



CK POWER PLC

No. 51/2023 31 March 2023

CORPORATES

Company Rating: A

Issue Ratings:
Senior unsecured AOutlook: Stable

Last Review Date: 29/09/22

Rating History:

DateRatingOutlook/Alert02/05/18AStable

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RATIONALE

TRIS Rating affirms the company rating on CK Power PLC (CKP) at "A", with a "stable" outlook, and also affirms the ratings on CKP's senior unsecured debentures at "A-". The issue ratings' one notch below the company rating reflects the structural subordination of the debentures, relative to the loans extended to CKP's operating subsidiaries.

The ratings mirror the reliable cash flow from its power portfolio, backed by long-term power purchase agreements (PPAs) with the Electricity Generating Authority of Thailand (EGAT, rated "AAA/stable") and track record of solid operations. The ratings also incorporate our expectation of a gradual decline in CKP's financial leverage notwithstanding the planned investments for the new hydropower project. Contrarily, the ratings are tempered by the hydrology risk and the country risk of the Lao People's Democratic Republic (Lao PDR).

KEY RATING CONSIDERATIONS

Reliable cash flow generation

The ratings are built from the reliability of cash flow CKP receives from its power portfolio, which mainly comprises two large-scale hydropower plants in the Lao PDR and two gas-fired cogeneration power plants. As of December 2022, CKP's equity capacity (or capacity in proportion to its ownership stakes in the power plants) totaled 1,003 megawatts (MW). Of the total capacity, hydropower represents 83%, or 829 MW. CKP owns majority stakes in the Nam Ngum 2 Hydroelectric Power Project (NN2HPP), and the Xayaburi Hydroelectric Power Project (XHPP). The remainder capacity comprises two gas-fired cogeneration plants of 155 MW (15%), and solar power of 19 MW (2%).

CKP's power assets hold long-term PPAs with credible off-takers, which help mitigate payment risk and market risk. EGAT is the main off-taker, buying about 96% of the total installed capacity. The rest of capacity is purchased by Electricite Du Laos (EDL), Thai industrial customers, and the Provincial Electricity Authority (PEA).

CKP has solid operating record. NN2HPP, CKP's key power plant, has generally operated with high plant availability factor since the onset, backed by an operation and maintenance agreement (OMA) with EGAT covering the entire term of the PPA. At the same time, the cogeneration power plants, Bangpa-in cogeneration power plant (BICPP), have consistently performed in accordance with the terms of EGAT PPAs.

Hydropower accounts for the majority of profits

Hydropower plants remain the key contributor for CKP's earnings. In 2022, the company's earnings before interest, taxes, depreciation, and amortization (EBITDA) came in at THB4.2 billion, of which about THB2.7 billion (or about 66%) was contributed by NN2HPP and THB205.5 million (or about 5%) was from XHPP. In general, EBITDA margin of hydropower are much higher than those of conventional fuel power plants due to the absence of fuel cost.

Given the main revenue contribution from hydropower, CKP is highly susceptible to hydrology risk, i.e., the uncertainty of the volume of water inflow.





Risks mitigation through well-structured PPAs

The uncertainty of the volume of water flow is the key risk of hydropower generation. The power output largely hinges on the volume of water supply, which can vary significantly from year to year. High variability in water inflow can lead to highly variable electrical generation and result in wavering revenue during certain periods of time.

CKP's hydropower assets hold PPAs which contain a mechanism that help smooth the assets' cash flows over the terms of PPA. The mechanism allows the hydropower plants to sell electricity in excess of the Annual Supply Target in a year of plentiful water flow and receive compensation for exceeding target sales in a dry year. When a hydropower plant's electricity sale in any given year falls short of an Annual Supply Target, the shortfall can be added to the annual supply target in the following years. Despite the constructive mechanism, prolonged periods of drought could jeopardize power generation and cash flow.

Weaker-than-expected earnings of cogeneration power

BICPP's earnings were affected by the surge in fuel cost during 2022. In selling electricity to industrial users, BICPP are vulnerable to fuel price risk in the event of surging gas prices. Electricity is sold to industrial users at discounts on tariff rates charged by PEA to large general service customers. The tariffs generally carry a fuel adjustment charge, or Ft. However, the Ft adjustment carries a time lag and is subject to the authorities' discretion on the timing and magnitude of the adjustments.

Gas prices soared to a record of above THB550 per metric million British thermal unit (MMBTU) in the third quarter of 2022 while the adjustment of Ft did not keep pace with the rise in fuel cost. As a result, BICPP's EBITDA were THB0.8 billion in 2022, a drastic 31% decrease from THB1.1 billion year-on-year (y-o-y).

