July 05, 2023

Patratu Vidyut Utpadan Nigam Limited: Rating reaffirmed

Summary of rating action

Instrument*	Previous Rated Amount (Rs. crore)	Current Rated Amount (Rs. crore)	Rating Action
Long-Term Non-Fund Based Facilities - Others	487.60	237.60	[ICRA]A- (Stable); reaffirmed
Long-Term Fund Based Facilities - Term Loans	14,000.00	14,000.00	[ICRA]A- (Stable); reaffirmed
Unallocated Limits	512.40	762.40	[ICRA]A- (Stable); reaffirmed
Total	**15,000.00**	**15,000.00**	

**Instrument details are provided in Annexure-I*

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 the 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 the 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 ~ 58.1% of the total project cost being incurred till April 30, 2023. The project has witnessed significant delays in implementation on account of the disruptions caused by the pandemic. The COD of Unit 1 of the project is now expected by July 2024 against the initial COD of March 2022 and subsequently the COD of other two units are expected by December 2024 and March 2025, respectively. Further, the progress in developing the captive Banhardih coal block has remained slow (land acquisition to commence shortly). The timely completion of the milestones, as per the approved mining plan, will remain critical.

Production from the mine is expected to start from FY2024-25 and is expected to attain its rated capacity in six 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 the coal mine development is critical for a 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.

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 72 gigawatt (GW) at present, comprising coal, gas, solar, wind and hydro power generation assets.

Long-term PPA for 100% capacity mitigates offtake risk - 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 the CERC guidelines, allowing a return on equity of 14%. Subject to meeting the normative guidelines, the levelised tariff, as per ICRA estimates, is Rs 3.59 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).

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 July 2024) and expected to attain its rated capacity in six 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.

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 safeguards 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. 1.19 per unit (after factoring in tapering production from the coal mine in the initial period).

Comfortable debt coverage metrics basis cost-plus tariff - CERC regulations allow for full recovery of fixed charges, subject to the project achieving normative plant availability factor of 85%. The repayment for the project loan of Rs. 14,000 crore will be spread over the next 14 years. Given the cost-plus tariff and savings in interest on working capital (based on assumptions, the company will not require any working capital debt), the project will start accumulating cash from the first year itself which will additionally benefit the liquidity profile of the company. As per ICRA estimates, an additional debt of Rs. 3,168 crore will be raised for the development of the captive coal mine project (debt:equity mix of 3:1; same as thermal project). ICRA expects the debt coverage metrics to remain comfortable with a cumulative DSCR of ~1.4 times and minimum DSCR of more than 1.2 times.

Credit challenges

Significant project execution risks and risks associated with development of coal mine - 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. The COD of Unit 1 is now expected by July 2024, a delay of more than two years from the initial commercial operation date. Around 58.1% of the total project cost has been incurred till April 30, 2023. 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 the 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 reduce the cushion for

debt servicing. Further, the company is required to develop the captive coal mine at Banhardih (located less than 100 km from the plant). The PVUNL board has approved the feasibility report. The finalisation of the financial appraisal is under progress and shall be approved by the PVUNL board. A notice inviting tender to appoint a mine developer-cum-operator shall be issued after the board approval.

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 the 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 agreement 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. JBVNL, given its weak financial profile, may require funding support from the 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. ICRA notes that Rs. 175 crore of equity contribution have already been received till May 2023 from JBVNL for the development of Banhardih coal block out of the JBVNL's 26% estimated equity contribution of Rs. 275 crore, which is a source of comfort.

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 March 31, 2023, Rs. 2,213.0 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 pressure if there are further delays in commissioning the project, and/or if there are 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. The 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 along with the development & operation of a coal mine in Jharkhand. The power project will be developed sequentially in two phases, 2,400 MW (3*800 MW) under Phase-I and 1,600 MW (2*800MW). under Phase-II. The budgeted cost for Phase I is Rs. 18,668 crore, to be funded in debt:equity ratio of 3:1. REC Ltd 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 the tariff based on the prevailing CERC regulations and will include 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 July 2024 (extended from March 2024) and subsequently the other two units are to be commissioned in December 2024 and March 2025 for Unit 2 and Unit 3, respectively.

The coal will be sourced from the Banhardih coal block which has been allocated 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. 4,223 crore. This coal mine development has been allocated to PVUNL; the tariff will be determined, as per the CERC regulations (cost-plus ROE of 14%).

Key financial indicators (audited)

PVUNL	FY2022	FY2023
Operating income	0.00	0.00
PAT	5.95	-39.67
OPBDIT/OI	NM#	NM#
PAT/OI	NM#	NM#
Total outside liabilities/Tangible net worth (times)	4.24	3.98
Total debt/OPBDIT (times)	NM#	NM#
Interest coverage (times)	NM#	NM#

PAT: Profit after tax; OPBDIT: Operating profit before depreciation, interest, taxes and amortisation; Amount in Rs crore; # NM – Not Meaningful

Status of non-cooperation with previous CRA: Not applicable

Any other information: None

Rating history for past three years

	Instrument	Current rating (FY2024)				Chronology of rating history for the past 3 years		
		Type	Amount rated (Rs. crore)	Amount outstanding as of March 31, 2023 (Rs. crore)	Date & rating in FY2024	Date & rating in FY2023	Date & rating in FY2022	Date & rating in FY2021
					July 05, 2023	May 24, 2022	Apr 08, 2021	July 28, 2020
1	**Non-Fund-Based Facilities**	Long term	237.60	-	**[ICRA]A- (Stable)**	[ICRA]A- (Stable)	[ICRA]A- (Stable)	[ICRA]A- (Stable)
2	**Fund-Based Term Loan**	Long term	14,000.00	5007.75	**[ICRA]A- (Stable)**	[ICRA]A- (Stable)	[ICRA]A- (Stable)	[ICRA]A- (Stable)
3	**Unallocated**	Long term	762.40	-	**[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 Term Loan	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 analysing 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 are available on ICRA’s website: Click Here

Annexure I: Instrument details

ISIN	Instrument Name	Date of Issuance	Coupon Rate	Maturity	Amount Rated (Rs. crore)	Current Rating and Outlook
NA	**Non-Fund-Based Facilities**	NA	NA	NA	237.60	[ICRA]A- (Stable)
NA	**Fund-Based Term Loan**	Nov 2017	-	March 2038	14,000.00	[ICRA]A- (Stable)
NA	**Unallocated**	NA	NA	NA	762.40	[ICRA]A- (Stable)

Source: Company

Annexure II: List of entities considered for consolidated analysis – Not Applicable

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