	0.00	0.45	0.00	20.66	21.11	8.55
9	Sabano	14.77	20.19	2.35	118.19	155.50	62.95
Total (Acres)		1404.00	947.70	45.19	1227.64	3624.53	1467.42
Total (Hectares)		568.42	383.68	18.30	497.02	1467.42	

Coal Linkage

The Project has been approved for a rated production capacity of 12 Mtpa and Coal production capacity synchronized with the coal requirement of Patratu Thermal Power Plant.

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Present Proposal:

The present forest diversion proposal is for non linear acquisition and covers forest 515.32 Ha of notified Forest land and 18.29 Ha of GMJJ Land, are falling in 7 villages (Ate, Tota, Banhardih, Bari, Sabano, Surli & Jagaldaga) out of the total projectized area of 1467.42 Ha.

Conclusion:

The coal from Banhardih mine shall be fully utilised for generation of power in Patratu Thermal Power Plant (Phase-1, 2400 MW). 85 % of total power generation from this plant shall be dedicated to the State of Jharkhand. The Banhardih Coal Mining project shall generate total direct employment 1306 and more than 3000 indirect employment in addition to the livelihood plans as per the approved detailed project report.

Considering the above, the present forest diversion proposal of 515.32 Ha may be considered for approval.

Thanking you

(Subodh John Purti)

Signatory Authority

Sr. Manager, PVUNL

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