

March 15, 2023

## Nuclear Power Corporation of India Limited: [ICRA]AAA (Stable) assigned to proposed non-convertible debentures (NCDs) of Rs. 2,500 crore; rating reaffirmed for existing NCDs

### Summary of rating action

Instrument*	Previous Rated Amount (Rs. crore)	Current Rated Amount (Rs. crore)	Rating Action
<b>Non-convertible debenture (NCD) programme</b>	26,010.10	26,010.10	[ICRA]AAA (Stable); reaffirmed
<b>Proposed non-convertible debenture (NCD) Programme</b>	0.00	2,500.0	[ICRA]AAA (Stable); assigned
<b>Total</b>	<b>26,010.10</b>	<b>28,510.10</b>	

\*Instrument details are provided in Annexure-1

### Rationale

The rating continues to factor in the 100% ownership of Nuclear Power Corporation of India Limited (NPCIL/the company) by the Government of India (GoI) and its strategic importance to the GoI in the nuclear energy sector. The rating also considers the limited demand and tariff risks because of the long-term power purchase agreements (PPAs) with state distribution utilities for its entire operational capacity as per the tariff norms notified by the Department of Atomic Energy (DAE), the GoI. Moreover, the tariffs offered by the operational capacity are cost-competitive in relation to the average pooled procurement cost (APPC) of the offtaking distribution utilities.

Further, ICRA takes note of the established track record of the operating capacity, with majority of the plants operating at higher-than-normative plant load factor (PLF), leading to stable cash flows. Lower-than-normative PLF was, however, observed in a few plants because of maintenance and rectification works. At present, two units of the Tarapur Atomic Power Station (TAPS – 1&2) are under prolonged shutdown and are expected to take at least another two-three years to restart operations, while unit 1 of Madras Atomic Power Station (MAPS) is also under prolonged shutdown since April 2018. While the combined capacity of these units is only 540 MW (8% of NPCIL’s total capacity), their timely commencement remains important for an improvement in the company’s overall generation.

The rating also draws comfort from the strong financial profile of NPCIL, supported by healthy profitability, low gearing levels and comfortable debt coverage metrics. The funding of the ongoing projects is expected to be met through a mix of internal accruals, fresh equity and debt funding at highly competitive rates.

These strengths are, however, partially offset by NPCIL’s high counterparty credit risk due to the weak financial health of many of the offtaking state distribution utilities (discoms). This is evident from the high receivable position of Rs. 6,980 crore (more than 150 days) as on December 31, 2022 due to significant payment delays from the state-owned utilities in a few states such as Tamil Nadu, the Union Territory of Jammu & Kashmir, Telangana, Madhya Pradesh and Maharashtra. However, this risk is mitigated to some extent by the diverse offtaker profile. Moreover, following the notification of the Electricity (Late Payment Surcharge and Related Matters) Rules, 2022 (LPS) notified by the Ministry of Power (MoP), Government of India, in June 2022, the discoms are clearing the bills in a regular manner. Also, the outstanding dues as of June 2022 along with the late payment surcharge aggregating to Rs. 5,925 crore is being realised in instalments of 12-48 months from the discoms, which is expected to lower the receivable position over the medium term.

Further, the rating factors in the execution risks associated with the large under-construction capacity, which entails an annual capital expenditure of about Rs. 12,000-14,000 crore, especially given the past delays in execution. The company expects to

commission unit-3 (700 MW) of the Kakrapar Atomic Power Station (KAPS) by March 2023/April 2023, followed by the unit-4 (700 MW) in FY2024. Thereafter, the units 7 and 8 (700 MW each) of Rajasthan Atomic Power Station (RAPS) and the units 3 and 4 (1000 MW each) of Kudankulam Nuclear Power Plant (KKNPP) are expected to be commissioned over the next two to three years. There are another 14 nuclear units under various stages of development. The relatively high capital cost (Rs.14 crore to Rs.20 crore per MW) of these projects would lead to high normative tariff rates, though the company's blended tariff is expected to remain competitive in relation to the discoms' APPC. In this context, the company's ability to secure PPAs for the under-construction projects as per the normative cost, reflective of the tariff norms, remains a key rating monitorable. The company faced challenges during the early part of this year in shipping equipment for the under-construction units of KKNPP from Russia due to the ongoing geo-political tensions. Nonetheless, these challenges have eased now, with the company finding alternative options to ship the equipment.

