

## NHPC Limited

April 23, 2019

### Summary of rating action

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

### 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. 3.66/kwh in FY2018 (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 85.3% in FY2018 and 88.3% in 9M FY2019. Further, with the commissioning of the remaining two units of TLDP-IV and 50-MW wind-power project in FY2017, 50MW solar power project in March 2018 and all three units of 330 MW Kishanganga hydroelectric plant (HEP) by May 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 the states which comprise most of the company's billing. 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 0.66 times (standalone basis) as on March 31, 2018 (which is very low in comparison to the capital-intensive nature of the business), healthy cash position of over Rs. 1,176 crore as on December 31, 2018, 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 company completed buyback of 21.43 crore number of equity shares at Rs 28/- per share with total issue size of Rs 600 crore in January 2019. The buyback is not expected to have significant impact on the capital structure of the company going forward.

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). Two units of 200 MW each of Parbati II (800 MW) hydro power project were synchronized in September 2018 while the project is expected to be commissioned in Q3 FY2021. The other under construction projects of the company under its books are Lanco Teesta (500 MW) hydro power project and Dibang (2880 MW) hydro power project. Presence of Letter of Credit as per terms of PPA and extension of tripartite agreement with 29 states (as on December 31, 2018) 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 had installed capacity of 5551 MW as on December 31, 2018 on standalone basis. 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.

**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 and working capital loan, return on equity and operation and maintenance (O&M) expenses. The tariff norms are notified for a block of five years and have been notified for the period FY2020-24 on March 07, 2019. The tariff norms are largely in line with norms for FY2014-19 with return on equity at 15.50% (pre-tax), higher operation and maintenance expenses, lower escalation for O&M expenses etc. 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 83.4% in FY2017, 85.3% in FY2018 and 88.3% in 9M FY2019 for its operational hydel-based power plants. The total generation in FY2018 and 9M FY2019 was 22,973 million units and 20,799 million units respectively.

**Comfortable financial risk profile** - The financial risk profile of NHPC remained comfortable, as evident from gearing of 0.66 times (standalone) as on March 31, 2018. The interest coverage ratio remained high at 6.48 times in FY2018. The company had healthy cash and bank balance of Rs. 1,472 crore as on March 31, 2018 and Rs. 1,176 crore as on December 31, 2018.

**Measures to promote hydro power sector by Ministry of Power are a positive for the company**- Ministry of Power vide its notification dated March 08, 2019 has announced several measures for promotion of hydro power sector in the country namely declaration of large hydro power projects (>25 MW) as renewable energy source, hydro purchase obligation as separate entity within non-solar renewable purchase obligation, tariff rationalization measures like back loading of tariff by considering escalation of 2% per annum, increase in life of project from 35 years to 40 years, increasing debt repayment period to 18 years, budgetary support for flood moderation/ storage hydro electric projects and budgetary support to cost of enabling infrastructure i.e. roads/ bridges are a positive for the company.

**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.

## 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. Although the collection efficiency deteriorated in 9M FY2019 due to delay in payments from counter parties, the same is expected to improve going forward. The presence of letter of credit equal to one month of billing as per terms of PPA mitigates the counter party credit risk to some extent. 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 29 states as on December 31, 2018 while the signing is in progress with other states.

**Execution risk for under-construction projects** - NHPC is constructing four hydroelectric projects with total capacity of 6,180 MW. The projects are relatively bigger than the projects executed by NHPC in the past. Parbati II is expected to be commissioned in Q3 FY2021 while Lanco Teesta (500 MW) project is expected to be commissioned within 5 years. However, Subansiri has been stuck since December 2011 due to agitation by locals and NGT order. Dibang hydro power project (2880 MW) is in initial stages. Timely completion of the under construction projects without material 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. Moreover, recent measures by Ministry of Power are expected to increase the demand of power from hydro power projects.

**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. The latest tariff norms have been notified on March 07, 2019 for FY2020-24 which provides visibility of regulatory norms for the period. However, in case stringent norms are finalised in the future (for instance lower return on equity) the company's profitability may be impacted.

## Liquidity Position:

In 9M FY2019, the company demonstrated satisfactory generation of 20,799 Mus and plant availability of 88.3% resulting in sales of Rs 6,195 crore and profit after tax of Rs 2,138 crore. Total receivables on account of sale of energy increased to Rs 2,525 crore as on December 31, 2018 as against Rs 1,784 crore as on December 31, 2017. The company had cash and bank balances of Rs 1,176 crore as on December 31, 2018. Considering the satisfactory generation track record of the projects of the company, the accruals from operations from expected to be sufficient to meet the debt repayment obligations of the company in near future.

