

## Maya Khola Hydropower Company Limited: [ICRANP] LBB-/ A4 (Assigned)

November 12, 2018

### Summary of rated instruments

Instrument *	Rated Amount (NPR Million)	Rating Action
Long-term loans, Fund-based	1,750	[ICRANP] LBB- (Assigned)
Short-term loans, Fund-based	75	[ICRANP] A4 (Assigned)
Short-term loans, Non-fund based	(1000)	[ICRANP] A4 (Assigned)
<b>Total</b>	<b>1,825</b>	

\* Instrument details are provided in Annexure-1

### Rating action

ICRA Nepal has assigned the long-term rating of [ICRANP] LBB- (pronounced ICRA NP L Double B minus) to the long-term loans of Maya Khola Hydropower Company Limited (MKHCL). ICRA Nepal has also assigned the short-term rating of [ICRANP] A4 (pronounced ICRA NP A four) to the short-term loans (including non-fund-based limits) of the company.

### Rationale

The assigned rating takes into account the significant execution risks of the 14.9-MW Maya Khola Hydroelectric Project (HEP) being developed by MKHCL. While the project is required to start operations from December 2019, only ~10-12% physical progress has been achieved till mid-Sept-18, with some major contracts still to be awarded. The experience of the promoters in hydro power development is a source of comfort; however, the early stage of construction and the risk of geological surprises expose the company to sizeable execution risks. The rating action is also impacted by the high evacuation risks as the Baneshwor substation (under Koshi corridor), where the power is to be evacuated, is still in preliminary stages of construction. This could push the project commissioning and hence increase the project costs, leading to modest debt coverage and return indicators, given the fixed tariffs. The revenues are linked to units generated, hence the inability of the plant to achieve its design operating parameters in case of weak hydrology, could further pressurise the debt coverage metrics. Timely infusion of equity also remains a concern, given the weak financial position of its largest promoter<sup>1</sup>. Nonetheless, the regulatory and offtake risks remain low because of firm offtake arrangement and stringent penalty terms (for delay by both the off-taker as well as the developer). Going forward, the company's ability to commission the project within the budgeted cost and stipulated time would remain the key rating sensitivity. Moreover, the timely completion of Koshi corridor for power evacuation would be a key rating determinant.

### Key rating drivers

#### Credit strengths

##### Presence of long-term power purchase agreement (PPA) results in low offtake and tariff risks-

MKHCL has entered into a PPA with Nepal Electricity Authority (NEA, the sole purchaser and distributor of electricity in Nepal) for its entire project capacity for a period of 30 years from commercial operation (subject to validity of generation licence). The predefined tariff as per PPA is NPR 4.8 per kWhr for wet season (Mid-April to Mid-December) while that for dry season is NPR 8.4 per kWhr. For these rates, there is 3% escalation per annum on the base tariff for five consecutive years after operation. With a firm PPA in place, tariff risks for the project are low. However, counterparty credit risk remains a concern, given the weak financial profile of NEA. This is partly offset by sovereign support to NEA being fully owned by Government of Nepal (GoN) and its past track record of timely payment to private HEP developers.

<sup>1</sup> KhaniKhola Hydropower Company Limited (KKHC) is the largest promoter of MKHCL with 12% equity commitment at present; while only 50% of this has been infused as on mid-Jul-2018.

**Supply-demand gap to result in healthy off take-**

Nepal is a net importer of electricity, even with limited electrification across the country and current suppressed demand (per capita power consumption of <150 KW as per 2015 study<sup>2</sup>, among the lowest in Asia). In the fiscal year (FY) 2017/2018, the peak power demand in the Integrated Nepal Power System (INPS) surged to 1,508 MW while the installed operational capacity was only 1,074 MW. The shortfall was met through import of electricity. As per NEA, the power demand is expected to grow at the rate of ~15% over next 22 years (driven by increase in electrification, per capita consumption and higher industrial demand) and hence the supply demand gap is expected to persist.

**Experienced promoter Group-**

The two largest promoters of the company<sup>3</sup> are directly linked to the hydropower sector, with KKHC being the developer and operator of the 6.36-MW Khanikhola HEP. PEDC, on the other hand, has been involved in multiple hydropower projects as a promoter/consultant. This provides some comfort in the front of development risks. Additionally, Prabhu Insurance Limited (from Prabhu Group) is also present as a promoter (~5% stake).

**Credit challenges****Project exposed to significant execution risks given nascent stages of construction-**

Hydro-power projects typically entail significant project execution risks as they are located in difficult terrain and hence adverse climatic conditions during the construction period and also natural calamities/geological surprises can result in time and cost overrun. Maya Khola HEP's required commercial operation date (RCOD) as per PPA is December 17, 2019; however, only ~10-12% of physical progress has been achieved till mid-September 2018, raising timeline concerns. Only ~10% of the total tunnel length of 2,205 m has been excavated in the initial six months of excavation owing to higher share of poor rock quality, which increases risk of geological surprises. This risk is partly mitigated by the experience of the developer/contractor in similar civil works. Nonetheless, contracts for other civil works, hydromechanical works and transmission line remain to be awarded. Any timeline delays would increase the project costs through hard cost escalations, incremental interest capitalisation as well as project monitoring costs. This would have a negative impact on the return indicators and debt coverage ratios of the project.

