

## Palun Khola Hydropower Limited: [ICRANP] LB+/A4 assigned

January 08, 2024

### Summary of rating action

Instrument* (Amount in NPR million)	Rated amount	Rating Action
Long-term loan limits	2,860	[ICRANP] LB+; assigned
Short-term loan limits (within long-term limits)	(1,352)	[ICRANP] A4; assigned
<b>Total</b>	<b>2,860</b>	

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

### Rating action

ICRA Nepal has assigned a long-term rating of [ICRANP] LB+ (pronounced ICRA NP L B plus) to the long-term loans of Palun Khola Hydropower Limited (the company) and a short-term rating of [ICRANP] A4 (pronounced ICRA NP A four) to its short-term loans.

### Rationale

The ratings are mainly constrained by the high project execution risks for the company's under-construction 21-megawatt (MW) Palun Khola Small Hydropower Project, given its nascent development stage (financial progress of ~10% until the end of December 2023) while the project's required commercial operation date (RCOD) is October 5, 2025. These concerns are further accentuated by the presence of a ~1.5-kilometre (km) long headrace tunnel structure, which could potentially impact the project's cost and timeline estimates in case of any geological surprises. The ratings also remain subdued by the high evacuation risks for the project, given that the proposed connection point, i.e. the Hangpang (Dhungesanghu) Substation, is also in the initial stages of development. Amid the project's modest budgeted cost (~NPR 182 million per MW), any unexpected time and cost overruns could impact the return and coverage metrics of the company. The project is also exposed to moderate funding risk, as ~55% of equity requirement is yet to be injected [including 20% proposed to be raised from the initial public offering (IPO)]. However, the required debt component has been tied up, which remains a positive. The rating concerns also arise from hydrological risks owing to the absence of a deemed generation clause in the power purchase agreement (PPA), along with the presence of stringent terms in the PPA, regarding minimum required dry energy.

Nonetheless, the ratings factor in the prior experience of the promoters/directors in executing hydropower projects. ICRA Nepal also takes comfort from the project's long-term PPA at predetermined tariffs and escalations under the take-or-pay modality, eliminating the tariff and offtake risks for the project. Going forward, the company's ability to timely manage the funding gaps (for remaining equity and to cover for cost overruns, if any) and commission the project within the estimated cost/timeline will remain key rating sensitivities.

### Key rating drivers

#### Credit strengths

**Experienced promoters** – The major promoters of the company have experience in hydropower project development and operation (including the 44-MW project under Super Madi Hydropower Limited rated [\[ICRANP-IR\] BB-](#)), which could aid the company to overcome challenges during the construction and operational stages of its project.

**Low tariff and offtake risks** – The tariff and offtake risks are low, as the company has a 30-year PPA with the Nepal Electricity Authority (NEA) for the entire project capacity. The pre-defined tariff rates are NPR 4.8 per kWh for the wet season (June to November) and NPR 8.4 per kWh for the dry season. Additionally, there is a 3% annual escalation clause on the base tariffs, for a total of eight times, provided that the project operations start within six months of RCOD (thereafter, one tariff escalation will be lost for every successive year of delay).

## Credit challenges

**High project execution risks** – The 21-MW project is in the nascent stages of construction with ~10% financial progress achieved by the end of December 2023, mostly towards access road development and construction of onsite camps. The project's execution risks are accentuated by the presence of a 1.5 km long headrace tunnel structure, wherein adverse geological events could impede the execution pace and thus could impact the project costs. The major site mobilisation is yet to start and the finalisation of contract agreements for major segments such as civil, electro-mechanical (MoU signed, detailed contract yet to be awarded) and hydro-mechanical works are still pending. The rating concerns, along with the execution risks, are accentuated by the project's RCOD on October 5, 2025, providing less than two years for project execution compared to the initial estimate of ~3 years. Going forward, the extent of the RCOD extension, if any, by the NEA and the company's ability to expedite the project progress would have a bearing on factors such as late COD penalty, tariff escalation losses and others, which will eventually determine its return metrics.

