

Chirkhwa Hydropower Limited: Rating upgraded to LB+ from LB

August 17, 2020

Summary of rated instruments

Instrument *	Previous rated amount (NPR million)	Current rated amount (NPR million)	Rating action
Long-term loan; Fund based	545	545	[ICRANP] LB+; upgraded
Long-term loan; Fund based	105	-	Rating withdrawn
Total	650	545	

* Instrument details are provided in [Annexure-1](#)

Rating action

ICRA Nepal has upgraded the long-term rating of Chirkhwa Hydropower Limited¹'s (CHL) NPR 545-million bank limits to [ICRANP] LB+ (pronounced ICRA NP L B plus) from [ICRANP] LB. ICRA Nepal has also withdrawn the rating on the existing limit of NPR 105 million. The rating was withdrawn due to the lower utilisation of the long-term limits vis-à-vis previous estimates.

Rationale

The rating upgrade factors in the progress made by CHL in minimising the funding gap by securing debt financing from the lender through a loan agreement. The company has lowered the debt component on the project to 60% from the initial estimate of 70% and the financing has been secured from the state-owned Rastriya Banijya Bank at a rate lower than the initial estimates. CHL's promoters had infused ~52% of the project equity till mid-August 2020 with the rest to be raised from the promoters as well as through an initial public offering (IPO) to the project-affected locals and the members of the public. The lower debt component and better pricing are expected to improve the project metrics including the debt coverage ratios vis-à-vis the original estimates. This has been factored into the rating action. The rating continues to factor in the low regulatory and offtake risks, given the firm offtake arrangement through a long-term power purchase agreement (PPA) with Nepal Electricity Authority (NEA). The changes made in the monetary policy for FY2021, requiring banks to increase their exposure towards the energy sector, could enable hydropower companies to raise cheaper borrowings, which could improve the project economics and provide comfort to the financial profile.

However, the rating remains constrained by the sizeable execution and evacuation risks associated with the project. The project has already surpassed the required commercial operation date (COD) of July 2020, as per the original PPA. Although the COD is likely to be extended by NEA due to its inability to complete the evacuation structure at the proposed connection point at the Khandbari substation, the project completion within the revised timeline will also be a challenge, given the early stage of project development (financial progress of ~21% till mid-August 2020). Evacuation risk also remains a concern, given the slow progress along NEA's Koshi corridor transmission line (expected COD in December 2020 as per NEA's FY2019 annual report). Given the early stage of project development, CHL's ability to complete the project within the cost and time estimates will remain a major challenge. Despite an improvement from the previous estimate, the company's financial indicators are expected to remain moderate, given the high project cost (NPR 910 million i.e. NPR 194 million per MW installed capacity) and the fixed tariff regime which does not compensate for the higher incurred cost. The financial indicators and debt coverage ratios could weaken in the event of substantial time/cost overrun. Given the higher estimated project cost, the generational efficiency of the project will be the key driver of the overall financial profile of the project and the company. Lower generational efficiency, especially in the initial years when the cash build-up is low, could constrain the debt coverage indicators, necessitating further fresh borrowings or equity injection by the promoters.

¹ Erstwhile Chirkhwa Hydropower Private Limited

Going forward, CHL's ability to execute the project in a timely manner, achieve the design parameters of the project and manage the interest rate volatility in the market would be the key driver for determining the project return metrics and coverage indicators.

Key rating drivers

Credit strengths

Low offtake risk, given current demand-supply gap and long-term PPA – Nepal is a net importer of electricity even with limited electrification across the country. It imported ~37%² of its energy demand in FY2019 from India. As per NEA, the power demand is expected to grow at a rate of ~15% over the foreseeable future driven by an increase in electrification, per capita consumption, and industrial demand. Hence, the supply-demand gap is expected to persist, resulting in the healthy offtake of the energy to be generated by the project.

CHL has executed a PPA with NEA for its entire capacity at a predetermined energy tariff. The tariff rates are standard at NPR 4.8 and NPR 8.4 per unit during the wet and dry seasons, respectively, with 3% annual escalation on the base tariff³ for first five years. The firm PPA with a predefined tariff mitigates the offtake and tariff risk. Moreover, the counterparty credit risk remains low, given the sovereign support of the Government of Nepal (GoN) to NEA, as well as NEA's past track record of timely payment of energy bills to private hydropower developers.

