

## NHPC Limited

March 29, 2018

### Summary of rated instruments

Instrument*	Previous Rated Amount (Rs. crore)	Current Rated Amount (Rs. crore)	Rating Action
Long term bonds programme	6250.00	6250.00	[ICRA]AAA (Stable); Reaffirmed
<b>Total</b>	<b>6250.00</b>	<b>6250.00</b>	

\*Instrument details are provided in Annexure-1

### Rating action

ICRA has reaffirmed a long-term rating of [ICRA]AAA (pronounced ICRA triple A) to the Rs. 6,250.00-crore long-term bonds programme of NHPC Limited (NHPC)<sup>1</sup>. The outlook on the long-term rating is Stable.

### Rationale

ICRA's rating reflects NHPC's established position in India's hydropower generation industry, its significant size of operating projects and the strategic importance to the Government of India (GoI) as reflected by the consistent support from the GoI in terms of low-cost subordinated debt for some of its projects. ICRA also notes the competitive tariffs of its plants with an average tariff of Rs. 3.56/kwh in FY2017 (adjusted for previous-year sales and free power to the home state) and strong operating efficiencies as reflected by average plant availability factor (PAF) of 82.7% in FY2017 (against normative availability of 77.80%) and 89.3% in 9M FY2018. Further, with the commissioning of two units of TLDP-IV in FY2016, the remaining two units of TLDP-IV and 50-MW wind-power project in FY2017, and two out of three units of Kishanganga hydroelectric plant (HEP) in FY2018 (as on March 21, 2018), there is visibility on increase in revenues and profit streams. The rating continues to reflect the low business risks arising out of cost-plus tariff mechanism applicable for its hydel-based power generating stations and favourable demand outlook in view of the power deficit scenario in the states which comprise most of the company's billing although energy and peak deficit has declined over the past two to three years. Further, the rating continues to factor in the healthy track record of power generation from operational hydel-based power projects due to favourable hydrology of the rivers on which these projects are located. Also, the ability of these projects to maintain high operating availability, which enables NHPC to recover annual fixed charges in form of capacity and energy charges on these projects (as envisaged in tariff petitions), support the rating. The credit profile is also supported by a conservative capital structure and strong liquidity despite the large size of the projects under construction as reflected in a debt-to-equity ratio of 0.71 times (standalone basis) as on March 31, 2017 (which is very low in comparison to the capital-intensive nature of the business), healthy cash position of over Rs. 3,528 crore as on December 31, 2017, and long tenure of debt including subordinate debt from the GoI at low interest rate for some projects in Jammu and Kashmir (J&K). The net worth of the company declined in FY2017 on account of buy back of 81.13 crore shares at a price of Rs. 32.25/- per share for an aggregate consideration of Rs. 2,616.59 crore. However, the buyback is not expected to have significant impact on the capital structure of the company going forward.

<sup>1</sup> For complete rating scale and definitions, please refer to ICRA's website [www.icra.in](http://www.icra.in) or other ICRA Rating Publications

ICRA, however, takes cognisance of the execution risks including cost and time overruns inherent in greenfield hydropower projects. Several of NHPC's recent and ongoing hydropower projects have seen significant cost and time overruns and further overruns cannot be ruled out for one of the projects under implementation, namely the Lower Subansiri HEP (2000 MW) in Arunachal Pradesh (progress has been stalled since December 2011 due to local agitation). The remaining two projects under construction, namely Kishanganga (330 MW) and Parbati-II (800 MW), are expected to be commissioned in FY2018 and FY2019, respectively. Presence of Letter of Credit as per terms of PPA and extension of tripartite agreement with 27 states (as on December 31, 2017) beyond October 31, 2016 for payment security will help in sustainability of timely collection in the future. Nevertheless, improvement in the financial and operational profile of state distribution utilities through schemes like Ujwal DISCOM Assurance Yojana (UDAY) are imperative for reducing counterparty credit risk for power generation entities like NHPC.

