

CK POWER PLC

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CORPORATES

Company Rating: A
Outlook: Stable

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RATIONALE

TRIS Rating assigns the company rating of CK Power PLC (CKP) at "A". The rating reflects the company's proven track record of developing and operating large-scale hydroelectric power plants as well as cogeneration power plants, predictable cash flow derived from power purchase agreements (PPAs) with creditworthy counter parties, and the proven technology used in the hydropower plants. However, the rating is constrained by the hydrology risk and the sovereign risk of the Lao People's Democratic Republic (Lao PDR; rated "BBB+/Negative" by TRIS Rating).

KEY RATING CONSIDERATIONS

Proven track record of developing power projects

CKP's strong business profile is built on its record of developing and operating large-scale hydropower projects in the Lao PDR. Its success in developing large-scale hydropower projects is aided by the strength of its major shareholder, CH. Karnchang PLC (CK; rated "A-/Stable" by TRIS Rating).

CKP, as a project developer for large-scale hydropower projects and gas-fired cogeneration power plants, has engaged in contractual arrangements, which have helped mitigate most of its project risks. Its project management is sound. CKP's major operating assets, which are the Nam Ngum 2 hydroelectric power project (NN2HPP) and two gas-fired cogeneration power plants, commenced operations on time and within budget.

Strength in hydropower

Currently, CKP is developing the Xayaburi hydroelectric power project (Xayaburi HPP), which is the largest hydropower plant in the Lao PDR. The project construction was 90.6% complete as of February 2018, and the operation of the first unit is expected to commence in November 2018. Based on CKP's experience, TRIS Rating believes the project should commence operation as scheduled.

In terms of CKP's power plant portfolio mix, hydropower plants make up the vast majority of CKP's portfolio of power-generating assets. The technology used in the hydroelectric power plant is proven and helps ensure the operation reliability. Once the Xayaburi HPP commences operation, the equity capacity (or capacity in proportion to CKP's ownership stakes) at hydropower projects will account for about 80% of the company's total equity capacity of 810.7 megawatts (MW). In 2017, the company's EBITDA (earnings before interest, tax, depreciation, and amortization) was Bt3.68 billion, of which about Bt2.6 billion was contributed by NN2HPP and the rest was from two gas-fired cogeneration power plants and one small solar power project.

Predictable cash flows from long-term PPAs with creditworthy parties

The rating is cognizant of the company's predictable cash flow, due in large part to well-structured PPAs and the creditworthiness of major power off-takers. The Electricity Generating Authority of Thailand (EGAT; rated "AAA/Stable" by TRIS Rating) is the main off-taker, buying about 94% of CKP's total installed capacity, including the Xayaburi HPP. The rest is purchased by Electricite Du Laos (3%), industrial customers (2%), and the Provincial Electricity Authority (PEA; 1%).

All of CKP's operating power plants have secured long-term PPAs. The NN2HPP

and the gas-fired cogeneration power plants, under the small power producer (SPP) scheme, hold 25-year PPAs with EGAT. The solar power projects hold five-year PPAs (which auto-renew every five years) with the PEA. Meanwhile, the Xayaburi HPP has secured PPAs with EGAT and EDL for 29 and 31 years, respectively.

The risks of hydropower projects are considerably mitigated by well-structured PPAs. The NN2HPP's PPA contains a mechanism allowing more electricity to be sold than the annual supply target and then to receive compensation for those extra sales in a dry year. Whenever the NN2HPP sells an amount of electricity below the annual supply target, the shortfall can be added to the annual supply target in the following years. This mechanism helps smooth out the project's cash flow, and it is also applied to the Xayaburi HPP.

The PPAs for the SPP power plants allow fuel costs to be passed on to EGAT as long as a plant meets the agreed plant efficiency. If the plant efficiency cannot be achieved, the power producers have to absorb the additional fuel costs that are above the agreement. The exposure to fluctuations in fuel prices is hence manageable. For the solar power projects, CKP obtains an adder tariff of Bt8 per kilowatts-hour (kWh) on top of the base tariff for 10 years, making the projects financially viable.

The Xayaburi HPP is expected to enlarge power production and income

CKP is vowing to increase its interest in Xayaburi Power Co., Ltd. (XPCL), a CKP's affiliate owning Xayaburi HPP, from 30% to 37.5%. This increase requires nearly Bt2.5 billion of funds, which CKP is intent on borrowing.

At the request of the government of Laos (GOL), the Xayaburi HPP requires additional construction with respect to environment aspects, causing a significant increase in the project value. In return for the additional investment, the Xayaburi HPP will receive compensation from the GOL in the form of a substantial reduction in royalty fees and corporate income tax. The Xayaburi HPP is also receive a two-year extension of the concession agreement.

