May 24, 2022

Patratu Vidyut Utpadan Nigam Limited: Rating reaffirmed

Summary of rating action

Instrument*	Previous Rated Amount (Rs. crore)	Current Rated Amount (Rs. crore)	Rating Action
Non-Fund Based Limits	487.60	487.60	[ICRA]A-(Stable); reaffirmed
Fund-Based Term Loan	-	14,000.00	[ICRA]A-(Stable); reaffirmed
Unallocated	14,512.40	512.40	[ICRA]A-(Stable); reaffirmed
Total	**15,000.00**	**15,000.00**	

**Instrument details are provided in Annexure-1*

Rationale

The rating reaffirmation factors in Patratu Vidyut Utpadan Nigam Limited's (PVUNL) strong parent - NTPC Limited (rated ICRA AAA/Stable) - which holds a 74% stake in the project. The remaining 26% stake is held by Jharkhand Bijli Vitran Nigam Limited (JBVNL), a state government-owned distribution company of Jharkhand. PVUNL is setting up a 2,400-MW (3 x 800MW) coal-based super thermal power project (STPP) at Patratu, Jharkhand.

The rating factors in the long-term power purchase agreement (PPA) for 25 years from the commercial operations date (COD) for 100% project capacity, mitigating the offtake risk. As per the PPA, JBVNL will be allocated 85% of the project capacity, while the balance 15% will be allocated by the Ministry of Power. The PPA is based on cost-plus tariff principle at normative norms, involving the recovery of fixed capacity charges (comprising allowed return on equity at 15.5%) at 85% plant availability and pass-through of fuel cost at normative operating efficiency level. The rating is supported by assured fuel supply from the allocated coal mine for captive purposes/bridge linkage for supply of coal from Coal India Limited (CIL). The merit order position of PVUNL is expected to remain comfortable, backed by domestic coal availability and proximity of the coal mine to the power plant.

The rating, however, is constrained by significant project implementation risks with only ~ 35% of the total project cost being incurred till January 31, 2022. The project has witnessed significant delays in implementation on account of the disruptions caused by the pandemic. There were delays in awarding ACC (air cooled condenser) work, supplying boiler structure and awarding ash handling package. The COD of Unit 1 of the project is now expected by March 2024 against the initial COD of March 2022 and subsequently COD of other two units are expected by September 2024 and March 2025, respectively. Further, the progress on developing the captive Banhardih coal block has remained slow. The approval of the revised mine development schedule by the Ministry of Coal (MoC) and subsequently, timely completion of the milestones will remain critical.

Production from the mine is expected to start from FY2024-25 and is expected to attain its rated capacity in seven years. Comfort is drawn from the availability of tapering bridge linkage from CIL which is now available till June 2024 (renewed for three years) and is expected to be renewed post expiry. The rating factors in the counterparty credit risks arising from the modest financial position of the offtaker, JBVNL, which has a weak financial profile. However, multiple payment security mechanisms such as letter of credit, guarantee from the Government of Jharkhand (GoJh) on the dues from JBVNL and coverage under the tripartite agreement (TPA) between the GoI, state governments and the Reserve Bank of India for payment of dues by state utilities mitigate the risk to a large extent.

Additionally, timely equity infusion from JBVNL/GoJh for the balance equity portion (beyond the available deemed loan) for the thermal project (in case of cost overrun) and coal mine development is critical for timely completion. Moreover, any disallowance by the CERC in approving the capital cost for the company at the time of the final tariff determination for the project remains a key sensitivity from a credit perspective.

The Stable outlook reflects ICRA's opinion that PVUNL will benefit from its strong parentage during the project execution stage and thereafter, from the availability of cost-plus based PPA with its full capacity and fuel availability tied-up during the operating phase. ICRA also notes that the fixation of tariff to recover the capital cost of the captive coal mine will be on cost-plus tariff basis (comprising allowed return on equity at 14%).

Key rating drivers and their description

Credit strengths

Strong parentage of NTPC Limited – The rating derives comfort from the commitment of NTPC's management towards the infusion of equity capital (in the proportion of its ownership, which is a 74% stake in the project) for the budgeted cost as well cost overruns (if any). Additionally, PVUNL will benefit from the strong executional, operational and managerial capabilities of NTPC, which has a commercial capacity of nearly 68 gigawatt (GW) at present, comprising coal, gas, solar, wind and hydro power generation assets.

Long-term PPA for 100% capacity mitigates offtake risk; cost-plus tariff to result in regulated returns – PUVNL's entire generation capacity has been contracted under a long-term cost-plus PPA of 25 years based on CERC tariff guidelines. JBVNL will be allocated 85% of the project capacity, while the balance 15% will be allocated by the Ministry of Power. The cost-plus tariff would result in regulated returns, subject to meeting the costs and efficiency levels within the normative levels post commissioning. The capex for developing the captive coal mine will also be recovered on cost-plus tariff basis as per CERC guidelines allowing a return on equity of 14%. Subject to meeting the normative guidelines, the levelised tariff, as per ICRA estimates, is Rs 3.66 per unit which takes into account the project cost of Rs 21,468 crore (15% higher than the current budgeted project cost of Rs 18,668 crore).