ICRA also takes note of the liability of Rs. 1,500 crore in case of any nuclear accident under the Civil Liability for Nuclear Damage Act, 2010, which is covered by an insurance policy of an equivalent amount. Any liability beyond Rs.1,500 crore would be borne by the GoI.

The Stable outlook assigned to NPCIL reflects the healthy cash flow, supported by an established track record of operations and the long-term PPAs for the entire operational capacity.

## Key rating drivers and their description

### Credit strengths

**Strategic importance to Government of India, with demonstrated equity support** - NPCIL has strategic importance to the GoI amid the push to reduce dependence on fossil fuel-based generation. NPCIL currently operates 22 nuclear power plants, which have a cumulative capacity of 6,780 MW. The entity is fully owned by the GoI, which provides continuous support in the form of regular equity infusion as well as the supply of fuel and coolants.

**Limited demand risks and competitive tariff rates of existing projects** – NPCIL's demand risk is mitigated by the long-term PPAs with the state distribution utilities for its entire operating capacity, as per the allocation approved by the Ministry of Power. The tariffs under the PPAs are single-part and cost-plus based that cover fixed and variable costs and are linked to the normative PLF of 68.5% as notified by the DAE. The latest notification on tariff norms was issued on November 20, 2017, which is applicable from April 1, 2017 for a period of five years. Tariff notification from the DAE for the ongoing control period is yet to come. Moreover, the tariff rates of the existing projects are competitive compared to the average pooled procurement cost (APPC) of the offtaking distribution utilities.

**Established track record of operations** - The nuclear power stations of NPCIL have an established track record of operations with majority of the plants operating at higher-than-normative PLF, leading to healthy cash flows. The generation improved by 9.5% year-on-year (YoY) in FY2022; for 11M FY2023, the generation has remained flat YoY.

**Strong financial profile** – NPCIL's financial profile remains strong, supported by healthy profitability, low gearing levels and strong debt coverage metrics. The company's capital structure remains comfortable, with gearing at 1.34 times as on September 30, 2022. Also, the debt coverage metrics are comfortable, with interest coverage ratio of 12.8 times and debt service coverage ratio of 4.84 times in FY2022. While the debt metrics are expected to moderate with the ongoing debt-funded capex, they would continue to be strong with the DSCR remaining well above 2.0x over the medium term. The funding of the ongoing projects is expected to be met through a mix of internal accruals, fresh equity and debt funding at a highly competitive rate. The company's superior financial flexibility and healthy profitability, aided by normative tariff-based PPAs, provide comfort from a credit perspective.

### Credit challenges

**High counterparty credit risks** – NPCIL’s counterparty credit risk remains high because of the weak financial health of majority of the state distribution utilities with whom the PPAs have been signed. This is reflected from the high debtor position of Rs. 6,980 crore (debtor days of more than 150 days) as on December 31, 2022. However, this risk is mitigated to some extent by the diverse offtaker profile. Moreover, following the notification of the LPS scheme by the MoP, the collection efficiency for NPCIL has improved and past dues as of June 2022 are being cleared by the discoms through instalments of 12-48 months. This is expected to lower the receivable position for the company over the medium term.

**Risk associated with under-construction projects** - The execution risks remain high for NPCIL as under-construction projects entail an annual capital expenditure of about Rs. 12,000-14,000 crore, especially given the past delays in execution. The capital cost of the under-construction projects remains relatively high, leading to high tariff, which may adversely impact the tariff competitiveness of these projects. Nonetheless, the company’s blended tariff is expected to remain competitive in relation to the APPC of the discoms. The timely signing of the PPAs for the upcoming projects remains a key monitorable for the company.

### Liquidity position: Strong

The liquidity profile of NPCIL is strong, supported by positive cash flow from operations, free cash balance, cash equivalents and liquid investments of Rs. 1,621 crore as on February 28, 2023. The cash flows are expected to remain sufficient to meet the debt obligations and contribution for the under-construction projects. Apart from the internal accruals, the capex is funded through equity infusion from the GoI and debt funding. The liquidity is further supported by realisation of past dues from discoms under the LPS scheme through instalments of 12-48 months.