## Outlook: Stable

Going forward, NHPC's ability to sustain power generation performance, satisfactory collection efficiency, complete projects without further time and cost overruns would be the key rating sensitivities. The outlook may be revised to Negative if the collection efficiency deteriorates significantly or there is further delay in execution of under-construction hydropower projects.

## Key rating drivers

### Credit strengths

**Sovereign ownership and strategic importance of NHPC to GoI** - NHPC is the largest hydropower company in the country and a Mini Ratna Category I public sector undertaking (PSUs). The company plays an important role in implementing the GoI's planned capacity addition in the hydel power sector. Strategic importance of NHPC is also evident from the long-term loans extended by GoI at concessional rates for some hydropower projects of the company located in J&K.

**Grid balancing role of hydropower** - With the GoI's present initiative of extensive renewable energy development, particularly large-scale deployment of solar power, hydropower would be required for grid balancing/stability.

**Regulated tariff ensures stable returns** - Tariffs for hydropower projects of NHPC are determined as per Central Electricity Regulatory Commission (CERC) regulations for tariff determination on cost-plus basis, which ensures recovery of depreciation, interest on long-term loan, interest on working-capital loan, return on equity and operation and maintenance expenses. The recovery of fixed cost is subject to normative plant availability for each plant, as notified by CERC. NHPC has demonstrated satisfactory operational performance in the past. Moreover, exemption of hydropower projects from competitive bidding till 2022 will ensure regulated tariff for under-construction projects of NHPC.

**Satisfactory operational performance** - NHPC has demonstrated satisfactory operational performance as evident from plant availability of 82.7% in FY2017 (against normative plant availability of 77.8%) and 89.3% in 9M FY2018 for its operational hydel-based power plants. The total generation in 9M FY2018 was 20,788 million units.

**Comfortable financial risk profile** - The financial risk profile of NHPC remained comfortable, as evident from gearing of 0.71 times (standalone) as on March 31, 2017. The interest coverage ratio remained high at 5.59 times in FY2017. The company had healthy cash and bank balance of Rs. 1,533 crore as on March 31, 2017 and Rs. 3,528 crore as on December 31, 2017.

## Credit challenges

**Counterparty credit risk** - NHPC is exposed to state electricity distribution utilities/boards with relatively weak credit profile, which may impact its collection efficiency. However, the company witnessed improvement in collections in the past years on account of the UDAY scheme of the GoI. Moreover, the tripartite mechanism between the GoI, state governments and the Reserve Bank of India to ensure payment security mechanism for supply agreements between Central PSUs such as NHPC and state discoms for supply of power, which was valid till October 2016, has been further extended by 27 states as on December 31, 2017. The signing is in progress with other states.

**Execution risk for under-construction projects** - NHPC is constructing three hydroelectric projects with total capacity of 3,130 MW. Two of the projects, namely Parbati II and Subansiri, are relatively bigger than the projects executed by NHPC in the past. However, two out of the three Kishanganga HEP units have been commissioned till March 21, 2018. The project is expected to be commissioned in FY2018. Parbati II is expected to be commissioned in FY2019. However, Subansiri has been stuck since December 2011 due to agitation by locals and NGT order. Timely completion of the projects without further cost and time overrun will remain a key rating sensitivity.

**Cost competitiveness of power from new projects** - The under-construction power projects have high capital cost per MW, which will make the cost of power from such projects unattractive as compared to thermal power projects and the recently discovered tariffs in wind/solar bidding. Therefore, the ability of the company to complete the projects on time and within the budgeted cost, and rationalisation in tariff through various measures will be critical to ensure cost competitiveness of power. It may be noted that hydropower is required for grid stabilisation and hence it can demand a premium over other sources of power.

**Regulatory Risk due to cost plus regime** - The tariff for hydel-based power projects of the company are determined as per CERC norms that are revised every five years. In case the stringent norms are finalised in the future (for instance lower return on equity) the company's profitability may be impacted.

