

Rating Rationale

Arun Valley Hydropower Development Company Limited

Rating

Particulars	Amount (Rs. In Million)	Rating ¹	Rating Action
Issuer Rating	NA	CARE-NP BB+ (Is) [Double B Plus (Issuer)]	Assigned

**The issuer rating is subject to the company maintaining overall gearing not exceeding 1.50x at the end of FY21.*

CARE Ratings Nepal Limited (CRNL) has assigned Issuer rating of ‘CARE-NP BB+ (Is)’ to Arun Valley Hydropower Development Company Limited (AHPC). Issuers with this rating are considered to have moderate risk of default.

Detailed Rationale & Key Rating Drivers

The rating assigned to AHPC is constrained by relatively high estimated cost of project coupled with project implementation risk and stabilization risk, operational and execution risk of the project, in which AHPC has invested and provided corporate guarantee. The rating is also constrained by hydrology risk associated with run-of-the-river power generation and exposure to regulatory risk. The rating, however, derives strength from experienced promoter/ directors and management expertise, multiple hydropower projects being developed through associate companies, long track record in operating hydro power project coupled with comfortable financial performance during FY20 with dividend paying history and presence of power purchase agreement with sufficient period coverage. The ratings also factor in moderate counterparty risk, current project operated at moderate Plant Load Factor (PLF), financial closure achieved for the estimated project cost, low power evacuation risk, current demand & supply gap however possible oversupply in future and government support for the power sector. The ability of company to reduce the gap between operational PLF and contracted PLF, availability of sufficient hydrology, timely receipt of the payments from Nepal Electricity Authority (NEA) and timely execution of the project within the deadlines avoiding any cost overrun are the key rating sensitivities.

Detailed Description of the Key Rating Drivers

Key Rating Weaknesses

Relatively high estimated cost of project coupled with project implementation risk and stabilization risk

The total estimated cost of the Kabeli B-1 Cascade Hydroelectric Project (KBHEP) is relatively high at Rs 1,979 Mn (i.e. Rs 199 Mn per MW). Further, till October 16, 2020, ~21% of the total project cost has been incurred by the company. As per progress report submitted by the company, till Mid-December 2020, pre-implementation activities such as construction of access roads, store house, camp facility has

¹Complete definitions of the ratings assigned are available at www.careratingsnepal.com

been completed. The project has 37.1 m gross head and includes 1,165 m long headrace pipe (buried and exposed section), and two penstock pipes of 73 m and 75 m each. Two turbines (each having 5.13MW capacity), two generators (each having 6.23 MVA capacity) and one transformers with 13 MVA capacity is proposed to be installed in the project.

The contract for Civil work, Hydro mechanical work, Electromechanical work has already been awarded. As the project is at the initial stage of construction the achievement of RCOD looks challenging and the project is exposed to execution risk associated with construction of hydropower project and satisfactory operations thereafter. However, the project implementation risk is mitigated to some extent as the project is being built by experienced developer.

Operational and execution risk of the project, in which AHPC has invested and provided corporate guarantee

AHPC has total investment of Rs 342 Mn in Q1FY21 ending on Mid October 2020 which mainly includes investment in associates companies related to power projects. AHPC has majorly invested Rs 191 Mn in Arun Kabeli Power Ltd. (AKPL, 25MW operational hydropower project), Rs 43 Mn in Himalaya Urja Bikash Co. Ltd., (has 19 MW under construction hydropower project) and Rs 20 Mn in Rairang Hydropower Development Company Co. Ltd. (RRHP, 10.4 MW operational hydropower project). AHPC's income from investment will depend upon the performance of the associates companies. Associate companies with projects under construction are exposed to project execution and stabilization risk and operational projects are prone to performance risks. Further, AHPC has provided corporate guarantee to the loan availed by AKPL, Ridi Hydropower Development Company Limited, and RRHP aggregating to Rs. 1,843 Mn.

Hydrology risk associated with run-of-the-river power generation

Run-of-the-river power is considered to be unsteady source of power, as a run-of-the-river project has little or no capacity for water storage and therefore is dependent on the flow of river water for power generation. It, thus, generates much more power during times when seasonal river flows are high and much less during the drier months. AHPC is generating electricity from discharge of Piluwa River at Piluwa Khola Small Hydroelectric Project (PKHEP) and proposed to utilize water discharge from tailrace of Kabeli B-1 HEP from Kabeli River at KBHEP, which are snow fed streams. Hence, the projects are exposed to risk associated with variation in discharge of water from the aforesaid rivers. However, the hydrology risk is moderated to some extent as the operational PLF of Kabeli B-1 HEP (which tailrace water will be utilized by KBHEP) is comfortable at 50.70% of generation capacity and 93.87% of contracted energy during 9 months' period from Mid-October 2019 to Mid-July 2020.