## Analytical approach:

Analytical Approach	Comments
Applicable Rating Methodologies	<a href="#">Corporate Credit Rating Methodology</a>
Parent/Group Support	The rating derive strength from NHPC's majority ownership by the Government of India (73.33% as on March 31, 2019) and its role in hydro power sector in India
Consolidation / Standalone	The rating is based on standalone financial statements of the company

## About the company:

NHPC, a Mini Ratna category I public sector utility, is the flagship hydroelectric generation company promoted by the GoI. As on March 31, 2019, the shareholding of GoI in the company was 73.33%. The company is the largest HEP developer in India with an installed capacity of 7,071 MW (including 1,520 MW of its 51%-owned subsidiary NHDC) as on December 31, 2018. 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 PAT of Rs 2,759 crore on operating income (OI) of Rs 6,934 crore in FY2018 as against PAT of Rs. 2,796 crore on OI of Rs. 7,271 crore in FY2017. NHPC reported a PAT of Rs 2,138 crore on OI of Rs 6,195 in 9M FY2019 as against PAT of Rs 2,569 crore on OI of Rs 5,797 crore in 9M FY2018.

## Key financial indicators (audited)

	FY2017	FY2018
Operating Income (Rs. crore)	7,271	6,934
PAT (Rs. crore)	2,796	2,759
OPBDIT/OI (%)	54.5%	55.2%
RoCE (%)	13.4%	14.3%
Total Debt/TNW (times)	0.71	0.66
Total Debt/OPBDIT (times)	4.86	4.86
Interest coverage (times)	5.59	6.48

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

## Any other information: None

## Rating history for last three years:

Current Rating (FY2020)				Chronology of Rating History for the past 3 years				
Instrument	Type	Amount Rated (Rs. crore)	Amount Outstanding as April 15, 2019 (Rs. crore)	Date & Rating April 2019	Date & Rating in FY2019 Dec 2018	Date & Rating in FY2018 March 2018 Sep 2017		Date & Rating in FY2017 Mar 2017
1 Long term bonds programme	Long Term	6250.00	4899.47	[ICRA]AAA(stable)	[ICRA]AAA(stable)	[ICRA]AAA(stable)	[ICRA]AAA(stable)	[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
INE848E07096	LT Bonds-Series	Q	12-Mar-12	9.25%	12-Mar-20	105.5	[ICRA]AAA (Stable)
INE848E07104	LT Bonds-Series	Q	12-Mar-12	9.25%	12-Mar-21	105.5	[ICRA]AAA (Stable)
INE848E07112	LT Bonds-Series	Q	12-Mar-12	9.25%	12-Mar-22	105.5	[ICRA]AAA (Stable)
INE848E07120	LT Bonds-Series	Q	12-Mar-12	9.25%	12-Mar-23	105.5	[ICRA]AAA (Stable)
INE848E07138	LT Bonds-Series	Q	12-Mar-12	9.25%	12-Mar-24	105.5	[ICRA]AAA (Stable)
INE848E07146	LT Bonds-Series	Q	12-Mar-12	9.25%	12-Mar-25	105.5	[ICRA]AAA (Stable)
INE848E07153	LT Bonds-Series	Q	12-Mar-12	9.25%	12-Mar-26	105.5	[ICRA]AAA (Stable)
INE848E07161	LT Bonds-Series	Q	12-Mar-12	9.25%	12-Mar-27	105.5	[ICRA]AAA (Stable)
INE848E07229	LT Bonds-Series- Tranche 1	R	11-Feb-13	8.70%	11-Feb-20	6.85	[ICRA]AAA (Stable)
INE848E07237	LT Bonds-Series- Tranche 1	R	11-Feb-13	8.70%	11-Feb-21	6.85	[ICRA]AAA (Stable)
INE848E07245	LT Bonds-Series- Tranche 1	R	11-Feb-13	8.70%	11-Feb-22	6.85	[ICRA]AAA (Stable)
INE848E07252	LT Bonds-Series- Tranche 1	R	11-Feb-13	8.70%	11-Feb-23	6.85	[ICRA]AAA (Stable)
INE848E07260	LT Bonds-Series- Tranche 1	R	11-Feb-13	8.70%	11-Feb-24	6.85	[ICRA]AAA (Stable)
INE848E07492	LT Bonds-Series- Tranche 1	R	11-Feb-13	8.70%	11-Feb-25	6.85	[ICRA]AAA (Stable)
INE848E07500	LT Bonds-Series- Tranche 1	R	11-Feb-13	8.70%	11-Feb-26	6.85	[ICRA]AAA (Stable)
INE848E07310	LT Bonds-Series- Tranche 2	R	11-Feb-13	8.85%	11-Feb-20	31.84	[ICRA]AAA (Stable)
INE848E07328	LT Bonds-Series- Tranche 2	R	11-Feb-13	8.85%	11-Feb-21	31.84	[ICRA]AAA (Stable)
INE848E07336	LT Bonds-Series- Tranche 2	R	11-Feb-13	8.85%	11-Feb-22	31.84	[ICRA]AAA (Stable)
INE848E07344	LT Bonds-Series- Tranche 2	R	11-Feb-13	8.85%	11-Feb-23	31.84	[ICRA]AAA (Stable)
INE848E07351	LT Bonds-Series- Tranche 2	R	11-Feb-13	8.85%	11-Feb-24	31.84	[ICRA]AAA (Stable)
INE848E07369	LT Bonds-Series- Tranche 2	R	11-Feb-13	8.85%	11-Feb-25	31.84	[ICRA]AAA (Stable)
INE848E07377	LT Bonds-Series- Tranche 2	R	11-Feb-13	8.85%	11-Feb-26	31.84	[ICRA]AAA (Stable)
INE848E07385	LT Bonds-Series- Tranche 2	R	11-Feb-13	8.85%	11-Feb-27	31.84	[ICRA]AAA (Stable)
INE848E07401	LT Bonds-Series	R	11-Feb-13	8.78%	11-Feb-20	89.2	[ICRA]AAA