**Analytical approach:** For arriving at the ratings, ICRA has applied its rating methodologies as indicated below.

**Links to applicable criteria:**

[Corporate Credit Rating Methodology](#)

## About the company

NHPC, a Mini Ratna category I public sector utility, is the flagship hydroelectric generation company promoted by the GoI. The company is the largest HEP developer in India and was incorporated in 1975. It has since grown to become the largest hydroelectric power-generating utility in the country with an installed capacity of 6,691 MW (including 1,520 MW of its 51%-owned subsidiary NHDC) as on December 31, 2017. The company supplies power to distribution companies/state electricity boards, mainly in northern, eastern and north-eastern India under terms of long-term PPAs signed.

NHPC reported a PAT of Rs. 2,796 crore on operating income (OI) of Rs. 7,271 crore in FY2017 as against PAT of Rs. 2,430 crore on OI of Rs. 7,353 crore in FY2016. NHPC reported a PAT of Rs 2,569 crore on OI of Rs 5,797 in 9M FY2018 as against a PAT of Rs 2,627 crore on OI of Rs 5,909 crore in 9M FY2017.

### Key financial indicators (audited)

	FY 2016	FY 2017
Operating Income (Rs. crore)	7353	7271
PAT (Rs. crore)	2430	2796
OPBDIT/OI (%)	58.4%	54.4%
RoCE (%)	11.8%	13.4%
Total Debt/TNW (times)	0.67	0.71
Total Debt/OPBDIT (times)	4.64	4.86
Interest Coverage (times)	6.35	5.59
NWC/OI (%)	-3.1%	-9.0%

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

**Any other information: None**

### Rating history for last three years

Instrument	Type	Current Rating (FY2018)				Chronology of Rating History for the past 3 years		
		Amount Rated (Rs. crore)	Amount Outstanding (Rs. crore)	Date & Rating	Date & Rating	Date & Rating in FY2017	Date & Rating in FY2016	Date & Rating in FY2015
1 Long term bonds programme	Long Term	6250.00	5538.36	Mar 2018 [ICRA]AAA (stable)	Sep 2017 [ICRA]AAA (stable)	Mar 2017 [ICRA]AAA (stable)	Apr 2016 [ICRA]AAA (stable)	Jan 2015 [ICRA]AAA (stable)

### Complexity level of the rated instrument

ICRA has classified various instruments based on their complexity as "Simple", "Complex" and "Highly Complex". The classification of instruments according to their complexity levels is available on the website [www.icra.in](http://www.icra.in)