Lower debt component and better pricing to support debt servicing ability – The 4.7-MW Lower Chirkhwa Hydroelectric Project (HEP) is estimated to be commissioned at NPR 910 million i.e. NPR 194 million per MW through 60% debt financing vis-à-vis 70% estimated earlier. The promoters have already raised NPR 190 million of equity (~52% of the project equity) with the rest to be raised through further contribution from the promoters and IPO issuance. The debt financing has been secured from state-owned Rastriya Banijya Bank at a low interest rate⁴. The lower debt component and better pricing are expected to lower the debt burden on the company's cashflow and accordingly improve the debt coverage metrics of the project.

Credit challenges

High execution risk – Despite the progress since the last rating, the 4.7-MW project is still in an early stage with ~21% of the cost incurred till mid-August 2020. The early stage of project development, difficult terrain and the geological surprises associated with project development remain a challenge for timely project execution. The contractors for the electromechanical and hydromechanical works are yet to be finalised and the evacuation structure by NEA is also not operational. This could stretch the project execution period. Execution concerns also arise because of the Covid-19 pandemic, which could create challenges in the areas of labour sourcing and logistics management.

Evacuation risk – The connection point of the 4.7-MW Lower Chirkhwa HEP is the Khandbari substation of NEA, which is the end of the 220-KV Koshi corridor transmission line (TL) project. The TL project has been running behind schedule with a revised completion target of December 2020. A delay in NEA's TL could result in increased costs for the project, which could deteriorate the project economics and its debt servicing capacity.

Hydrological risk and absence of deemed generation clause in the PPA – As with smaller rivers in the country, a long-term gauge record is not available for the Chirkhwa river. Hence, the availability of water to sustain long-term energy generation remains a concern. This is a major risk for the project's earnings as the PPA with NEA does not contain a provision for deemed generation.

² NEA's annual report for FY2019

³ For 9.008 MW capacity; for balance 500 KW capacity, 8-times 3% escalation is provided in the addendum PPA

⁴ Floating interest rate, currently priced at 9.5% p.a. vs. 11-12% rates offered to similar projects by private sector banks

Analytical approach: For arriving at the rating, ICRA Nepal has applied its rating methodology as indicated below.

Links to applicable criteria:

[Corporate Credit Rating Methodology](#)

About the company

Chirkhwa Hydropower Limited (CHL) is a hydropower development company incorporated in January 2009. The company is a special purpose vehicle (SPV) set up to develop the 4.7-MW run-of-the-river Chirkhwa Hydroelectric Project (HEP) along Chirkhwa river in the Bhojpur district of eastern Nepal. The power generated by the project is proposed to be connected at NEA's Khandbari substation, which is ~10 km from the project's powerhouse.

The project is proposed to be developed at an estimated cost of NPR 910 million in a debt-equity ratio of 60:40. The original required COD of the project was in July 2020 as per the PPA signed with NEA. However, the same is expected to be extended, given NEA's inability to complete the Koshi corridor transmission line (TL) project and the Covid-19 pandemic. As of mid-August 2020, the project was in the early stage of commissioning and had incurred ~21% of the cost.

The company is promoted by ~30 individual promoters with a major stake held by Mr. Dambar Bahadur Karki, Mr. Kedar Nath Karki, Mr. Gelje Lama, Mr. Ang Dorji Lama and Mr. Ganesh Man Singh Karki. The major promoters include individuals with experience in the construction sector (contractors), the legal sector (advocates) and others.

Annexure-1: Instrument details

Instrument	Previous rated amount (NPR million)	Current rated amount (NPR million)	Rating action
Fund based - Long-term loans	545	545	[ICRANP] LB+ (upgraded)
Fund based - Long-term loans	105	-	Rating withdrawn
Total	650	545	

Analyst Contacts

Mr. Kishor Prasad Bimali (Tel No. +977-1-4419910/20)

kishor@icranepal.com

Mr. Sailesh Subedi (Tel No. +977-1-4419910/20)

sailesh@icranepal.com

Relationship Contacts

Ms. Barsha Shrestha (Tel No. +977-1-4419910/20)

barsha@icranepal.com

About ICRA Nepal Limited

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For more information, visit www.icranepal.com

ICRA Nepal Limited

Sunrise Bizz Park, 6th Floor, Dillibazar, Kathmandu, Nepal.

Phone:+977 1 4419910/20

Email: info@icranepal.com

Web: www.icranepal.com

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