March 24, 2017

NHPC Limited

Instrument*	Rated Amount (in crore)	Rating Action
LT Bonds Programme	4000.00	[ICRA]AAA (Stable); reaffirmed
Total	**4000.00**	

*Instrument Details are provided in Annexure-1

Rating Action

ICRA has reaffirmed the rating of [ICRA] AAA (pronounced ICRA triple A) on the long term scale to Rs. 4,000 crore long term bonds programme of NHPC Limited (NHPC)†. The outlook on long term rating is 'Stable'.

Detailed Rationale

ICRA's AAA rating for NHPC reflects its established position in the hydro power generation industry in India, its significant size of operating projects and strategic importance to the GoI which is also reflected in the consistent support from 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 3.67/kwh during FY 2015-16 (adjusted for previous years income) and strong operating efficiencies, as reflected by average plant availability factor (PAF) of 81.6% during FY 2015-16 (against normative availability of 77.80%). Further with the commissioning of two units of TLDP-IV in FY2016 and remaining two units during H1 FY2017 and 50 MW wind power project during Q3 FY2017, there is visibility on increase in revenue and profit streams. The rating continues to reflect low business risks arising out of favourable demand outlook in view of the power deficit scenario in the states which comprise majority of billing of the company and cost plus tariff mechanism applicable for its hydel based power generating stations. Further, the rating continues to factor in the healthy track record of power generation from operational hydel based power projects arising out of favourable hydrology of the rivers on which these projects are located and ability 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. The credit profile is also supported by a conservative capital structure and strong liquidity despite the large size of projects under construction as reflected in a debt equity ratio of 0.64 times (standalone basis) as on March 31, 2016 (which is very low in relation to the capital intensive nature of its business), healthy cash position of over Rs 5877 crore as on March 31, 2016 and Rs. 6015 crores as on December 31, 2016 and long tenure debt. The board of directors of the company have approved buyback of shares not exceeding 81.13 crore representing 7.33% of the paid-up share capital of the company at a price of Rs 32.25/- per share for aggregate consideration not exceeding Rs 2616.59 crore. The buyback is not expected to have significant impact on the capital structure of the company going forward. ICRA has taken note of the healthy growth in generation during 9M FY2016-17 following full year operation of 130 MW capacity added during FY 2014-15, 80 MW capacity added during FY2015-16, better hydrology and partial operation of two units of 40 MW each of TLDP-IV and 50 MW wind power project commissioned during 9M FY2017.

ICRA however takes cognisance of the execution risks, including risks of cost and time overruns, inherent in greenfield hydro power projects. Several of NHPC's recent and ongoing hydro power 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 Dec 2011 due to local agitation). Remaining two projects under construction namely Kishanganga (330 MW) and Parbati-II (800 MW) are expected to be commissioning in FY2018 and

† For complete rating scale and definitions, please refer to ICRA's website www.icra.in or other ICRA Rating Publications

FY2019 respectively. Nonetheless, power purchase agreements are signed for these projects at tariff to be determined by CERC on cost plus basis and thus, off-take risk is mitigated. Presence of LC as per terms of PPA and extension of Tripartite Agreement with 12 states beyond October 31, 2016 for payment security will help in sustainability of timely collection in future. Nevertheless, improvement in financial and operational profile of state distribution utilities through schemes like UDAY are imperative for reducing counter party credit risk for generation entities like NHPC.

Going forward, NHPC’s ability to complete projects without further time and cost overrun, maintain tariff competitiveness and healthy collections would remain key sensitivities.

Key rating drivers

Credit Strengths

- Sovereign ownership, strategic importance of NHPC in implementing the GoI’s planned capacity addition in the hydel power sector and status as the largest hydro power company in the country.
- Limited demand risk in view of the energy shortage in Northern and North-eastern states.
- With Government of India’s present initiative for extensive renewable energy development particularly large scale deployment of solar and wind power, hydro power would be required for grid balancing/ stability.
- Very competitive cost of power, while the average selling price of Rs 3.67/kwh for the year 2015-16.
- Cost plus regime coupled with operational efficiency results in satisfactory and stable profitability. CERC regulations for FY2014-19 has resulted in improved profitability for NHPC’s power projects. Both, increase in normative O&M expenses and higher escalation rate approved by CERC are positive for hydro power stations. Exemption to hydro power plants from competitive bidding till 2022 will also protect NHPC’s growth in future.
- Healthy capital structure as reflected in moderate debt levels in relation to the capital intensive nature of the business. Strong cash position as well- total cash and liquid investments stood at over Rs. 5877 crores as on March 31, 2016 and Rs 5818 crore as on December 31, 2016 which will enable equity funding for ongoing projects.
- Ability to contract loans of longer tenure at satisfactory rates.
- Capacity addition of 80 MW during FY 2016 and full year operation of 130 MW capacity added during FY 2015 along with better hydrology has led to a healthy growth of 7.4% in the generation levels during FY 2016 (23683 Mus, PAF of 81.6%) as compared to FY 2015 (22038 Mus, PAF of 77.3%).

