



# **CK POWER PLC**

No. 20/2024 5 March 2024

# **CORPORATES**

Company Rating: Issue Ratings: A-

Senior unsecured

BBB+

Outlook:

Stable

Last Review Date: 31/03/23

**Company Rating History:** 

Date Rating

Outlook/Alert

02/05/18

Stable

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#### **RATIONALE**

TRIS Rating downgrades the company rating on CK Power PLC (CKP) to "A-" from "A". Also, TRIS Rating downgrades the ratings on CKP's outstanding senior unsecured debentures to "BBB+" from "A-". The outlook is "stable". The downgrade reflects our expectation of CKP's deteriorating financial risk profile, as opposed to our previous assessment. We expect CKP's cash flow against debt to weaken, given our anticipation of CKP's softening earnings amidst its sizable investment commitments in the Luang Prabang Hydroelectric Power Project (LPHPP) in the years ahead.

The issue ratings are one notch below the company rating, reflecting the structural subordination of the debenture obligations compared with the debt obligations of the company's operating subsidiaries. In aggregate, the priority debt to total debt ratio exceeds our 50% threshold.

The ratings reflect the reliability of cash flow from its power portfolio, underpinned by long-term power purchase agreements (PPAs) with the Electricity Generating Authority of Thailand (EGAT, rated "AAA/Stable") and its track record of sound operations. However, the ratings are mainly weighed down by the hydrology risk. The ratings also take into account CKP's exposure to the country risk of the Lao People's Democratic Republic (Lao PDR).

### **KEY RATING CONSIDERATIONS**

# A sizable power portfolio

CKP owns majority stakes in two large-scale hydropower projects in the Lao PDR, the Nam Ngum 2 Hydroelectric Power Project (NN2HPP) and the Xayaburi Hydroelectric Power Project (XHPP). CKP also holds 65% stakes in two cogeneration power plants, Bangpa-in cogeneration power plant (BICPP). In addition, the company owns a pool of solar power projects. Currently, CKP's equity capacity in operating power plants (or capacity in proportion to its ownership stakes) totals 1,003 megawatts (MW).

# Reliability of cash flow

Reliability of cash flow CKP earns from its power portfolio remains the key factor supporting the ratings. CKP's power assets hold multi-year PPAs with credible off-takers, which help mitigate payment risk and market risk. EGAT is the main off-taker, buying about 92% of the total equity capacity. The rest of capacity is purchased by Electricite Du Laos (EDL), Thai industrial customers, and the Provincial Electricity Authority (PEA) of Thailand.

CKP's power projects have consistently staged sound operating performances. NN2HPP, CKP's key power plant, has generally operated with high plant availability factor since its commencement. Meanwhile, the cogeneration power plants have successively performed in accordance with terms of EGAT PPAs.

# Hydropower is the centerpiece

Of the total operating capacity, hydropower plants represent 83%, or 829 MW. The remainder capacity comprises two gas-fired cogeneration plants of 155 MW (15%) and a pool of solar power projects of 19 MW (2%). With that, CKP's earnings are heavily reliant on the performances of its hydropower plants. In 2023, the company's earnings before interest, taxes, depreciation, and amortization (EBITDA) stood at THB4.5 billion, of which about THB2.6 billion





(or about 58%) was contributed by NN2HPP and THB209 million (or about 5%) was from XHPP in a form of dividend. Hydropower has relatively low cost of electricity generation, compared with other types of power plants, due to the absence of fuel cost. In effect, it renders relatively higher profit than those of fossil-fuel power plants. Given the main revenue contribution from hydropower, CKP's earnings are immensely sensitive to hydrology risk, i.e., the uncertainty of the volume of water inflow.

# Well-structured PPAs mitigate hydrology risk

The major risk of hydropower generation is the uncertainty of the volume of water flow. 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 fluctuating revenue during certain periods of time.

In mitigating the risk of fluctuating water flow, CKP's hydropower PPAs are structured to smoothen cash flows. The PPAs contain a mechanism, which 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. Notwithstanding the risk mitigating mechanism, prolonged periods of drought could undermine power generation and cash flow.

### Large investment commitments in LPHPP

Currently, CKP is developing the 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 about 1,460 MW. CKP holds 50% in the project company, Luang Prabang Power Co., Ltd. The construction started in 2023 while the commercial operation is set to begin in 2030. We estimate CKP to spend about THB21 billion for equity injection over the course of project development. As of December 2023, CKP had already injected capital of THB4 billion into the project. Looking ahead, CKP is obliged to contribute to the project's equity of nearly THB9 billion during 2024-2026.

In addition to the equity contribution, CKP is committed to providing substantial amounts of shareholder 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-case forecast.

# Weakening cash flow against debt

We expect a weakening cash flow against debt, as opposed to our previous assessment. We slash our forecast on CKP's earnings, as we project BICPP's earnings to soften, with more conservative tariff adjustment. We expect a narrower profit margin on electricity sales to industrial customers, compared with our previous projection. With respect to hydropower, we assume the NN2HPP to sell electricity of about 1,800 gigawatt hours (GWh) per year over the forecast period.

In our base-case projection, we project CKP to arrive at THB4.3-THB4.4 billion in EBITDA a year during 2024-2026, down from a range of THB4.4-THB4.8 billion per year in our previous rating assessment. We forecast EBITDA from NN2PC of about THB2.8 billion per year, EBITDA from BICPP of about THB1.1 billion per year, and dividend incomes from XHPP of about THB0.2-THB0.3 billion per year.