## Annexure-1: Instrument Details

ISIN No	Instrument Name	Date of Issuance / Sanction	Coupon Rate	Maturity Date	Amount Rated (Rs. crore)	Current Rating and Outlook
INE848E07070	LT Bonds- Q Series	12 Mar 2012	9.25%	12 Mar 2018	105.5	[ICRA]AAA (Stable)
INE848E07088	LT Bonds- Q Series	12 Mar 2012	9.25%	12 Mar 2019	105.5	[ICRA]AAA (Stable)
INE848E07096	LT Bonds- Q Series	12 Mar 2012	9.25%	12 Mar 2020	105.5	[ICRA]AAA (Stable)
INE848E07104	LT Bonds- Q Series	12 Mar 2012	9.25%	12 Mar 2021	105.5	[ICRA]AAA (Stable)
INE848E07112	LT Bonds- Q Series	12 Mar 2012	9.25%	12 Mar 2022	105.5	[ICRA]AAA (Stable)
INE848E07120	LT Bonds- Q Series	12 Mar 2012	9.25%	12 Mar 2023	105.5	[ICRA]AAA (Stable)
INE848E07138	LT Bonds- Q Series	12 Mar 2012	9.25%	12 Mar 2024	105.5	[ICRA]AAA (Stable)
INE848E07146	LT Bonds- Q Series	12 Mar 2012	9.25%	12 Mar 2025	105.5	[ICRA]AAA (Stable)
INE848E07153	LT Bonds- Q Series	12 Mar 2012	9.25%	12 Mar 2026	105.5	[ICRA]AAA (Stable)
INE848E07161	LT Bonds- Q Series	12 Mar 2012	9.25%	12 Mar 2027	105.5	[ICRA]AAA (Stable)
INE848E07211	LT Bonds- R Series- Tranche 1	11 Feb 2013	8.70%	11 Feb 2019	6.85	[ICRA]AAA (Stable)
INE848E07229	LT Bonds- R Series- Tranche 1	11 Feb 2013	8.70%	11 Feb 2020	6.85	[ICRA]AAA (Stable)
INE848E07237	LT Bonds- R Series- Tranche 1	11 Feb 2013	8.70%	11 Feb 2021	6.85	[ICRA]AAA (Stable)
INE848E07245	LT Bonds- R Series- Tranche 1	11 Feb 2013	8.70%	11 Feb 2022	6.85	[ICRA]AAA (Stable)
INE848E07252	LT Bonds- R Series- Tranche 1	11 Feb 2013	8.70%	11 Feb 2023	6.85	[ICRA]AAA (Stable)
INE848E07260	LT Bonds- R Series- Tranche 1	11 Feb 2013	8.70%	11 Feb 2024	6.85	[ICRA]AAA (Stable)
INE848E07492	LT Bonds- R Series- Tranche 1	11 Feb 2013	8.70%	11 Feb 2025	6.85	[ICRA]AAA (Stable)
INE848E07500	LT Bonds- R Series- Tranche 1	11 Feb 2013	8.70%	11 Feb 2026	6.85	[ICRA]AAA (Stable)
INE848E07302	LT Bonds- R Series- Tranche 2	11 Feb 2013	8.85%	11 Feb 2019	31.84	[ICRA]AAA (Stable)
INE848E07310	LT Bonds- R Series- Tranche 2	11 Feb 2013	8.85%	11 Feb 2020	31.84	[ICRA]AAA (Stable)
INE848E07328	LT Bonds- R Series- Tranche 2	11 Feb 2013	8.85%	11 Feb 2021	31.84	[ICRA]AAA (Stable)
INE848E07336	LT Bonds- R Series- Tranche 2	11 Feb 2013	8.85%	11 Feb 2022	31.84	[ICRA]AAA (Stable)
INE848E07344	LT Bonds- R Series- Tranche 2	11 Feb 2013	8.85%	11 Feb 2023	31.84	[ICRA]AAA (Stable)
INE848E07351	LT Bonds- R	11 Feb 2013	8.85%	11 Feb 2024	31.84	[ICRA]AAA