The Xayaburi HPP has passed the period of high construction risk. The progress on the project was reported at 90.6% as of February 2018. TRIS Rating expects this much-anticipated project to commence commercial operation in October 2019 as planned. The project will generate revenue of about Bt15 billion and EBITDA of about Bt13 billion per annum. Based on CKP's 37.5% interest in the project, CKP is expected to record a share of the profit of about Bt1 - Bt1.5 billion per annum in a full year of operation and receive dividend income of about Bt400 - Bt800 million per annum from 2021 onward.

Exposure to hydrology risk

The forecast energy production of the hydropower plants is established using long-term hydrological statistics of average water flow, but yearly water flows can vary. Even longer-term records offer no assurance that the hydrology will not change. Notwithstanding the merit of the contractual framework, the NN2HPP and the Xayaburi HPP remain susceptible to a precipitous and lingering falloff in water availability, which could drastically dampen cash flow and returns from the projects.

Exposure to country risk of the Lao PDR

In light of geographic diversification, CKP's main power plants are located in the Lao PDR. Therefore, CKP is exposure to the country risks, such as transparency and consistency of regulations, changes in tariff systems, as well as money transferability and convertibility. However, these risks are largely offset by the concession agreement with the GOL and the PPAs with EDL, the state-enterprise of Laos, one of the sponsors of both the NN2HPP and the Xayaburi HPP. The market risk is mitigated by the PPAs with EGAT.

Looking ahead, CKP will continue to place a great emphasis on neighboring countries. TRIS Rating believes the company will leverage its strengths to develop sizable hydropower projects. Since a hydropower project, in essence, takes several years to develop and alters large areas of the environment, TRIS Rating does not expect massive growth in the company's assets in the next few years.

Satisfactory performance and financial profile

CKP's EBITDA was about Bt3.6-Bt3.7 billion per year during the past three years. The EBITDA is expected to increase to about Bt4-Bt4.5 billion per year during 2018-2020. The increase is due to the full year of operation of the second cogeneration power plant, which will add about Bt500-Bt600 million per year in earnings. In addition, the water inflow to the NN2HPP is expected to improve from the 2017 level, which will help ramp-up EBITDA. The operation of the Xayaburi HPP is also built into TRIS Rating's forecast.

CKP's operating margin (operating income before depreciation and amortization as a percentage of sales) is relatively high at about 50%-60% compared with other power holding companies, because CKP has concentrated its investment in the hydropower projects. On average, CKP's hydroelectric power project has an operating margin of about 75%-80%, while the

cogeneration power plant has an operating margin of about 20%-25%. Such profitability is in line with peers.

At the end of 2017, CKP had a satisfactory capital structure. The company had total debt of Bt28.4 billion with a debt to capitalization ratio of 48.1%. The EBITDA interest coverage ratio was 2.5 times at the end of 2017, steadily declining from 3.3 times at the end of 2015. The ratio of funds from operations (FFO) to total debt was 8.9% in 2017. These ratios are expected to improve during 2018-2020 due to the full year operation of the second cogeneration power plant (Bangpa-in Cogeneration 2) and the commencement of operations at the Xayaburi HPP in late 2019.

Adequate liquidity profile

On a consolidated basis, CKP holds cash and cash equivalents, including restricted cash for project loans, of about Bt5.8 billion at the end of 2017. TRIS Rating expects CKP's FFO will be about Bt2.8 billion in 2018. Cash on hand and FFO are sufficient to cover loan repayments of about Bt1.6 billion, capital expenditures of about Bt600 million and investments, including the acquisition of an additional 7.5% interest in XPCL, totaling about Bt3.3 billion in 2018. However, CKP plans to issue new debentures or secure loans from financial institutions worth about Bt2.5 billion for the new investments.

Based on TRIS Rating's forecast, the operating subsidiaries should be capable of generating sufficient cash to repay their respective financial obligations, mostly project loans. In addition, the operating subsidiaries have to make deposits in the reserve accounts for the next loan payment. These accounts serve as a protective cushion for the lenders, in case operating results do not reach expectations.

On a stand-alone basis, CKP has bonds coming due in 2019 to the tune of Bt4 billion. At the end of 2017, CKP held cash and cash equivalents of about Bt2.2 billion. The dividend income from subsidiaries and associated companies is forecast at about Bt1 billion per annum. As a result, TRIS Rating expects that CKP will refinance the bonds with new debentures or borrow from financial institutions. The refinancing risk is largely mitigated by CKP's predictable revenue stream and its accessibility to the money market. Currently, CKP has secured back-up credit facilities from financial institutions, to be used for refinancing the maturing debts.

