

CK POWER PLC

No. 67/2021
30 April 2021

CORPORATES

Company Rating:	A
Issue Ratings:	
Senior unsecured	A-
Outlook:	Stable

Last Review Date: 30/10/20

Company Rating History:

Date	Rating	Outlook/Alert
02/05/18	A	Stable

Contacts:

Sermwit Sriyotha

sermwit@trisrating.com

Narongchai Ponsirichusopol

narongchai@trisrating.com

Parat Mahuttano

parat@trisrating.com

Monthian Chantarklam

monthian@trisrating.com



WWW.TRISRATING.COM

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-”. At the same time, TRIS Rating assigns the rating of “A-” to CKP’s proposed issue of up to THB4 billion in senior unsecured debentures. The proceeds from the new debentures will be used to repay its coming due debentures, to finance investments, and to fund working capital. 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 CKP’s strengths in developing and operating large-scale hydroelectric power plants, reliable cash flow derived from power purchase agreements (PPAs) with the Electricity Generating Authority of Thailand (EGAT; rated “AAA/Stable” by TRIS Rating), and the track record of sound operations. However, the ratings are held back by the susceptibility to hydrology risk and the country risk of the Lao People’s Democratic Republic (Lao PDR).

KEY RATING CONSIDERATIONS

Strengths in developing large-scale hydropower

CKP gains a recognition in developing large-scale hydropower projects on time and within budget. The company developed two hydropower projects in the Lao PDR, “Nam Ngum 2 Hydroelectric Power Project” (NN2HPP) and “Xayaburi Hydroelectric Power Project” (XHPP). These two projects have a combined installed capacity of 1,900 megawatts (MW), of which 615 MW are from NN2HPP and 1,285 MW from XHPP. Both projects started commercial run as scheduled despite geographical and environmental challenges.

One of the key success factors in developing large-scale hydropower projects is the specialized engineering expertise of its major shareholder, CH. Karnchang PLC (CK; rated “A-/Stable” by TRIS Rating). CK is a top-notch engineering and construction (E&C) company listed on the Stock Exchange of Thailand (SET) based on its construction competency and solid market position. In addition, CKP also successfully developed other types of power projects, including cogeneration and solar power projects.

Hydropower accounts for the majority of earnings

Hydropower plants remain the key contributor for CKP’s earnings. For a normal year of operation, hydropower plants contributed about 70% to CKP’s earnings before interest, taxes, depreciation and amortization (EBITDA). Although NN2HPP declared a drought year for 2020, it made up most of CKP’s earnings, representing about 45%-50% of CKP’s EBITDA. In addition, XHPP is expected to pay dividend to CKP from 2021 onwards, suggesting higher contribution from hydropower assets.

The technology used by the hydropower plants is proven with low operating risk. In general, the hydropower renders EBITDA margin (earnings before interest, taxes, depreciation, and amortization as percentage of revenue) of more than 75%, which is much higher than those of conventional fuel power plants due to the absence of fuel cost. However, it is subject to hydrology risk, i.e., the uncertainty of the volume of water flow.

Major contracts help mitigate major risks

As of March 2021, CKP's operating power assets, based on equity interest, comprised hydropower plants of about 765 MW (82%), two gas-fired cogeneration plants of 155 MW (16%), and solar power of 19 MW (2%). CKP's power assets hold a long-term PPAs with credible off-takers, which help mitigate payment risk and market risk.

In CKP's power portfolio, EGAT is the main off-taker, buying about 92% of the total installed capacity, including that of XHPP. The rest of capacity is purchased by Electricite Du Laos (EDL), Thai industrial customers, and the Provincial Electricity Authority (PEA) of Thailand.

CKP's hydropower assets, the key earnings sources, hold PPAs which contain a mechanism that help smooth the assets' cash flows over the terms of PPA, regardless of water fluctuation. 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.

Track record of sound operations

NN2HPP holds an operation and maintenance agreement (OMA) with EGAT covering the entire term of the PPA. From initial operation in March 2011 to 2020, the NN2HPP's plant availability factor had been higher than 96%, except for 2018 and 2019. During 2018-2019, the plant availability factor was about 92%-93% due to a partial overhaul in 2018 and a water supply shortage in 2019. As for the cogeneration power plants, the PPAs enable CKP's plants to pass on fuel costs to EGAT as long as they meet the agreed plant efficiency. The exposure to fluctuations in fuel prices is hence manageable. CKP's plants have so far outperformed the allowance.

Susceptibility to risk of low water resources

Given the predominant revenue contribution from hydropower, CKP is highly susceptible to the risk of hydrology. Hydropower output primarily hinges on the volume of water flow, which can vary significantly from year to year. High variability in water inflow can lead to variable electrical generation and result in a drop-off in revenue during certain periods of time. This could impact available cash to cover fixed costs. Although the resource risk is partially mitigated by the contractual mechanism, a drawn-out drought period could translate to less power generation and a significant drop in revenue during the affected period. This was demonstrated by the impact of low water resources on NN2HPP's revenue over the past two years. The electricity output of XHPP also fell short of estimate for the same reason.

CKP's earnings in 2020 were largely hurt by the low level of power generation of NN2HPP. The project declared 2020 a drought year under the PPA, which in effect exempted it from breaching its obligation of minimum electricity production. The water flow into NN2HPP's reservoir has been lower than normal for two years in a row. NN2HPP aimed to increase water storage at its reservoir to the normal level by the end of 2020, such that it would have sufficient water resources for production in 2021. NN2HPP generated 916 gigawatts-hour (GWh) of electricity in 2020, a 45% plunge from the previous year. As a result, CKP's EBITDA declined by 28% to THB2.9 billion in 2020. The underperformance of hydropower plants was partly offset by the operating results of its cogeneration power plants. CKP's debt to EBITDA ratio soared to 7.6 times at the end of 2020, from 5.7 times in 2019.