Low permitting risks and available infrastructure to aid project execution – The project is being constructed on the premises of the existing Patratu thermal power station (325-MW de-rated station was shut down in January 2017). Thus, the infrastructure in terms of construction power, water availability, railway siding, etc, is already in place though the same needs to be augmented for the higher capacity project now being developed. The thermal project has received clearance from the Ministry of Environment Forest and Climate Change and the Airport Authority of India (for stack height) and the project land is already in place as a part of the transfer scheme of the GoJh, 2015.

Assured fuel supply – The coal block for the project's end use has been transferred to PVUNL, which will develop the coal mine through a mine development operator (MDO) along with the construction of the power plant. Production from the mine is expected to start from FY2024-25 (COD of Unit 1 is March 2024) and expected to attain its rated capacity in seven years. Comfort is drawn from the availability of a tapering bridge linkage from CIL which is now available till June 2024 (renewed for three years) and is expected to be renewed post expiry.

Favourable merit order position expected – PVUNL will benefit from the lower landed cost of coal because of the proximity of the allocated coal block to the project site (located less than ~ 100km). Consequently, the merit order position is expected to remain favourable due to lower variable charges, providing additional safeguard against offtake and demand risks for the project. The variable cost of generation is likely to remain competitive on the basis of domestic coal availability through bridge linkage till the captive coal block development commences. As per ICRA estimates, the levelised variable charge for the project is Rs 1.57 per unit (after factoring in tapering production from the coal mine in the initial period).

Credit challenges

Significant project execution risks - The engineering, procurement and construction (EPC) work for the project was awarded to Bharat Heavy Electricals Limited (BHEL) in March 2018. The execution of the project has been delayed as Covid-related disruptions slowed down the supply of components and the award/re-award of certain contracts/packages. COD of the Unit 1 is now expected by March 2024, a delay of two years from the initial commercial operation date. Around 35% of the total project cost has been incurred till January 31, 2022. While the project's progress is now satisfactory, the company remains exposed to the execution risk of completing the project within the budgeted cost of Rs 18,668 crore and revised timelines due to the large scale of the project. Higher completed project cost will increase the tariff and reduce the attractiveness of the generated power. On the other hand, any project cost disallowances from the regulator will lead to lower returns for the project and reduced cushion for debt servicing.

Risks associated with development of coal mine – The company is required to develop the captive coal mine at Banhardih (located less than 100 km from the plant). Work on that front is running behind schedule at present on account of delays in finalising the geological report (GR). The revised schedule for the mine development is yet to be approved by the Ministry of Coal (MoC). The approval of the revised mine development schedule by the MoC and timely completion of the milestones will remain critical.

Exposure to counterparty credit risk – The entire power from the project (minimum 85%; the balance 15% is subject to allocation by the Ministry of Power) will be sold to JBVNL. The weak financial profile of JBVNL - reflected in its negative net worth, low-cost coverage, weak coverage indicators, high aggregate technical and commercial loss (AT&C loss) and stretched payable days - exposes PVUNL to counterparty credit risks. However, these risks are mitigated by multiple payment security mechanisms. The PPA specifies maintaining a letter of credit of 105% of the monthly billing amount by JBVNL. Additionally, the dues from JBVNL are backed by guarantee from the GoJh, which are covered under the tripartite agreements between the GoI, the state governments and the Reserve Bank of India for payment of dues by state utilities.

Timely infusion of equity by Government of Jharkhand/JBVNL – Of the 26% equity requirement for the thermal project, JBVNL's contribution is estimated at Rs. 1,213.7 crore. A substantial portion of this is being funded from the consideration for the land transferred/to be transferred by the GoJh to PVUNL (Rs. 837 crore plus accrued interest during the project construction period). For the balance equity capital and for funding the cost overruns (if any) in the project, JBVNL would be required to infuse funds. In addition, it will have to infuse equity to develop the Banhardih coal block. JBVNL, given its weak financial profile, may require funding support from GoJh to meet its equity commitment for the project. Although the cash requirements are back-ended (initial amount will be subscribed from land transfer consideration), the eventual timing of the receipt of funds from the GoJh (if required) will be critical.

Liquidity position: Adequate

PVUNL's liquidity position is adequate, backed by a strong parent, NTPC Limited, and the substantial upfront equity from JBVNL (in the form of deemed loan), which should ensure timely equity infusion. As on January 31, 2022, Rs. 1,672.5 crore of the total equity commitment of Rs. 4,668 crore has been infused and the entire project debt of Rs. 14,000 crore has been sanctioned. Post commissioning, the liquidity position of the company is expected to be supported by adequate cash flow from operations, driven by a long-term PPA, a payment security mechanism and adequate fuel supply arrangements.

Rating sensitivities

Positive factors – Significant progress in project development as per the revised timelines would be a key factor for a rating upgrade or a revision in the outlook to positive.