	Series- Tranche 3							(Stable)
INE848E07419	LT Bonds-	R	11-Feb-13	8.78%	11-Feb-21	89.2	[ICRA]AAA	(Stable)
	Series- Tranche 3							(Stable)
INE848E07427	LT Bonds-	R	11-Feb-13	8.78%	11-Feb-22	89.2	[ICRA]AAA	(Stable)
	Series- Tranche 3							(Stable)
INE848E07435	LT Bonds-	R	11-Feb-13	8.78%	11-Feb-23	89.2	[ICRA]AAA	(Stable)
	Series- Tranche 3							(Stable)
INE848E07443	LT Bonds-	R	11-Feb-13	8.78%	11-Feb-24	89.2	[ICRA]AAA	(Stable)
	Series- Tranche 3							(Stable)
INE848E07450	LT Bonds-	R	11-Feb-13	8.78%	11-Feb-25	89.2	[ICRA]AAA	(Stable)
	Series- Tranche 3							(Stable)
INE848E07468	LT Bonds-	R	11-Feb-13	8.78%	11-Feb-26	89.2	[ICRA]AAA	(Stable)
	Series- Tranche 3							(Stable)
INE848E07476	LT Bonds-	R	11-Feb-13	8.78%	11-Feb-27	89.2	[ICRA]AAA	(Stable)
	Series- Tranche 3							(Stable)
INE848E07484	LT Bonds-	R	11-Feb-13	8.78%	11-Feb-28	89.2	[ICRA]AAA	(Stable)
	Series- Tranche 3							(Stable)
INE848E07518	Tax Free Bonds-		2-Nov-13	8.18%	2-Nov-23	50.81	[ICRA]AAA	(Stable)
	13-1A							
INE848E07542	Tax Free Bonds-		2-Nov-13	8.43%	2-Nov-23	60.77	[ICRA]AAA	(Stable)
	13-1B							
INE848E07526	Tax Free Bonds-		2-Nov-13	8.54%	2-Nov-28	213.12	[ICRA]AAA	(Stable)
	13-2A							
INE848E07559	Tax Free Bonds-		2-Nov-13	8.79%	2-Nov-28	85.61	[ICRA]AAA	(Stable)
	13-2B							
INE848E07534	Tax Free Bonds-		2-Nov-13	8.67%	2-Nov-33	336.07	[ICRA]AAA	(Stable)
	13-3A							
INE848E07567	Tax Free Bonds-		2-Nov-13	8.92%	2-Nov-33	253.62	[ICRA]AAA	(Stable)
	13-3B							
INE848E07AE5	LT Bonds-	W1	15-Sep-17	6.91%	15-Sep-19	300	[ICRA]AAA	(Stable)
	Series							(Stable)
INE848E07AF2	LT Bonds-	W1	15-Sep-17	6.91%	15-Sep-20	300	[ICRA]AAA	(Stable)
	Series							(Stable)
INE848E07AG0	LT Bonds-	W1	15-Sep-17	6.91%	15-Sep-21	300	[ICRA]AAA	(Stable)
	Series							(Stable)
INE848E07AH8	LT Bonds-	W1	15-Sep-17	6.91%	15-Sep-22	300	[ICRA]AAA	(Stable)
	Series							(Stable)
INE848E07AI6	LT Bonds-	W2	15-Sep-17	7.35%	15-Sep-23	150	[ICRA]AAA	(Stable)
	Series							(Stable)
INE848E07AJ4	LT Bonds-	W2	15-Sep-17	7.35%	15-Sep-24	150	[ICRA]AAA	(Stable)
	Series							(Stable)
INE848E07AK2	LT Bonds-	W2	15-Sep-17	7.35%	15-Sep-25	150	[ICRA]AAA	(Stable)
	Series							(Stable)
INE848E07AL0	LT Bonds-	W2	15-Sep-17	7.35%	15-Sep-26	150	[ICRA]AAA	(Stable)
	Series							(Stable)
INE848E07AM8	LT Bonds-	W2	15-Sep-17	7.35%	15-Sep-27	150	[ICRA]AAA	(Stable)
	Series							(Stable)

Source: NHPC Limited

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For more information, visit [www.icra.in](http://www.icra.in)

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