Spark Hydroelectric Company Limited

Ratings

Facilities	Amount (Rs. in Million)	Rating[1]	Rating Action
Long Term Bank Facilities	19,300.00	CARE-NP BB- [Double B Minus]	Reaffirmed
Total Facilities	19,300.00		

CARE Ratings Nepal Limited (CRNL) has reaffirmed the rating of 'CARE-NP BB-' assigned to the long-term bank facilities of Spark Hydroelectric Company Limited (SHCL).

Detailed Rationale & Key Rating Drivers

The reaffirmation of rating assigned to the bank facilities of SHCL factors in project implementation risk and operations stabilization risk thereafter associated with its under-construction hydropower project. The project is in initial stage of construction, exposing it to potential risks of cost and time overrun which remain common challenges for hydropower projects in Nepal primarily due to geological surprises encountered during the construction phase. Such delays or escalations could adversely impact the project's revenue profile and debt service coverage indicators, particularly given the fixed tariff structure outlined in the Power Purchase Agreement (PPA) with the Nepal Electricity Authority (NEA). The rating takes note of hydrology risk associated with run-of-the-river power generation, risk of natural calamities and the company's exposure to volatile interest rate risk.

The rating, however, derives strengths from the company's experienced promoters and management team in the hydropower sector, low offtake risk, moderate counter party risk and government's support for the power sector. The rating also factors in the low power evacuation risk, given that the project's proposed substation is already operational.

Going forward, the ability of the company to successfully execute the project within the envisaged cost and time and early stabilization thereafter will be the key rating sensitivities.

Detailed description of the key rating drivers

Key Rating Weaknesses

Project implementation and stabilization risk

SHCL is setting up a 145 MW run-of-river Tamor Mewa Hydroelectric Project (TMHP) in Phungling municipality, Taplejung district of Nepal. The estimated cost of the project is Rs 25,738 Mn for total installed capacity of 145 MW (i.e. Rs 178 Mn per MW) which is proposed to be financed in debt equity mix of 75:25. As for the debt portion, Debt for 128 Mw i.e. 17,280 has been tied up. ~33% of the equity (including advances) has been infused till June 2026. The project is in initial stage of construction with ~8% financial progress as on May 14,2026. The power evacuation risk is low as the power generated from the project is proposed to be evacuated from 6.3 km long transmission line to 220 kv Hangpang (Dhungesangu) substation which is already operational. Required Commercial Operation Date (RCOD) of the project is October 10, 2028. If the project is not completed within the RCOD, the company will be liable to pay delay penalty. Furthermore, if COD is delayed by 6 months to 18 months from RCOD, there are restriction clauses in escalation of tariff rate. It is, therefore, critical for the company to complete the project within the timeline to avail the accelerated clauses of tariff. Any delay in the same would impact the project's expected returns and debt servicing capabilities which is critical from credit perspective.

[1]Complete definition of the ratings assigned are available at www.careratingsnepal.com and other CARE publications

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

A Run-of-the-river (ROR) power project is recognized as a variable energy source of power generation due to its reliance on natural river flow without significant water storage capacity. The dependency on river flow makes the power generation from the project highly responsive to seasonal variations. The project extracts discharge from Tamor Khola, covering a catchment area of 2,062 sq. kms. SHCL tends to produce higher electricity output during the wet season, from June to November, when river flows are abundant. Conversely, during the dry season, from December to May, power generation may be reduced due to lower river flows. Consequently, the project's performance will be exposed to the inherent risk associated to the natural hydrological patterns, and variability in water discharge throughout the year.

Risk of Natural Calamities

In Nepal, hydropower projects are usually located in terrains that are topographically challenging making their construction and operations vulnerable to adversities of nature. Floods and landslides that tend to occur in these areas pose threat to these power projects damaging their infrastructures as well as impacting their timely completion. Moreover, disruption in their construction in turn could lead to time and/or cost overrun, negatively impacting the project's financial aspects. Moving forward also, these natural calamities can adversely affect the smooth flow of power generation and distribution, which can further impact financial returns of the projects. SHCL is also exposed to such risks of natural calamities that might cause infrastructural, operational and financial damages to the project.