Credit Weakness

- Weak counterparty credit profile given the exposure of NHPC to some of fundamentally weak SEBs and EDs of North and North Eastern states. However, some positive can be derived from recent measures such as UDAY scheme and extension of tripartite agreement for payment security beyond October 2016 which has been signed by 12 states as on date.
- Project execution risks inherent in hydel projects with possibility of time and cost overruns due to geological surprises, flash floods, law and order problems as well as infrastructural constraints. Most of NHPC's ongoing projects have already seen significant cost and time overruns and further overruns/slippages cannot be ruled out either.
- Some of the new power projects which are being commissioned are at a very high cost/MW and the cost of power from such units will be high.
- While GoI support is a positive, it may also result in continued pressure to take up unviable projects for strategic objectives.
- The tariff for hydel based power projects of the company are determined as per CERC norms. In case stringent norms are finalized in future, it may impact the profitability of the company. Hence, revenue and profitability of the company is subject to regulatory risk.

Detailed Description of key rating drivers highlighted above:

NHPC is the largest HEP developer in the country and was promoted by Government of India (GoI) in 1975, with an objective of developing hydroelectric and renewable power projects. The company has 21 HEP plants and one wind power project in operation with an installed capacity of 6717 MW, which includes two plants with an installed capacity of 1,520 MW in its 51% owned subsidiary, Narmada Hydroelectric Development Corporation (NHDC).

The credit strengths arise from NHPC's established position in hydro power generation business, its significant size of operating as well as under construction projects, consistent support from GoI in terms of low cost subordinated debt, highly competitive tariffs of its plants with an average tariff of Rs 3.67/Kwh during 2015-16 and strong operating efficiencies, as reflected by average PAF of over 81.6% (as against normative availability of 77.8%). The strengths also factor in the healthy track record of power generation from operational projects arising out of favourable hydrology of the rivers on which these projects are located. Although deemed hydrology clauses for projects which have completed 10 years of operation have been abolished under the new CERC norms- however this needs to be viewed against the backdrop that such plants would have by and large completed their debt servicing and the track record of healthy hydrology of these rivers, resulting in low hydrological risks. Further, the financial profile continues to remain strong supported by cost plus tariff regime and satisfactory operations resulting in strong accruals which maintained a comfortable capital structure, despite increased debt levels to support funding plans. Also, the ability to contract longer-tenure debt and consistent support from GoI in terms of low cost subordinated debt for under construction Kishanganga project mitigates funding risks to a large extent.

NHPC is currently engaged in the construction of 3 hydroelectric projects, which are expected to increase its total installed capacity by 3130 MW. All the three under construction projects are located in Northern or North Eastern states and also two of the projects are relatively bigger in relation to the projects which have been executed by NHPC in the past (for instance Parbati II and Subansiri). Kishanganga project is expected to be commissioned in FY 2018 while Parbati II is expected to be commissioned in FY2019. However, Subansiri project has been stuck since December 2011 due to agitation by locals and NGT order.

Given the significantly old plants for which NHPC has repaid most of its debt, NHPC continues to benefit from a very favourable cost of generation. NHPC plants have competitive tariff, which is reflected in NHPC's average selling tariff for FY 2015-16 of Rs. 3.67 per unit. While the tariffs for some of the existing plants and under construction projects are on the higher side, it may be noted that hydro tariffs can be considered sustainable at somewhat higher levels than thermal power projects given the peaking nature of such projects and also given the fact that they are independent of coal/gas prices which can impact thermal generation.

The absolute debt levels of NHPC have increased significantly over past years on account of significant capital expenditure undertaken by the company towards the recently commissioned projects as well as under construction projects. Notwithstanding this, the overall gearing remains low mainly because of substantial equity accretion through internal generation. With cost plus tariff regime, coverage indicators have remained strong, stable and predictable. While Total Debt/EBITDA and NCA/Total debt are somewhat adverse in relation to the rating assigned, this must be viewed in context of the very long tenure of debt and stability of cashflows.