Hydropower remains the key growth driver

Hydropower plants remains CKP's key growth driver. CKP is developing the "Luang Prabang Hydroelectric Power Project" (LPHPP) in Luang Prabang Province, the Lao PDR. The project is a large run-of-river hydroelectric power plant in the Mekong River, for an installed capacity of approximately 1,460 MW. Currently, CKP has acquired an additional 8% equity interest in the project company, Luang Prabang Power Co., Ltd., lifting its total equity stake to 50%. CKP's equity capacity will increase to 1,733 MW.

The construction of LPHPP is expected to start in the second quarter of 2023 while the commercial operation is set to begin in 2030. We estimate CKP will need to spend a tally of THB21.6 billion for the project's equity over the course of project development. To date, CKP has already injected capital of THB3.9 billion into the project. Looking ahead, CKP is slated to contribute to the project's equity of THB2 billion in 2024, THB2.4 billion in 2025, and THB3.0 billion in 2026.

In addition to the equity contribution, CKP is committed to providing substantial amounts of shareholder's loan if the project construction experiences cost overrun. The company is also committed to providing financial support to a shareholder if it fails to make its respective equity contribution to the project. We currently leave out these additional commitments from our base forecast.

Significant exposure to country risk of the Lao PDR

As CKP's main power plants are operating in the Lao PDR, CKP is exposed to the country risk, in particular the downside risks stemming from regulatory changes for power generation in the country. That said, the country risk is considerably curtailed as the CKP's existing hydropower projects are established under the collaboration between the government of Thailand and the government of the Laos (GOL) in relation to the power sale to Thailand. All projects are backed by the concession agreement with the GOL and the PPAs with EGAT. The payment by EGAT for the power purchase is made directly to the projects' revenue accounts in Thailand. Moreover, the Laos state-run EDL-Generation Public Company (EDL-Gen) is one of the sponsors of both NN2HPP and XHPP. We expect LPHPP will follow the same mechanism. The GOL is expected to take part in LPHPP as well.

Expected gradual recovery in earnings

CKP's EBITDA fell to THB4.2 billion in 2022, a 13% drop from the prior year. We expect CKP's earnings to gradually recover. With respect to hydropower, we use a conservative assumption of power output in our base-case forecast. We assume the NN2HPP to sell electricity of about 1,650 GWh per year in 2023-2024, given the pattern of water flow in the recent years. For 2025, we expect a recovery of water flow with an assumption for electricity sold of 1,800 GWh. At the same time, we expect BICPP's earnings to gradually pick up following the recent Ft upward adjustments and normalized gas prices in the long term. In addition, we also expect CKP to receive dividend income from XHPP of about THB170-THB255 million per year during 2023-2025. As a result, we project CKP's EBITDA to arrive at THB4.2-THB4.8 billion per year in 2023-2025. Funds from operations (FFO) is projected to be THB3.1-THB3.6 billion per year over the same period.





Leverage expected to decline

The rating affirmation embeds our expectation that CKP's financial leverage will decline despite the committed investments for LPHPP in the years ahead. We expect CKP's debt to EBITDA ratio will fall to below 5 times from 2024 onwards. In all, we project CKP to spend capital expenditures and investments in total of THB4.6 billion during 2023-2025. Given CKP's scheduled equity contributions to LPHPP plus the committed financial supports to the project, we do not expect CKP to further engage in any sizable investments in the years ahead. In our base-case forecast, we expect the debt to capitalization ratio of CKP to remain below 40% in 2023-2025. We view additional funds CKP needs to provide to LPHPP could hold back deleveraging.

Debt Structure

At the end of December 2022, CKP's consolidated debt, excluding lease liability, was THB30.1 billion. CKP's priority debt was THB17.6 billion, consisting of secured debt and senior unsecured debt owed by CKP's subsidiaries. The priority debt to total debt ratio was 58%, suggesting that CKP's unsecured creditors are significantly disadvantaged to the priority debt holders with respect to claims against the company's assets. In effect, we rate CKP's senior unsecured debentures one notch below the company rating.

Adequate liquidity profile

We assess CKP as having sufficient level of liquidity. As of December 2022, the company had cash and cash equivalents, including restricted cash for project loans of about THB7.7 billion. The company had unused credit facilities of THB6.5 billion. Cash on hand, unused credit facilities and expected FFO should be sufficient to cover loans and debentures coming due in the next 12 months of THB3.4 billion.

In our forecast, we expect CKP's operating subsidiaries to be capable of generating sufficient cash to repay their respective financial obligations, both debentures and project loans. In addition, the operating subsidiaries are required to make deposits in the debt service reserve accounts. These accounts serve as debt servicing cushions for the project lenders, in case operating results do not meet expectations.