Negative factors – The rating could face downgrade pressure if there are further delays in commissioning the project and/or cost overruns (not approved by CERC), resulting in cost under-recovery and consequent weakening of the company's credit and return metrics. Further, any weakening of linkages with NTPC or deterioration in the credit profile of NTPC could be a negative trigger.

Analytical approach

Analytical Approach	Comments
Applicable Rating Methodologies	Corporate Credit Rating Methodology Rating Methodology for Thermal Power Producers Implicit Support from Parent or Group
Parent/Group Support	Parent – NTPC Limited holds a 74% stake in PVUNL Assigned rating derives comfort from the strong credit profile of parent NTPC (with 74% stake in PVUNL), which is expected to meet the funding requirements or cash flow mismatches of PVUNL as and when required
Consolidation/Standalone	The rating is based on the standalone financial statements of the rated entity

About the company

PVUNL, incorporated in October 2015, is a JV of NTPC (74% stake) and JBVNL (26% stake, Jharkhand state discom). It is involved in the development of a 4,000-MW coal-based power plant and the development & operation of a coal mine in Jharkhand. The power project will be developed sequentially in two phases, Phase I – 2,400 MW (3*800 MW) and Phase II – 1,600 MW (2*800MW). The budgeted cost for Phase I is Rs. 18,668 crore and is to be funded in debt: equity ratio of 3:1. REC Limited has sanctioned the project debt of Rs.14,000 crore. The PPA has been signed with JBVNL (85% allocated to JBVNL, 15% available with Ministry of Power, Government of India as unallocated quota) for a term of 25 years from the start of commercial operations with tariff based on prevailing CERC regulations and will include the capacity charge, energy charge, incentives, taxes, levies etc. The EPC contract has been awarded to BHEL and the expected COD of Unit 1 of Phase I has been revised to March 2024 (extended from March 2023) and subsequently the other two units are to be commissioned in September 2024 and March 2025.

The coal will be sourced from the Banhardih coal block, which is allocated to and will be developed by PVUNL. Till the commencement of coal mining, PVUNL has secured approval for bridge linkage from CIL for the interim period. The estimated project cost for the same would be ~ Rs. 3,900 crore which will be recovered at a cost-plus ROE of 14% as per CERC regulations.

Key financial indicators (audited)

PVUNL Standalone	FY2020	FY2021
Operating Income (Rs. crore)	0.0	0.0
PAT (Rs. crore)	-0.41	-0.21
OPBDIT/OI (%)	NM#	NM#
PAT/OI (%)	NM#	NM#
Total Outside Liabilities/Tangible Net Worth (times)	4.35	3.66
Total Debt/OPBDIT (times)	NM#	NM#
Interest Coverage (times)	NM#	NM#

PAT: Profit after Tax; OPBDIT: Operating Profit before Depreciation, Interest, Taxes and Amortisation
#NM: Not Meaningful
Source: company, ICRA Research

Status of non-cooperation with previous CRA: Not applicable

Any other information: None

Rating history for past three years

	Instrument	Current Rating (FY2023)				Chronology of Rating History for the past 3 years		
		Type	Amount Rated (Rs. crore)	Amount Outstanding as on January 31, 2022 (Rs. crore)	Date & Rating on	Date & Rating in FY2022	Date & Rating in FY2021	Date & Rating in FY2020
					May 24, 2022	April 08, 2021	July 28, 2020	January 30, 2020
1	Non-fund-based facilities	Long-term	487.60	-	**[ICRA]A-(Stable)**	[ICRA]A-(Stable)	[ICRA]A-(Stable)	[ICRA]A-(Stable)
2	Fund based term loan	Long-term	14,000.00	3,027.75	**[ICRA]A-(Stable)**	[ICRA]A-(Stable)	[ICRA]A-(Stable)	[ICRA]A-(Stable)
3	Unallocated	Long-term	512.40	-	**[ICRA]A-(Stable)**	[ICRA]A-(Stable)	[ICRA]A-(Stable)	[ICRA]A-(Stable)

Complexity level of the rated instruments

Instrument	Complexity Indicator
Non-fund based facilities	Very Simple
Fund-based facilities	Simple
Unallocated	Not Applicable

The Complexity Indicator refers to the ease with which the returns associated with the rated instrument could be estimated. It does not indicate the risk related to the timely payments on the instrument, which is rather indicated by the instrument's credit rating. It also does not indicate the complexity associated with analyzing an entity's financial, business, industry risks or complexity related to the structural, transactional, or legal aspects. Details on the complexity levels of the instruments, is available on ICRA’s website: www.icra.in

Annexure-1: Instrument details

ISIN No.	Instrument Name	Date of Issuance	Coupon Rate	Maturity	Amount Rated (RS Crore)	Current Rating and Outlook
NA	Non-fund based facilities	NA	NA	NA	487.60	[ICRA]A-(Stable)
NA	Fund based Term Loan	Nov 2017	-	Mar 2038	14,000.00	[ICRA]A-(Stable)
NA	Unallocated	NA	NA	NA	512.40	[ICRA]A-(Stable)

Source: *Company*

Annexure-2: List of entities considered for consolidated analysis: Not Applicable

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About ICRA Limited:

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For more information, visit www.icra.in

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