Total debtors against sale of energy as on December 31, 2016 reduced to Rs 2607 crore as against Rs 3352 crore as on December 31, 2015 primarily on account of receipt of dues from J&K. Top debtors with receivables of more than 60 days are Uttar Pradesh Power Corporation Limited (Rs 343 crore), BSES Yamuna (Rs 255 crore) and J&K (Rs 255 crore) as on December 31, 2016. Presence of LC as per terms of PPA and extension of Tripartite Agreement with 12 states beyond October 31, 2016 for payment security will help in sustainability of timely collection in future. Nevertheless, improvement in financial and operational profile of state distribution utilities through schemes like UDAY are imperative for reducing counter party credit risk for generation entities like NHPC.

Analytical approach: Not Applicable

Links to applicable Criteria
Corporate Credit Rating –A Note on Methodology
Rating Methodology for Power Generation Projects/IPPs

About the Company:
NHPC, a Mini Ratna category I public sector utility, is the flagship hydroelectric generation company promoted by the Government of India. The company is the largest hydro electric plant (HEP) developer in India and was incorporated in 1975. It has since grown to become the largest hydro electric generating utility in the country with an installed capacity of 6717 MW (including 1520 MW of its 51% owned subsidiary NHDC) as on December 31, 2016. The company supplies power to distribution companies/state electricity boards located mainly in Northern, Eastern and North Eastern India under terms of long-term PPAs signed with them.

NHPC reported a PAT of Rs. 2440 crores on operating income of Rs. 7434 crores for FY 2015-16 and PAT of Rs 2627 on operating income of Rs 5908 for nine month period of FY 2016-17.

Status of non-cooperation with previous CRA: Not Applicable

Any other information: Not Applicable

Rating History for last three years:
Table: Rating History

S.No	Name of Instrument	Current Rating (2017)			Chronology of Rating History for the past 3 years		
		Type	Rated Amount (Rs. Crores)	Date & Rating	Date & Rating in FY2016	Date & Rating in FY2015	Date & Rating in FY2014
				March 2017	March 2016	December 2014	September 2013
1	LT Bonds	Long Term	4000.00				
				[ICRA]AAA (stable)	[ICRA]AAA (stable)	[ICRA]AAA (stable)	[ICRA]AAA

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

Annexure-1

Details of Instrument

Name of the instrument	Date of issuance	Coupon rate	Maturity Date	Size of the issue (Rs. Cr)	Current Rating and Outlook
LT Bonds- Q Series	12 Mar 2012	9.25%	12 Mar 2027	1266.00	[ICRA]AAA (Stable)
LT Bonds- R Series-Tranche 1	11 Feb 2013	8.70%	11 Feb 2026	82.20	[ICRA]AAA (Stable)
LT Bonds- R Series-Tranche 2	11 Feb 2013	8.85%	11 Feb 2027	382.08	[ICRA]AAA (Stable)
LT Bonds- R Series-Tranche 3	11 Feb 2013	8.78%	11 Feb 2028	892.00	[ICRA]AAA (Stable)
Tax Free Bonds-13-1A	02 Nov 2013	8.18%	02 Nov 2023	50.81	[ICRA]AAA (Stable)
Tax Free Bonds-13-1B	02 Nov 2013	8.43%	02 Nov 2023	60.77	[ICRA]AAA (Stable)
Tax Free Bonds-13-2A	02 Nov 2013	8.54%	02 Nov 2028	213.12	[ICRA]AAA (Stable)
Tax Free Bonds-13-2B	02 Nov 2013	8.79%	02 Nov 2028	85.61	[ICRA]AAA (Stable)
Tax Free Bonds-13-3A	02 Nov 2013	8.67%	02 Nov 2033	336.07	[ICRA]AAA (Stable)
Tax Free Bonds-13-3B	02 Nov 2013	8.92%	02 Nov 2033	253.62	[ICRA]AAA (Stable)

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About ICRA Limited:

ICRA Limited was set up in 1991 by leading financial/investment institutions, commercial banks and financial services companies as an independent and professional investment Information and Credit Rating Agency.

Today, ICRA and its subsidiaries together form the ICRA Group of Companies (Group ICRA). ICRA is a Public Limited Company, with its shares listed on the Bombay Stock Exchange and the National Stock Exchange. The international Credit Rating Agency Moody's Investors Service is ICRA's largest shareholder.

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