

XAYABURI POWER CO., LTD

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CORPORATES

Company Rating: A-
Outlook: Stable

Contacts:

Narongchai Ponsirichusopol
narongchai@trisrating.com

Jarturun Sukthong
jarturun@trisrating.com

Parat Mahuttano
parat@trisrating.com

Monthian Chantarklam
monthian@trisrating.com



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RATIONALE

TRIS Rating assigns a company rating of “A-” to Xayaburi Power Co., Ltd. (XPCL) with a “stable” rating outlook. The rating reflects the reliable cash flow from the company’s long-term power purchase agreement (PPA) with the Electricity Generating Authority of Thailand (EGAT; rated “AAA” with a “stable” outlook by TRIS Rating). The rating also incorporates the prudent contractual framework of the PPA, and competitive cost of electricity generation. However, these strengths are held back by the company’s debt-heavy capital structure, and high interest expense burden. The rating is also constrained by the uncertainty of water flow and the country risk of the Lao People’s Democratic Republic (Lao PDR).

KEY RATING CONSIDERATIONS

Sizable run-of-river hydroelectric power plant

XPCL owns and operates the Xayaburi Hydroelectric Power Plant (XHPP), a 1,285 megawatts (MW) run-of-river hydroelectric power plant. XHPP is located on the bank of Mekong River in Xayaburi province, Lao PDR. The project is established under the memorandum of understanding between the government of Thailand and the government of the Lao PDR (GOL) in relation to the power sale to Thailand.

The run-of-river power plant is a diversion dam on the river, without a reservoir as in the case of most other conventional dams. The dam regulates the level of upstream water and release water through power generators along the river. The amount of water flowing in is equal to the amount of water flowing out of the power plant. Hence, XHPP could generate electricity all year round if the water flow is sufficient.

Reliable cash flow backed by long-term PPA with EGAT

The rating is primarily built on the reliable cash flow backed by a 29-year PPA with EGAT. The PPA is a take-or-pay basis. This type of PPA largely mitigates market risk. The electricity to be sold consists of three components: Primary Energy (PE), Secondary Energy (SE), and Excess Energy (EE). Each component is separated by the period of power sold. The tariff for PE is paid in US dollars 50% and Thai Baht 50% while the tariff for SE and EE is paid in Thai Baht.

EGAT is obliged to purchase up to 5,709 gigawatt-hour (GWh) each year, which is the Annual Supply Target or the Committed Energy. The Annual Supply Target comprises PE of 4,299 GWh and SE of 1,410 GWh.

XPCL has relatively low cost of electricity generation, compared to other types of power plants. Average tariff is about THB1.8 per kilowatt-hour (kWh). Therefore, we expect EGAT to dispatch electricity from XPCL as base load.

XPCL commenced its operation in October 2019. In 2020, revenue was THB12.1 billion while earnings before interest, taxes, depreciation, and amortization (EBITDA) were THB11.1 billion. In 2021, revenue improved by 15.5% to THB14 billion. EBITDA came in at THB13 billion. The increased revenue was due to higher water flow.

Contractual framework mitigates key risks

The contractual mechanism of the PPA helps mitigate the impact from the fluctuating water flow. This mechanism allows XPCL to sell electricity in

excess of the Annual Supply Target in wet years. The delivery of energy in excess of the target is accounted and compensated in dry years. Conversely, if XPCL delivers electricity less than the Annual Supply Target in a dry year, XPCL could account the shortfall and deliver more electricity in the following years.

For instance, XPCL sold electricity of 7,221 GWh to EGAT in 2021, 5,640 GWh of which was counted under the quota of the Annual Supply Target of 5,709 GWh. The rest was counted as non-committed energy supply of 1,581 GWh. The shortfall amount of 69 GWh under the Annual Supply Target in 2021 was cumulated to the Annual Supply Target in 2022. As a result, XPCL could sell electricity higher than the Annual Supply Target of 5,709 GWh in 2022 if there is enough water flow.