BASE-CASE ASSUMPTIONS

- NN2HPP's electricity sale to EGAT to be 1,650 GWh per year in 2023-2024 and 1,800 GWh in 2025.
- Electricity sale of two cogeneration power plants to be in range of 1,452 GWh to 1,564 GWh per year.
- Steam sale of two cogeneration power plants to be in range of 77-80 kilotonnes per year.
- Total capital spending and investments to be around THB4.6 billion over 2023-2025.

RATING OUTLOOK

The "stable" outlook reflects our expectation that CKP's power plants will perform in line with their respective guidance. As such, we expect CKP will continue receiving stable cash flows from its investments. We expect CKP's financial leverage will steadily decline while its cash flow against debt obligations will be in line with our forecast.

RATING SENSITIVITIES

The prospect of a rating upgrade is limited. Conversely, downward rating pressure would emerge if CKP's financial performance materially comes short of our forecast. This could occur if the performances of CKP's operating power projects significantly miss estimates. An adverse scenario could also develop if CKP engages more debt-funded investments or outlays, particularly those related to extra commitments to LPHPP.

COMPANY OVERVIEW

CKP, as a holding company, was spun off from CH. Karnchang PLC (CK; rated "A-/stable") 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 9 March 2023, CKP's major shareholders were CK (30%), TTW PLC (25%), and Bangkok Expressway and Metro PLC (16.8%). The rest of the company's shares were 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 subsidiaries and affiliated companies, with an aggregated installed capacity of 2,167 MW or equity capacity of 1,003 MW.





CKP's portfolio of power plants comprises hydropower, cogeneration, and solar power. 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 (with auto-renewal every five years) with the PEA, and 25-year PPAs with industrial customers. Meanwhile, the XHPP has secured PPAs with EGAT and EDL for 29 years and 31 years, respectively.

NN2HPP contributed a majority portion of CKP's EBITDA, accounting for about 60%-70%. The rest of 30%-40% was generated by the two gas-fired cogeneration power plants, a small solar power project, and XHPP.

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.	NN2HPP	Hydro	615	46	282.7	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.	Nakhon Ratchasima Solar	Solar	6	30	1.8	Mar 12	PEA	5 (auto)
7.	XHPP	Hydro	1,285	43	546.1	Oct 19	EGAT	29
							EDL	31
8.	Solar rooftop & farm	Solar	6.7	100	6.7	2019	IUs	25 (auto)
9.	LPHPP	Hydro	1,460	50	730.0	2030	EGAT	35
Total			3,626.7		1,732.4			

^{*} NN2HPP commenced initial operation in March 2011 and commenced commercial operation in January 2013.





FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS

Unit: Mil. THB

	Year Ended 31 December						
	2022	2021	2020	2019	2018		
Total operating revenues	11,255	9,154	7,048	8,776	9,096		
Earnings before interest and taxes (EBIT)	3,969	3,884	1,180	2,264	2,517		
Earnings before interest, taxes, depreciation,	4,166	4,788	2,910	4,015	4,618		
and amortization (EBITDA)							
Funds from operations (FFO)	3,038	3,672	1,905	2,829	3,173		
Adjusted interest expense	1,076	1,072	1,001	1,173	1,400		
Capital expenditures	46	49	106	251	779		
Total assets	69,846	68,977	67,038	64,191	62,503		
Adjusted debt	23,672	24,439	22,098	22,905	24,765		
Adjusted equity	37,939	36,130	35,038	35,547	31,522		
Adjusted Ratios							
EBITDA margin (%)	37.00	52.24	41.13	45.32	50.77		
Pretax return on permanent capital (%)	5.79	5.77	1.81	3.61	4.16		
EBITDA interest coverage (times)	3.87	4.47	2.91	3.42	3.30		
Debt to EBITDA (times)	5.68	5.10	7.59	5.71	5.36		
FFO to debt (%)	12.83	15.03	8.62	12.35	12.81		
Debt to capitalization (%)	38.42	40.35	38.68	39.19	44.00		

RELATED CRITERIA

- Group Rating Methodology, 7 September 2022
- Corporate Rating Methodology, 15 July 2022
- Key Financial Ratios and Adjustments for Corporate Issuers, 11 January 2022
- Issue Rating Criteria, 15 June 2021





CK Power PLC (CKP)

Company Rating:	А
Issue Ratings:	
CKP23NA: THB1,500 million senior unsecured debentures due 2023	A-
CKP245A: THB1,500 million senior unsecured debentures due 2024	A-
CKP265A: THB1,000 million senior unsecured debentures due 2026	A-
CKP27NA: THB1,500 million senior unsecured debentures due 2027	A-
CKP285A: THB1,500 million senior unsecured debentures due 2028	A-
CKP286A: THB2,500 million senior unsecured debentures due 2028	A-
CKP31OA: THB2,000 million senior unsecured debentures due 2031	A-
CKP32NA: THB1,000 million senior unsecured debentures due 2032	A-
Rating Outlook:	Stable

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