RATING OUTLOOK

The "stable" outlook reflects TRIS Rating's expectation that CKP's power plant will perform in line with their respective guidance. As such, CKP will continue to receive stable cash flows from its investments. Moreover, TRIS Rating also expects the Xayaburi HPP will commence operation as planned, and will contribute return as expected.

RATING SENSITIVITIES

Any credit upside would be limited over the next 12-18 months. A downside case may emerge if the performances of the operating power plants fall short of estimates, which weakens CKP's cash flow. The rating could also be lowered if the Xayaburi HPP delays its commercial operation date or its performance deviates materially from the expectation. Any large debt-funded investments which deteriorates the company's financial profile would be a negative pressure on the rating as well.

COMPANY OVERVIEW

CKP, as a holding company, was spun off from CK to be a flagship company of the CK Group to invest in power business. CKP was listed on the Stock Exchange of Thailand (SET) in July 2013. As of March 2018, CKP's major shareholders were CK (27.4%), TTW PLC (25.3%), and Bangkok Expressway and Metro PLC (19.3%). The rest of the company's shares was publicly owned.

CKP's track record dates back in 2004 when it was a department of CK developing the 615-MW NN2HPP in the Lao PDR. This project's initial operation was in March 2011 and it commenced commercial operation in January 2013. The management, development, and operation teams were transferred to CKP in 2013. Currently, CKP invests in seven power projects, through its subsidiary and affiliated companies, with an aggregated installed capacity of 2,160 MW or equity capacity of 810.7 MW. Out of the equity capacity, about 425 MW is in operation while the remaining of 385.7 MW, solely from the Xayaburi HPP, is under construction. In terms of off-takers for the operation phase of the project, about 375 MW or 88% is sold to EGAT and the rest is for the industrial customers and the PEA. For the project under construction, EGAT will be the main off-taker, accounting for about 95% of the project's installed capacity, while the rest will be purchased by EDL.

CKP plans to double its aggregate capacity to 5,000 MW after 2025. The company has focused on cross-border hydropower projects to leverage the strength of the Group.

KEY OPERATING PERFORMANCE
Table 1: CKP's Portfolio

Project	Plant Type	Installed Capacity (MW)	CKP's Interest (%)	CKP's Capacity (MW)	COD/SCOD	Main Off-taker	PPA (Years)
1. Nam Ngum 2 HPP	Hydro	615	42	258.3	Mar 11 *	EGAT	25+2
2. Bangpa-in Cogeneration 1	Gas-fired	118	65	76.7	Jun 13	EGAT	25
3. Bangpa-in Cogeneration 2	Gas-fired	120	65	78.0	Jun 17	EGAT	25
4. Bangkhenchai	Solar	8	100	8.0	Aug 12	PEA	5 (auto)
5. Chiang Rai Solar	Solar	8	30	2.4	Jan 13	PEA	5 (auto)
6. Nakorn Ratchasima Solar	Solar	6	30	1.8	Mar 12	PEA	5 (auto)
7. Xayaburi HPP**	Hydro	1,285	30	385.5	Oct 19	EGAT	29
						EDL	31
Total		2,160		810.7			

* Nam Ngum 2 HPP commenced initial operation date (IOD) in March 2011 and commenced commercial operation date (COD) in January 2013.

** CKP will acquire additional 7.5% interest in Xayaburi HPP from BEM. After acquiring, CKP's capacity will increase to 907 MW.

FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS

Unit: Bt million

	Year Ended 31 December				
	2017	2016	2015	2014	2013
Revenue	6,879	6,319	6,757	6,999	5,568
Gross interest expense	1,489	1,256	1,130	1,220	1,343
Net income from operations	278	477	370	477	216
Funds from operations (FFO)	2,536	2,255	2,639	2,732	2,377
Earnings before interest, tax, depreciation, and amortization (EBITDA)	3,679	3,644	3,732	3,973	3,695
Total assets	60,462	59,305	54,567	49,327	50,482
Total debts	28,428	28,030	21,908	22,574	24,209
Shareholders' equity	30,659	30,506	31,812	26,104	25,414
Operating income before depreciation and amortization as % of sales	52.7	57.4	54.3	55.9	64.9
Pretax return on permanent capital (%)	2.9	3.2	3.6	4.3	4.1
Earnings before interest, tax, depreciation, and amortization (EBITDA) interest coverage (times)	2.5	2.9	3.3	3.3	2.8
FFO/total debt (%)	8.9	8.0	12.0	12.1	9.8
Total debt/capitalization (%)	48.1	47.9	40.8	46.4	48.8

CK Power PLC (CKP)

Company Rating:

A

Rating Outlook:

Stable

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