In addition, XPCL has a mechanism in place that safeguards the receipt of cash flow from operation, whereby the payments from EGAT are paid to the company's account in Thailand. We expect revenue from sale of electricity to EGAT will represent 98% of total revenue. Such mechanism mitigates the cross-border risks of fund transferability and currency convertibility.

Susceptibility to fluctuation in water flow

XHPP was developed based on historical data of rainfalls over a past period of 50-60 years. The company also collected average water flow data covering 2009-2021, to obtain more updated information and arrive at more precise estimation of power output. That being said, XPCL remains highly susceptible to the fluctuation of water flow in the Mekong River. The level of water flow through the power plant largely hinges on rainfalls, water volume in secondary rivers, and water flow from upstream dams in China. Moreover, the effect of climate change is an increasing risk factor. The low level of water flow in 2020-2021 had resulted in electricity output falling short of forecast.

However, to put the effect of water flow into perspective, XPCL needs water inflow of approximately 400-600 Cubic Meters per Second (CMS) to operate one generator for EGAT while the lowest water flow in Mekong River during dry season is approximately 1,200 CMS. In addition, the mechanism in PPA helps stabilize cash flow over a multiple-year period.

Debt-heavy capital structure

At the request of GOL, XPCL constructed a fish passing system for the purpose of fish preservation. The additional project cost about THB19.4 billion was spent for fish passing facilities, sediment-flushing facilities, and earthquake resistant. In return, GOL granted an extension of the concession for another two years. The additional cost was supported by shareholder loans. That resulted in the company carrying a debt-heavy capital structure and immense interest burden. As of December 2021, total debt was at THB104.5 billion, consisting of project loans of THB83.3 billion and the sponsor loan, including accrued interest, of THB21.2 billion. The debt to capitalization ratio stood at 77.1%. The debt to EBITDA ratio was 7.5 times while the funds from operations (FFO) to debt ratio was at 8.2%.

In our base-case forecast, we assume XPCL to issue debentures amounting to THB38.5 billion to partially replace project loans and shareholder loans during 2022-2026. We project revenue to be THB12.4-THB12.8 billion in 2022-2025, translating into EBITDA of THB11.3-THB11.4 billion, and FFO of THB6.5-THB7.4 billion over the forecast period. We expect XPCL will have no major investments or expenditures in the foreseeable future, other than the planned maintenances. In effect, we expect total debt to gradually decline to THB74.6 billion in 2025. The debt to capitalization ratio should gradually decline to a level below 65%. We forecast the ratio of debt to EBITDA will decrease toward 6 times and the ratio of FFO to debt will improve to 10% in 2025.

Adequate cash to meet near-term debt obligations

We view that XPCL has adequate liquidity to cope with maturing debt obligations. The project loans have cash waterfall mechanism to reserve cash for debt repayment. As of December 2021, XPCL had restricted bank deposits of THB5.5 billion reserved for the following six-month principal repayments and interest expenses according to the condition of project loans. XPCL also intends to maintain a minimum cash on hand of about THB1.5 billion in preserving liquidity.

BASE-CASE ASSUMPTIONS

- Annual electricity generation to be in the range of 6,400-6,500 GWh in 2022-2025.
- Plant availability factor during 2022-2025 to be higher than 94%
- Operation and Maintenance (O&M) expenses to increase by about 3%-5% per annum
- Energy tariff, royalties, and corporate income tax are in accordance with the terms of the PPA and the concession agreement.
- No capital spending during 2022-2025, except for the planned maintenances

RATING OUTLOOK

The “stable” outlook reflects our expectation that XHPP will perform satisfactorily and deliver stable cash flow over the long term, leading to a steady decline in financial leverage.

RATING SENSITIVITIES

As XHPP is in early phase of operation, a credit upside is unlikely in the near term. However, over a longer horizon, a credit upgrade could occur if XPCL could generate higher-than-expected cash flow while the cash flow against debt obligations significantly improves on a sustain basis. Negative rating pressure could develop if XPCL’s operating performance is consistently below expectation, resulting in material weakening in cash generation against debt obligations.