### Rating sensitivities

**Positive factors** – Not applicable

**Negative factors** – NPCIL’s rating could face pressure if the operational nuclear power units show a sustained under-performance with PLF below the normative level, adversely impacting the profitability and cash accruals. Any significant delays in payments from the offtakers adversely impacting its liquidity profile could be another negative factor. Also, the inability of the company to secure PPAs for the new projects under the normative tariff mechanism would weigh on the rating. Further, any weakening of linkages with the Government of India would affect the rating.

### Analytical approach

Analytical Approach	Comments
Applicable Rating Methodologies	<a href="#">Corporate Credit Rating Methodology</a> <a href="#">Rating Approach - Implicit parent or group support</a>
Parent/Group Support	The rating derives strength from NPCIL’s ownership by the Government of India and its strategic importance for nuclear power generation in the country
Consolidation/Standalone	The rating is based on the standalone financial profile of the company

### About the company

NPCIL is a public-sector enterprise under the administrative control of the Department of Atomic Energy (DAE), the Government of India. NPCIL is responsible for the design, construction, commissioning and operations of nuclear power plants in the country. At present, NPCIL is operating 22 nuclear power reactor units, with an installed capacity of 6,780 MW. NPCIL owns all the commercial nuclear reactors (21), except Rajasthan Atomic Power Station’s unit 1 (RAPS-1; 100 MW), which is owned by the DAE, the Government of India. The company has an under-construction capacity of 4,800 MW with advance

progress in execution and another 1,400 MW in early stages of construction. In addition, the Government has given administrative approval to 12 more reactor units, which are in very early stages of development.

#### Key financial indicators (Standalone)\*

NPCIL Standalone	FY2021 (Audited)	FY2022 (Audited)	9M FY2023 (Unaudited)
Operating income (Rs. crore)	13335.1	15035.8	10822.93
PAT (Rs. crore)	4370.7	6394.8	3528.07
OPBDITA/OI (%)	51.71%	54.67%	48.59%
PAT/OI (%)	32.78%	42.53%	32.60%
Total outside liabilities/Tangible net worth (times)	1.58	1.56	NA
Total debt/OPBDITA (times)	8.04	7.88	NA
Interest coverage (times)	9.15	12.81	10.33

\*Ratios are as per ICRA's computation; PAT: Profit after tax; OPBDITA: Operating profit before depreciation, interest, taxes and amortisation

#### Status of non-cooperation with previous CRA: Not applicable

Any other information: None

#### Rating history for past three years

Instrument	Type	Current rating (FY2023)				Chronology of rating history for the past 3 years				
		Amount rated (Rs. crore)	Amount outstanding as on Dec 31, 2022 (Rs. crore)	Date & rating		Date & rating in FY2022	Date & rating in FY2021		Date & rating in FY2020	
				March 15, 2023	Dec 19, 2022		Mar 08, 2022	Mar 09, 2021		Dec 07, 2020
1 Non-convertible debentures	Long term	18200.0	18200.0	[ICRA]AAA (Stable)	[ICRA]AAA (Stable)	[ICRA]AAA (Stable)	[ICRA]AAA (Stable)	[ICRA]AAA (Stable)	[ICRA]AAA (Stable)	
2 Non-convertible debentures	Long term	1785.1	1785.1	[ICRA]AAA (Stable)	[ICRA]AAA (Stable)	[ICRA]AAA (Stable)	[ICRA]AAA (Stable)	-	-	
3 Non-convertible debentures	Long term	3675.0	3675.0	[ICRA]AAA (Stable)	[ICRA]AAA (Stable)	[ICRA]AAA (Stable)	-	-	-	
4 Non-convertible debentures	Long term	2350.0	2350.0	[ICRA]AAA (Stable)	[ICRA]AAA (Stable)	-	-	-	-	
5 Proposed non-convertible debentures*	Long term	2500.0	-	[ICRA]AAA (Stable)	-	-	-	-	-	