**High evacuation risk** – The evacuation risk for the project remains on the higher side given the NEA's under-construction evacuation structure, i.e. the Hangpang (Dhungesanghu) Substation in the Taplejung district. Timely commissioning of the evacuation structures before the project's RCOD (October 5, 2025) will remain essential for the project's operational and financial profile. While the project is exploring alternative evacuation arrangements to lower the evacuation risks, concrete developments in this regard are yet to be achieved.

**Relatively modest project cost** – The project is being planned at a cost of ~NPR 3,814 million, leading to a modest project cost of ~NPR 182 million per MW. Typically, hydropower projects in Nepal are located in difficult terrain and witness unanticipated delays owing to various factors, generally leading to cost overrun. Such unexpected time and cost overruns could impact the return and coverage metrics of the company, given the fixed tariff structure.

**Moderate funding risks** – The project has been planned in a debt-to-equity ratio of 75:25. Until mid-November 2023, ~45% of the overall equity requirements were injected by the promoters while 20% is planned to be raised from IPO at a later date. The timely infusion of balance equity commitment by the promoters, as well as the timely collection from IPO, would remain crucial to avoid delays in project development due to funding gaps. However, the pace of equity injection from the promoters vis-à-vis project progress has remained good, which continues to be a positive amid the sizeable projects undertaken by the promoter group. While the financial closure for the required debt funding (at current cost estimates) also remains a positive factor, the promoter's ability to close any successive funding gap (in case of cost overrun) remains to be seen.

**High hydrological risks amid the stringent PPA terms** – The lack of a deemed generation clause in the PPA exposes the project to high hydrological risks. In case of adverse river flow scenarios, the project may face losses without receiving compensation for such occurrences. However, the source river is partially snow-fed, which somewhat reduces these concerns. Nonetheless, the stringent PPA terms could result in a proportional reduction of annual energy sales revenue in case of weak generation during the dry season (<30% of annual energy, as against ~31% dry energy mix as per the energy table agreed in PPA). The PPA also has a clause regarding the conditional offtake for 10% of the PPA capacity for five wet months during the entire project life if the COD is within FY2028, which also remains a concern.

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

**Link to the applicable criteria:**

[Corporate Credit Rating Methodology](#)

## About the company

Incorporated on September 29, 2016, as a private limited company, Palun Khola Hydropower Limited (the company) was converted to a public limited on July 13, 2023, to facilitate public participation. The company's paid-up capital (including advances towards share capital) was ~NPR 426 million as of mid-November 2023. As on the same date, the major promoters were Mr. Pushpa Jyoti Dhungana (~49% stake), Mr. Durga Prasad Uprety (~9%) and M/s Prabhu Capital Limited (7%), among others.

The company is developing a run-of-the-river project viz. Palun Khola Small Hydropower Project with a capacity of 21 MW in Taplejung district of Koshi Province of Nepal. The project's PPA is based on a 43% probability of exceedance model (Q43), for which the design discharge is 8.69 m<sup>3</sup>/sec, while the gross head is ~300 m. At ~68% contract plant load factor (PLF), the annual saleable energy would be 124.91 GWh, with a dry energy mix of 31.31%. The project has been planned to be developed at a total cost of ~NPR 3,814 million, which is to be funded in a debt-to-equity ratio of ~75:25.

### Annexure-1: Instrument details

Instrument* (Amount in NPR million)	Rated amount	Rating Action
<b>Long-term loan limits (A)</b>	<b>2,860</b>	[ICRANP] LB+; assigned
Fund-based facilities; Term loan	2,760	
Fund-based facilities; Term loan (unallocated limit)	100	
<b>Short-term loan limits (B)</b>	<b>(1,352)</b>	[ICRANP] A4; assigned
Non-fund-based facilities; Letter of credit (within term loan)	(852)	
Fund-based facilities; Bridge gap loan (within term loan)	(400)	
Non-fund-based facilities; Bank Guarantee (within term loan)	(100)	
<b>Total (A+B)</b>	<b>2,860</b>	

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### About ICRA Nepal Limited

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