COMPANY OVERVIEW

XPCL is a limited company incorporated in June 2010 under the laws of the Lao PDR. XPCL's shareholders are CK Power PLC (CKP -- 42.5%), Natee Synergy Co., Ltd. (NSC -- 25%); a wholly owned subsidiary of Global Power Synergy PLC, The Electricity Generating Public Company Limited (EGCO -- 12.5%), and EDL-Generation PLC (EDL-GEN -- 20%), a subsidiary of Electricite du Laos (EDL).

XPCL engages in the generation and sale of electricity from the XHPP. The company holds a 29-year PPA with EGAT (1,220 MW) and a 31-year PPA with EDL (60 MW). XPCL holds concession agreement with the GOL on Build-Own-Operate and Transfer basis. Under the concession agreement, XPCL is obliged to pay royalties and corporate income tax. Besides, the company has a commitment to implement a community development program to support the economic and social development of the nearby communities.

XHPP consists of eight generators, seven of 175-MW and one of 60-MW generators. The power generated from seven generators is sold to EGAT via the 500 kilovolt (kV) transmission line from Xayaburi Substation to Tha Li Substation in Loei province, Thailand. At the same time, the power generated from 60-MW generator is sold to Electricite du Laos (EDL).

Apart from power generators, the project contains navigation lock which is designed to allow boat passing from down-to upstream and vice versa, with free of charge to all users. The fish passing facilities was constructed to let fish safely pass from upstream to downstream and downstream to upstream.

XPCL applied community development program to ensure villagers around the project are proper recovering from relocation in terms of economic and others. Water quality, sediment and fish are periodically monitored to ensure the environment surrounding the project is well-managed.

XPCL commenced its operation on 29 October 2019. For day-to-day operations, XPCL has its own operation and maintenance teams. XPCL could leverage the strengths of major shareholder, CKP. CKP has proven experience and expertise in running hydroelectric power plant.

KEY OPERATING PERFORMANCE
Table 1: Performance Statistics of Xayaburi Hydroelectric Power Plant

Plant Performance	2021	2020	2019*
Electricity generation (GWh)	7,305	6,301	798
Average capacity factor (%)	65.4	56.2	46.9
Average plant availability (%)	92.9	96.0	99.8
Average Monthly Water inflow (cms)	3,039	2,534	1,707
Average upstream water level (masl)	275	275	275
Average downstream water level (masl)	241	240	239

* Based on performance statistic in November and December 2019

Notes: Electricity generation = PE + SE + EE + Test Energy

GWh = gigawatt-hours

cms = cubic meters per second

masl = meter above sea level

Source: XPCL

FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS

Unit: Mil. THB

	----- Year Ended 31 December -----		
	2021	2020	2019
Total operating revenues	13,949	12,074	1,567
Earnings before interest and taxes (EBIT)	8,808	6,924	2,144
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	12,985	11,095	2,878
Funds from operations (FFO)	7,960	5,140	(2,447)
Adjusted interest expense	5,025	5,955	5,325
Capital expenditures	1,227	45	9,767
Total assets	134,480	131,465	129,943
Adjusted debt	96,926	97,034	101,697
Adjusted equity	28,878	27,915	26,772
Adjusted Ratios			
EBITDA margin (%)	93.09	91.89	183.72
Pretax return on permanent capital (%)	6.66	5.31	1.70
EBITDA interest coverage (times)	2.58	1.86	0.54
Debt to EBITDA (times)	7.46	8.75	35.33
FFO to debt (%)	8.21	5.30	(2.41)
Debt to capitalization (%)	77.05	77.66	79.16

RELATED CRITERIA

- Key Financial Ratio and Adjustments for Corporate Issuers, 11 January 2022
- Rating Methodology – Corporate, 26 July 2019

Xayaburi Power Co., Ltd. (XPCL)

Company Rating:	A-
Rating Outlook:	Stable

TRIS Rating Co., Ltd.

Silom Complex Building, 24th Floor, 191 Silom Road, Bangkok 10500, Thailand Tel: +66 2 098 3000

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