Exposure to regulatory risk

Government of Nepal (GoN) has recently established Electricity Regulatory Commission (ERC) for regulating generation, transmission and distribution of electricity in Nepal. ERC will be the regulator

under the GoN which will be responsible for regulating hydropower companies in Nepal. Policies and the directives issued by ERC like approval process for IPO issuance, PPA approval through ERC poses a new challenge to hydropower companies. Company is planning to issue Rs. 524.12 Mn right shares for the construction of Kabeli B-1 Cascade Hydroelectric Project. The delay in approval process of the same will lead to delay in the construction of the project. Hence, sector is prone to regulatory risk and changes in other policies by GoN.

Key Rating Strengths

Experienced promoter/ directors and management expertise

AHPC is managed under the overall guidance of the company's Board of Directors (BoD), who possesses wide experience in the hydropower sector. AHPC has five board of directors. Mr. Ramesh Prasad Neupane is the Executive Chairperson of the company since September 2017, after served as Managing Director for seven years. Mr. Neupane has more than 20 years' of experience in hydro power sector and is one of the directors at Ridi Hydro Power Development Co. Ltd. [CARE-NP BB+/A4+] since 2010. Mr. Hasta Man Rai is the Project Manager of the company. Mr. Rai has ~26 years' of experience in hydro power sector in various position including Project Manager at Kabeli B-1 HEP (25 MW) for ~7 years.

Multiple hydropower projects being developed through associate companies

AHPC has been involved in operation and construction of hydropower projects by itself and through associate companies. Currently, AHPC and its associate companies has 57.30 MW operational hydropower projects which include 3MW PKHEP developed by AHPC itself and remaining 54.30 MW through associate companies. Further, 68.94 MW hydropower projects are under construction and 18.5 MW solar power projects are under initial stage to be developed by AHPC and its associate companies. Also, there is 8.5 MW operational Solar Project developed by its associate company.

Long track record in operating hydro power project coupled with comfortable financial performance during FY20

AHPC's PKHEP is operating since September 2003. AHPC reported total revenue of Rs.69 Mn during FY20 as compared to Rs.55 Mn in FY19 through sales of energy generated from PKHEP. The increase in the revenue was on account of increase in PLF during FY20. Other income (mainly include interest income, dividend income and profit on sale of investment) has been increased to Rs 60 Mn during FY20 from Rs 42 Mn in FY19 mainly due to increase in interest income and increase in income from sale of investment. The PBILDT margin decline to 67.64% during FY20 on account of increase in operating expenses. The total net worth of the company increased to Rs. 1,077 Mn during FY20 on the back of accretion of the profit to networth.

AHPC's overall gearing ratio was low at 0.07x at the end of FY20 (FY19: 0.05x) and interest coverage ratio was comfortable at 4.93x in FY20 (FY19:5.60x). The total repayment of the debt incurred for

construction of PKHEP has already been made by the company. Hence, the operational hydropower project is debt free and the cash flow from the PKHEP will provide cushion for the debt repayment of the Kabeli B1-Cascade Hydroelectric Project. However, the debt coverage indicators will deteriorate during FY21 on back of increase in bank loans for the under-construction project.

Further, AHPC's total income increased by 74.27% to Rs 47 Mn during Q1FY21 over Q1FY20 mainly due to increase in other income. PAT of the company increased to Rs. 33 Mn during Q1FY21 from Rs 14 Mn during Q1FY20 due to increase in total income coupled with decline in interest expenses.

Power purchase agreement with sufficient period coverage

AHPC had entered into PPA with Nepal Electricity Authority (NEA) as on January 23, 2000 and November 25, 2018 for sale of entire power generated by the plant of PKHEP and KBHEP respectively. The PPA is signed for a period of 25 years for PKHEP and 30 years for KBHEP from the date of COD or till validity of Generation License (which are obtained on August 21, 2000 for PKHEP for 40 years and November 12, 2019 for KBHEP for 35 years), whichever is earlier. Required Commercial Operation Date (RCOD) for KBHEP is September 17, 2021 as per PPA. PKHEP has two set of tariff rate. Current tariff rate for PKHEP is Rs. 3.90 per kWh and Rs. 5.52 per kWh for wet and dry seasons respectively. Tariff for KBHEP is Rs. 4.80 per kWh and Rs. 8.40 kWh for wet and dry season respectively with 3% escalation on base tariff for next 8 years. If the project is not completed within RCOD date, the company is bound to pay penalty to NEA as per the PPA. Also, number of escalations in the tariff rate will reduce if the delay in RCOD is more than 6 months.

Moderate counter party risk

AHPC is exposed to counter party payment risk pertaining to NEA, which has been making consecutive losses in past till FY16. However, as per the annual report published by NEA, during FY20 (provisional), NEA earned profit of Rs 11,056 Mn (Rs. 9,812 Mn during FY19) resulting the accumulated profit in its book. Further, during FY20, NEA achieved gross cash accrual of Rs 16,056 Mn (Rs 14,664 Mn in FY19). The counter party payment risk is moderated by the fact that, NEA is fully owned by government of Nepal, and generating positive gross cash accruals. Further, NEA has been making timely payment to independent power producers (IPPs) in past. The average collection period from NEA during FY20 was 41 days.