We project CKP to spend net capital expenditures and investments in total of THB7.5 billion during 2024-2026. Adjusted net debt is projected to hover around THB21-THB22 billion over the same period. At this pace, we forecast the debt to EBITDA ratio to stay at 5 times or above over the forecast period, in contrast to our previous projection that the debt to EBITDA ratio should fall below 5 times. The debt to capitalization ratio is forecast to stay at about 35%. Looking further ahead, we project the debt to EBITDA ratio will sustainably exceed 5 times as CKP will likely finance the equity injection to LPHPP primarily with new debt.

# Significant exposure to country risk of the Lao PDR

CKP has a significant exposure to the country risk of the Lao PDR as its main operating power plants are located in the country. However, we view the downside risks stemming from regulatory changes for power generation are considerably mitigated through the concession agreement with the Lao government and the PPAs with EGAT. The hydropower projects are established under the government-to-government collaboration between Thailand and the Lao PDR. More importantly, the project companies have the right to receive and hold their revenue accounts outside the Lao PDR. The payment from EGAT is paid to their accounts in Thailand. As such, the risks of fund transferability and currency convertibility are well mitigated.





#### **Debt structure**

At the end of December 2023, CKP's consolidated debt, excluding lease liability, was THB28 billion. CKP's priority debt was THB15.9 billion, consisting of secured debt and senior unsecured debt owed by CKP's subsidiaries. The priority debt to total debt ratio was 57%, 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. Looking forward, we expect the priority debt ratio to decrease, given the gradual decline in debts of subsidiaries. Therefore, we expect the structural subordination risks to abate over a longer term.

### Adequate liquidity profile

We assess CKP as having sufficient level of liquidity. As of December 2023, the company had cash, including restricted cash for project loans of about THB6 billion. The company had unused credit facilities of THB4.5 billion. Cash on hand, unused credit facilities, and expected funds from operations (FFO) should be sufficient to cover loans and debentures coming due in the next 12 months of THB4.6 billion.

# **BASE-CASE ASSUMPTIONS**

These are the key assumptions in TRIS Rating's base-case forecast for CKP's operations during 2024-2026:

- NN2HPP's electricity sale to EGAT to be 1,800 GWh per year.
- Electricity sale of two cogeneration power plants to be in the range of 1,500 GWh to 1,535 GWh per year.
- Steam sale of two cogeneration power plants to be in the range of 79-80 kilotonnes per year.
- Net capital spending and investments to be around THB7.5 billion.

# **RATING OUTLOOK**

The "stable" outlook embeds our expectation that CKP's power plants will continue to perform well in line with their respective guidance and generate cash flows as forecasted. We expect CKP's cash flow against debt obligations and financial leverage level will align with our forecast.

# **RATING SENSITIVITIES**

An upgrade of ratings is unlikely, given that CKP is in an investing phase in LPHPP. However, we could revise the ratings upward if CKP strengthens its capital structure significantly, which most probable from a capital increase. Conversely, we could take a negative action on the ratings if CKP's cash flow against debt obligations is significantly worse than our forecast. This could occur if CKP's operating power plants severely underperform. An adverse scenario could also develop if CKP engages more debt-funded investments or outlays, particularly those related to shareholder 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 December 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 generally contributes a majority portion of CKP's EBITDA, accounting for about 60%-70%. The rest of 30%-40% is generated by the two gas-fired cogeneration power plants, a pool of solar power projects, 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	14	100	14.0	Aug 12, 2027	PEA	5 (auto), 25
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			3,632.7		1,738.4			

<sup>\*</sup> 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					
	2023	2022	2021	2020	2019	
Total operating revenues	10,640	11,241	9,154	7,048	8,778	
Earnings before interest and taxes (EBIT)	3,010	3,955	3,884	1,180	2,264	
Earnings before interest, taxes, depreciation,	4,462	4,152	4,788	2,914	4,015	
and amortization (EBITDA)						
Funds from operations (FFO)	3,305	3,024	3,672	1,909	2,829	
Adjusted interest expense	1,067	1,076	1,072	1,001	1,173	
Capital expenditures	134	46	49	106	251	
Total assets	68,765	70,056	68,977	67,038	64,191	
Adjusted debt	21,435	23,671	24,438	22,098	22,905	
Adjusted equity	38,918	37,939	36,130	35,038	35,547	
Adjusted Ratios						
EBITDA margin (%)	41.9	36.9	52.2	41.2	45.3	
Pretax return on permanent capital (%)	4.4	5.8	5.8	1.8	3.6	
EBITDA interest coverage (times)	4.2	3.9	4.5	2.9	3.4	
Debt to EBITDA (times)	4.8	5.7	5.1	7.6	5.7	
FFO to debt (%)	15.4	12.8	15.0	8.6	12.4	
Debt to capitalization (%)	35.5	38.4	40.3	38.7	39.2	

<sup>\*</sup> Consolidated financial statements

# **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:	A-
Issue Ratings:	
CKP245A: THB1,500 million senior unsecured debentures due 2024	BBB+
CKP265A: THB1,000 million senior unsecured debentures due 2026	BBB+
CKP27NA: THB1,500 million senior unsecured debentures due 2027	BBB+
CKP285A: THB1,500 million senior unsecured debentures due 2028	BBB+
CKP286A: THB2,500 million senior unsecured debentures due 2028	BBB+
CKP31OA: THB2,000 million senior unsecured debentures due 2031	BBB+
CKP32NA: THB1,000 million senior unsecured debentures due 2032	BBB+
Rating Outlook:	Stable

# TRIS Rating Co., Ltd.

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