\*Yet to be issued

#### Complexity level of the rated instrument

Instrument	Complexity Indicator
Non-convertible debentures	Simple

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-1: Instrument details**

ISIN No	Instrument Name	Date of Issuance / Sanction	Coupon Rate	Maturity Date	Amount Rated (Rs Crore)	Current Rating and Outlook
-	<b>Proposed Non-Convertible Debentures</b>	-	-	-	2500.00	[ICRA]AAA (Stable)
INE206D08493	<b>Non-Convertible Debentures – Series XXXVII</b>	December 23, 2022	7.55%	December 23, 2032	2350.00	[ICRA]AAA (Stable)
INE206D08485	<b>Non-Convertible Debentures – Series XXXVI</b>	March 22, 2022	6.89%	March 24, 2037	3675.00	[ICRA]AAA (Stable)
INE206D08477	<b>Non-Convertible Debentures – Series XXXV</b>	March 21, 2021	6.80%	March 21, 2031	1785.10	[ICRA]AAA (Stable)
INE206D08469	<b>Non-Convertible Debentures – Series XXXIV</b>	January 23, 2020	7.34%	January 23, 2030	2300.00	[ICRA]AAA (Stable)
INE206D08410	<b>Non-Convertible Debentures – Series XXXIII</b>	December 15, 2016	7.25%	December 15, 2031	500.00	[ICRA]AAA (Stable)
INE206D08428					500.00	[ICRA]AAA (Stable)
INE206D08436					500.00	[ICRA]AAA (Stable)
INE206D08444					500.00	[ICRA]AAA (Stable)
INE206D08451					500.00	[ICRA]AAA (Stable)
INE206D08360	<b>Non-Convertible Debentures – Series XXXII</b>	March 28, 2016	8.13%	March 28, 2031	400.00	[ICRA]AAA (Stable)
INE206D08378					400.00	[ICRA]AAA (Stable)
INE206D08386					400.00	[ICRA]AAA (Stable)
INE206D08394					400.00	[ICRA]AAA (Stable)
INE206D08402					400.00	[ICRA]AAA (Stable)
INE206D08311	<b>Non-Convertible Debentures – Series XXXI</b>	August 04, 2015	8.23%	August 04, 2030	700.00	[ICRA]AAA (Stable)
INE206D08329					700.00	[ICRA]AAA (Stable)
INE206D08337					700.00	[ICRA]AAA (Stable)
INE206D08345					700.00	[ICRA]AAA (Stable)
INE206D08352					700.00	[ICRA]AAA (Stable)
INE206D08261	<b>Non-Convertible Debentures – Series XXX</b>	March 25, 2015	8.14%	March 25, 2030	440.00	[ICRA]AAA (Stable)
INE206D08279					440.00	[ICRA]AAA (Stable)
INE206D08287					440.00	[ICRA]AAA (Stable)
INE206D08295					440.00	[ICRA]AAA (Stable)
INE206D08303					440.00	[ICRA]AAA (Stable)
INE206D08212	<b>Non-Convertible Debentures – Series XXIX</b>	November 28, 2014	8.40%	November 28, 2029	440.00	[ICRA]AAA (Stable)
INE206D08220					440.00	[ICRA]AAA (Stable)
INE206D08238					440.00	[ICRA]AAA (Stable)
INE206D08246					440.00	[ICRA]AAA (Stable)
INE206D08253					440.00	[ICRA]AAA (Stable)
INE206D08162	<b>Non-Convertible Debentures – Series XXVIII</b>	January 23, 2014	9.18%	January 23, 2029	400.00	[ICRA]AAA (Stable)
INE206D08188					400.00	[ICRA]AAA (Stable)
INE206D08170					400.00	[ICRA]AAA (Stable)
INE206D08196					400.00	[ICRA]AAA (Stable)
INE206D08204					400.00	[ICRA]AAA (Stable)
INE206D08139	<b>Non-Convertible Debentures – Series XXVII</b>	March 15, 2013 & March 18, 2013	8.54% - 8.56%	March 15, 2023 & March 18, 2023	187.50	[ICRA]AAA (Stable)
INE206D08147					377.50	[ICRA]AAA (Stable)
INE206D08154					935.00	[ICRA]AAA (Stable)

Source: Nuclear Power Corporation of India Limited

**Annexure-2: List of entities considered for consolidated analysis**

Not applicable

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