Current project operated at moderate PLF

The annual contracted PLF of the PKHEP is 74.38% of the installed capacity of the plant. The project has been operated at moderate PLF over the period. During FY19, the PLF from the project was at 51.90% (over generation capacity) which was improved to 64.71% during FY20. The power generation from the project as a percentage to the contracted power was 69.76% in FY19 and 86.96% in FY20. Operated PLF was lower than contracted energy PLF on annual basis on account of the hydrology issues during FY20. The company was liable to pay the short supply penalty of Rs. 2.88 Mn during FY20 (FY19: 3.82 Mn).

The ability of the company to reduce the gap between operational PLF and contracted PLF and availability of sufficient hydrology is the key rating sensitivity.

Financial closure achieved for the estimated project cost

The 9.94 MW KBHEP project's cost is estimated to be Rs. 1,979 Mn including Interest During Construction (IDC) and the same is proposed to be financed in a debt-equity mix of 70:30 (i.e. Rs 1,385 Mn debt and Rs 594 Mn equity and internal accruals). Financial closure of the total loan was achieved on October 14, 2020. AHPC has incurred Rs.410 Mn over the project till October 16, 2020 and the same is funded through equity and bank loan. Company ability to raise fund from propose right issue of Rs 524.12 Mn for funding of project cost would be key rating sensitivity.

Low power evacuation risk

The power generated from KBHEP along with other two projects (i.e. 25 MW Kabeli B-1 and 9.99 MW Iwa Khola) will be pooled at Kabeli B-1 pooling station which will be further evacuated to operational Amarpur Substation. Construction of 3 km long 33KV transmission line from powerhouse to Kabeli B-1 pooling station is within the scope of AHPC. KBHEP has obtained necessary approval to evacuate the power through this pooling station.

Current demand & supply gap however possible oversupply in future

As per the NEA's Annual Report for FY20, the current peak electricity demand is 1,408MW. The total domestic installed capacity stands at 1,328 MW which includes 632 MW owned by NEA and 696 MW by private sector IPPs. Overall, during FY20, total energy demand was 7,894 GWh which was met by import of 1,721 GWh from India whereas balance was met by domestic generation.

However, considering under construction projects which are expected to generate electricity in next 2-3 years and electricity demand which has not increased substantially in past few years could create a situation of oversupply in near future in wet season. This could put pressure on NEA's payment capabilities which is sole counter party with majority of PPA signed on take or pay basis.

Government support for the power sector

GoN Government of Nepal (GoN) considers hydropower generation as priority sector and intends to maximize private sector participation in generation of hydroelectricity by offering different exemptions and facilities. GoN has announced full tax exemption for first 10 years and 50% tax exemption for next 5 years for such person/entity who starts commercial operation, transmission and distribution of electricity up to mid-April 2024.

About the Company

AHPC is a public limited company promoted by business persons having long experience in the hydropower and other sectors for setting up Hydroelectric Project (HEP) in the territory of Nepal. The company was established in March 12, 1998 as a private limited company and later converted to public limited company in August 27, 2009. It was listed in Nepal Stock Exchange dt. August 28, 2009. AHPC

has two run of the river hydropower project; 3MW operational Piluwa Khola Small Hydroelectric Project (PKHEP) at Sankhuwasabha District which has been in commercial operation since August 2003 and 9.94MW under construction Kabeli B-1 Cascade Hydroelectric Project (KBHEP) at Panchthar District. KBHEP will utilized water from tailrace of 25MW operational Kabeli B1 Hydroelectric Project of Arun Kabeli Power Ltd.

As per the Generation License, from Government of Nepal – Ministry of Energy, PKHEP and KBHEP, the project shall be handed, on whatever conditions the project is, to the Government of Nepal after expiry of Generation License. Paid up capital of the company as on July 15, 2020 stood at Rs 998.32 Mn and is proposed to be increased to Rs. 1,572.36 Mn resulted after 5% bonus share issuance during FY20 followed by 1:0.5 right share issue during FY21. Ms. Sumitra Devi Neupane (holds 4.33%), Mr. Amar Raja Tamrakar (holds 3.60% stake), and Mr. Guru Prasad Neupane (holds 3.48% stake) are major shareholders of the company as on December 06, 2020. Company is planning to issue Rs. 524.12 Mn right shares for the construction of Kabeli B-1 Cascade Hydroelectric Project.

Brief Financial Performance during the last three years is as follows:

(Rs. In Million)

Particulars	FY18 (A)*	FY19 (A)	FY20 (A)
Income from Operations	71	97	130
PBILDT	39	40	47
PAT	20	53	70
Overall Gearing (times)	0.06	0.05	0.07
Interest Coverage Ratio	4.88	5.60	4.93

*Audited

Analyst Contact	Group Head	Relationship Contact
Ms. Elisha Lamichhane elisha.lamichhane@careratingsnepal.com Tel No.: +977-01-4012629	Ms. Shalini Sanghai shalini.sanghai@careratingsnepal.com Tel No.: +977-01-4012628	Mr. Sajan Goyal sajan.goyal@careratingsnepal.com Tel No.: 9818832909/+977-01-4012628/29/30

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