	Series- Tranche 2					(Stable)
INE848E07369	LT Bonds- R	11 Feb 2013	8.85%	11 Feb 2025	31.84	[ICRA]AAA
	Series- Tranche 2					(Stable)
INE848E07377	LT Bonds- R	11 Feb 2013	8.85%	11 Feb 2026	31.84	[ICRA]AAA
	Series- Tranche 2					(Stable)
INE848E07385	LT Bonds- R	11 Feb 2013	8.85%	11 Feb 2027	31.84	[ICRA]AAA
	Series- Tranche 2					(Stable)
INE848E07393	LT Bonds- R	11 Feb 2013	8.78%	11 Feb 2019	89.2	[ICRA]AAA
	Series- Tranche 3					(Stable)
INE848E07401	LT Bonds- R	11 Feb 2013	8.78%	11 Feb 2020	89.2	[ICRA]AAA
	Series- Tranche 3					(Stable)
INE848E07419	LT Bonds- R	11 Feb 2013	8.78%	11 Feb 2021	89.2	[ICRA]AAA
	Series- Tranche 3					(Stable)
INE848E07427	LT Bonds- R	11 Feb 2013	8.78%	11 Feb 2022	89.2	[ICRA]AAA
	Series- Tranche 3					(Stable)
INE848E07435	LT Bonds- R	11 Feb 2013	8.78%	11 Feb 2023	89.2	[ICRA]AAA
	Series- Tranche 3					(Stable)
INE848E07443	LT Bonds- R	11 Feb 2013	8.78%	11 Feb 2024	89.2	[ICRA]AAA
	Series- Tranche 3					(Stable)
INE848E07450	LT Bonds- R	11 Feb 2013	8.78%	11 Feb 2025	89.2	[ICRA]AAA
	Series- Tranche 3					(Stable)
INE848E07468	LT Bonds- R	11 Feb 2013	8.78%	11 Feb 2026	89.2	[ICRA]AAA
	Series- Tranche 3					(Stable)
INE848E07476	LT Bonds- R	11 Feb 2013	8.78%	11 Feb 2027	89.2	[ICRA]AAA
	Series- Tranche 3					(Stable)
INE848E07484	LT Bonds- R	11 Feb 2013	8.78%	11 Feb 2028	89.2	[ICRA]AAA
	Series- Tranche 3					(Stable)
INE848E07518	Tax Free Bonds- 13-1A	02 Nov 2013	8.18%	02 Nov 2023	50.81	[ICRA]AAA
						(Stable)
INE848E07542	Tax Free Bonds- 13-1B	02 Nov 2013	8.43%	02 Nov 2023	60.77	[ICRA]AAA
						(Stable)
INE848E07526	Tax Free Bonds- 13-2A	02 Nov 2013	8.54%	02 Nov 2028	213.12	[ICRA]AAA
						(Stable)
INE848E07559	Tax Free Bonds- 13-2B	02 Nov 2013	8.79%	02 Nov 2028	85.61	[ICRA]AAA
						(Stable)
INE848E07534	Tax Free Bonds- 13-3A	02 Nov 2013	8.67%	02 Nov 2033	336.07	[ICRA]AAA
						(Stable)
INE848E07567	Tax Free Bonds- 13-3B	02 Nov 2013	8.92%	02 Nov 2033	253.62	[ICRA]AAA
						(Stable)
INE848E07AD7	LT Bonds- W1 Series	15 Sep 2017	6.91%	15 Sep 2018	300.00	[ICRA]AAA
						(Stable)
INE848E07AE5	LT Bonds- W1 Series	15 Sep 2017	6.91%	15 Sep 2019	300.00	[ICRA]AAA
						(Stable)
INE848E07AF2	LT Bonds- W1 Series	15 Sep 2017	6.91%	15 Sep 2020	300.00	[ICRA]AAA
						(Stable)
INE848E07AG0	LT Bonds- W1 Series	15 Sep 2017	6.91%	15 Sep 2021	300.00	[ICRA]AAA
						(Stable)
INE848E07AH8	LT Bonds- W1 Series	15 Sep 2017	6.91%	15 Sep 2022	300.00	[ICRA]AAA
						(Stable)
INE848E07AI6	LT Bonds- W2 Series	15 Sep 2017	7.35%	15 Sep 2023	150.00	[ICRA]AAA
						(Stable)
INE848E07AJ4	LT Bonds- W2	15 Sep 2017	7.35%	15 Sep 2024	150.00	[ICRA]AAA

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	Series					(Stable)
INE848E07AK2	LT Bonds- W2 Series	15 Sep 2017	7.35%	15 Sep 2025	150.00	[ICRA]AAA (Stable)
INE848E07AL0	LT Bonds- W2 Series	15 Sep 2017	7.35%	15 Sep 2026	150.00	[ICRA]AAA (Stable)
INE848E07AM8	LT Bonds- W2 Series	15 Sep 2017	7.35%	15 Sep 2027	150.00	[ICRA]AAA (Stable)

Source: NHPC Limited

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