Exposure to volatile interest rate

SHCL's interest rates are based on floating interest rate regime, where a certain premium is added to the monthly base rate and interest rate is changed accordingly on monthly basis. The base rates of the banks and financial institutions (BFIs) in Nepal remain quite volatile as they are impacted by available liquidity in the system, which leads to changes in interest rates. Any rate hikes could put additional interest burden on the company, squeezing its profitability and impacting its liquidity position.

Key Rating Strengths

Experienced promoters and management team

SHCL has seven board of directors having long experience in various sectors including both operational and under construction hydropower projects in Nepal. The board is chaired by Mr Sudip Kumar Chaudhary, have over two decades of experience in hydropower and construction sector. He is also chairman of Him River Power Limited (CARE-NP BB). Other directors of the company have prior experience in operational hydropower projects including hydropower projects of Super Mai Hydropower Limited, Mandakini Hydropower Limited (CARE-NP BB+(Is)), Singati Hydro Energy Limited (CARE-NP BB+/A4+) etc. The board is supported by other experienced management team.

Low offtake risk and moderate counterparty risk

SHCL had entered into a long term PPA with NEA as on October 11, 2023 for sale of 128 MW power to be generated from the project on take or pay basis. However, PPA includes provision of reserve margin where 10% of contracted energy for the period of mid-June to mid-November is placed under reserve margin (take and pay modality) and will be purchased under instruction of Load Dispatch Center (LDC). PPA has been entered for the period of 30 years from the COD or till validity of generation license (obtained on October 11, 2020 for 35 years) whichever is earlier. PPA period may be extended with mutual consensus during the last six months of validity. Tariff rate as per PPA is Rs 4.80 per Kwh for wet season (mid-April-mid-December) and the tariff rate for dry season (mid-December-mid-April) is 8.4 per Kwh with 3% annual escalation on base tariff for 8 years. The contracted Plant Load Factor (PLF) for total 128 MW is 63.45% with energy contracted of 711.43 MU for 128 MW .It is critical for the company to start the commercial production within the RCOD to have the benefits of all the eight tariff escalations in the base tariff. The escalations would support the project's incremental revenue, return and debt service coverage indicators.

Favourable Government policies towards power sector

Government of Nepal (GoN) has featured the significance of power generation as a priority sector and encouraging private sector involvement by providing various exemptions within the power generation sector. GoN has also announced a comprehensive tax incentive package, offering full tax exemption for the initial 10 years and a 50% tax exemption for the subsequent 5 years to individuals or entities engaged in the commercial operation, transmission, and distribution of electricity until mid-April 2028. This approach is aimed at promoting investment and growth in the energy sector. Furthermore, directives from the Nepal Rastra Bank (NRB) mandate financial institutions regulated by NRB to allocate a minimum share of their total advances to the energy sector. This strategic initiative is expected to contribute to the financial support and development of projects within the energy sector which argues well for the sector. The increasing trend of cross-border energy trade, coupled with the growing prospects stemming from bilateral agreements between Nepal and India for additional power export from Nepal to India, further boosts the long-term demand outlook for the power sector in Nepal.

Applicable Criteria

Rating Methodology - Power Generation Projects

About the company

Spark Hydroelectric Company Limited (SHCL) is a public limited company, incorporated on November 30, 1999. It is setting up of a 145 MW run-of-river Tamor Mewa Hydroelectric Project (TMHP) in Phungling municipality, Taplejung district, Koshi province of Nepal. The power project is proposed to utilize available head and flow from Tamor Khola which is one of the major tributaries of Saptakoshi River. The project is constructed under BOOT (Build, Own, Operate and Transfer) mechanism.

Annexure-1: Details of Instruments/Facilities

Name of the Instrument	Type of the Facility	Amount (Rs. Million)	Rating
Long Term Bank Facilities	**Term Loan**	**17,280.00**	**CARE-NP BB-**
Long Term Bank Facilities	**Proposed**	**2,020.00**	**CARE-NP BB-**
Total Facilities		**19,300.00**	

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