**Evacuation risks remain high, mitigated to an extent by presence of high penalty clauses-**

The generated power is to be evacuated through the proposed Baneshwor substation of Sankhuwasabha (under Koshi Corridor), which is to be constructed by NEA. The construction of the same is in initial stage so far and hence evacuation risk remains high, assuming MKHCL completes the project on time. These risks are mitigated to some extent by the presence of high-penalty provisions on part of NEA and the developer towards timely completion of respective transmission line and generation projects. Being a super six project<sup>4</sup>, the project would be entitled to penalty of 45% of lost revenue (vs. 5% clauses in other PPAs). Additionally, multiple projects are being developed in the corridor with some of these having earlier RCOD compared to MKHCL's project. These would also create timeline pressures to NEA in completing the transmission line corridor. On the offsite, the developer will also have to pay higher penalty (28% vs. 5% in other PPAs) in case of delayed project completion.

**Timely equity infusion critical given weak financial profile of largest promoter; debt component fully tied up-**

The equity requirement for the project is NPR 750 million, of which around 60% has been committed, 10% remains to be committed while the rest 30% is planned through IPO issuance. Till mid Jul-18, around 33% of equity requirements had been infused. However, as the largest promoter KKHC has weak financial profile<sup>5</sup>, the infusion of remaining equity commitment and timely raising the balance 40% equity would remain critical. Nonetheless, the tie up of the debt component (Debt to equity of 70:30) provides relief in debt funding risk.

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<sup>2</sup> Study conducted by Water and Energy Commission Secretariat, GoN

<sup>3</sup> Pashupati Energy Development Company (PEDC) (6% stake in MKHCL) is the largest promoter of KhaniKhola Hydropower Company Limited (KKHC) that operates a 6.36 MW HEP.

<sup>4</sup> Refers to six projects that were initially studied by Department of Electricity Development (DoED) and later auctioned to private developers through competitive bidding.

<sup>5</sup> KKHC has sustained sizeable losses so far eroding its net worth to ~NPR 39 per share against par value of NPR 100.

### High interest rates during construction could increase gearing levels, leading to low debt coverage ratio-

Being a low discharge project with relatively easily accessible location, the current project cost estimates are lower (NPR 168 million per MW). Nonetheless, this could witness escalations given the possible delays in project execution. Cost overrun, if any, would have to be financed either through incremental equity or through short-term debts, which could increase the gearing levels. Promoter's ability to timely increase equity in the event of cost overrun would also remain critical. Additionally, the high interest rates during the construction period (12.88% as of now; interest is to be capitalised during construction) would add up to the debt component. These could affect the project's ability to serve its debt obligations from its cashflows. Coverage indicators are hence likely to remain moderate in early years of operation due to high interest obligations.

### Hydrology risks remain high given lack of deemed generation clause in PPA-

Like most of the small rivers in Nepal, Mayakhola is also not a gauged river. Additionally, lack of deemed generation clause in PPA exposes the project to high hydrological risks; hence, loss in revenue in case of fall in hydrology will not be compensated. Contract plant load factor (PLF) for the project as per PPA at ~62% also remains on a slightly lower side compared to most projects. Low contract PLF would result in relatively lower revenue. Return and debt coverage indicators could further come under pressure in case the project is unable to achieve design operating parameters.

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

#### Links to applicable criteria:

[Corporate Credit Rating Methodology](#)

### About the company

Incorporated in May 2010 as a private limited company, Mayakhola Hydropower Company Limited (MKHCL) was converted to a public limited company in December 2016. Khanikhola Hydropower Company Limited (KKHC) and Pashupati Energy Development Company (PEDC) are the major promoters of the company. MKHCL is developing the 14.9-MW Mayakhola HEP in Sankhuwasabha district of eastern Nepal at the current estimated cost of NPR 2,502 million.

### Annexure-1: Instrument Details

Instrument	Limit (Amount in NPR Million)	Rating Action
Fund-based Long-term	1,750.00	[ICRANP] LBB-
Non-fund Based Short-term LC (within term loan)	(1,000.00)	[ICRANP] A4
Fund-based Short-term (Bridge Gap-within term loan)	(200.00)	[ICRANP] A4
Fund-based Short-term (Working capital loan)	75.00	[ICRANP] A4
Non-fund Based Short-term BG (within working capital loan)	(0.30)	[ICRANP] A4
<b>Total Rated Loan Limits</b>	<b>1,825.00</b>	

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### **About ICRA Nepal Limited:**

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