Hydropower plants remain the key growth driver

We expect hydropower plants will remain CKP's key growth drivers. Currently, 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. Yearly average production is estimated to be 6,854 GWh over an expected concession period of 32 years. CKP presently holds 42% in the project company, Luang Prabang Power Co., Ltd., which is in the negotiation process for the key agreements, such as concession agreement, construction agreement, and PPA. CKP expects the construction to kick off by 2021 and commencement of commercial operation in 2028. In total, we estimate CKP will need to spend THB13-THB15 billion over the course of project development. Apart from the new hydropower project, CKP plans to spend about THB1.8 billion to acquire an additional 5% equity interest in XHPP, lifting its total equity stake to 42.5%.

Exposure to country risk of the Lao PDR

As CKP's main power plants are located in the Lao PDR, CKP is inevitably exposed to the country risk of the Lao PDR, in particular the downside risks stemming from regulatory changes for power generation in the country. However, these risks are mitigated by the concession agreement entered into with the government of Laos (GOL) and the PPAs entered into with EGAT. Moreover, the Laos state-run EDL-Gen is one of the sponsors of both NN2HPP and XHPP. The GOL is expected to take part in LPHPP as well.

Earnings to recover

We forecast CKP's earnings will recover in 2021, largely driven by an improving operating performance of NN2HPP. Our base-case forecast is based on the level of water at the beginning of 2021 and a conservative assumption on the volume of water inflow. We forecast NN2HPP's capacity factor to be around 30%-35% in 2021-2022 and recover to around 36%-40% in 2023. We estimate CKP's EBITDA to be in the range of THB4.5-THB4.8 billion per year during 2021-2023. This estimation embeds our expectation that the cogeneration power plants continue to contribute a reliable source of CKP's EBITDA of about THB1.1-THB1.2 billion per year, and the company to receive dividend from XHPP of about THB200-THB300 million per year (based on its equity interest of about 42.5%). We project CKP's funds from operations (FFO) to be THB3.4-THB3.6 billion per year during the forecast period.

Leverage expected to decline

We expect CKP's debt to EBITDA ratio will gradually decline to stay below 5 times in 2022 onwards, incorporating CKP's planned investments in new hydropower projects and the acquisition of additional 5% interest in XHPP into our forecast. In all, we project total capital spending to total THB6.3 billion during 2021-2023. We expect CKP will continue focusing on neighboring countries and leveraging its strengths to develop sizable hydropower projects. Since a hydropower project generally takes several years to develop and alters large areas of the environment, we do not expect robust growth in the company's assets in the next few years. In our base forecast, we expect the debt to capitalization ratio of CKP will stay below 40% in 2021-2023.

Adequate liquidity profile

On a consolidated basis, CKP held cash and cash equivalents, including restricted cash for project loans of about THB9.4 billion at the end of 2020. The company also has unused credit facilities (committed and uncommitted) of about THB9.5 billion. We forecast CKP's FFO to be about THB3.4 billion in 2021. Cash on hand, unused credit facilities and expected FFO should be sufficient to cover long-term loans and debentures coming due of about THB5.5 billion. CKP plans to refinance about THB4 billion of its debentures coming due in 2021 by issuance of new debentures to preserve liquidity.

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 a debt servicing cushion for the lenders, in case operating results do not meet expectations.

BASE-CASE ASSUMPTIONS

- The capacity factor of NN2HPP to be in the range of 30%-35% in 2021-2022 and 36%-40% in 2023.
- The capacity factor for two cogeneration power plants to range 75%-77%.
- Total capital spending to be around THB6.3 billion over 2021-2023.

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, with its financial leverage and cash flow against debt obligations at levels in line with our forecast.

RATING SENSITIVITIES

The prospect of a rating upgrade is limited over the next 12-18 months. In contrast, downward rating pressure could develop if the performances of the operating power plants materially weaken. This could occur from prolonged low levels of water inflow. Any large debt-funded investment that significantly weakens the company's financial profile could also trigger a rating downgrade.

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 SET in July 2013. As of March 2021, CKP's major shareholders were CK (31.9%), TTW PLC (25.0%), and Bangkok Expressway and Metro PLC (16.5%). 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 eight power projects, through its subsidiaries and affiliated companies, with an aggregated

installed capacity of 2,166.7 MW or equity capacity of 938.2 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, theXHPP 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 46% in 2020. The rest of 54% was generated by the two gas-fired cogeneration power plants, a small solar power project, and others.

In terms of off-takers for the operation phase of the project, 857 MW (or 92%) is sold to EGAT, and 58.7 MW (6%) is sold to the industrial customers in Thailand and the PEA. The rest of 22.5 MW (or 2%) is sold to EDL.

CKP plans to double its aggregate installed capacity to 5,000 MW by 2025. The company will focus 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. 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	38	481.9	Oct 19	EGAT EDL	29 31
8. Solar rooftop & farm	Solar	6.7	100	6.7	2019	IUs	25 (auto)
Total		2,166.7		938.2			

* 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 -----				
	2020	2019	2018	2017	2016
Total operating revenues	7,077	8,859	9,096	6,916	6,337
Earnings before interest and taxes (EBIT)	1,180	2,264	2,517	1,597	1,731
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	2,910	4,015	4,618	3,587	3,658
Funds from operations (FFO)	1,925	2,829	3,173	2,077	2,384
Adjusted interest expense	1,001	1,173	1,400	1,494	1,260
Capital expenditures	106	251	779	2,704	3,496
Total assets	67,038	64,191	62,503	60,462	59,305
Adjusted debt	22,098	22,905	24,765	23,565	21,727
Adjusted equity	35,038	35,547	31,522	30,659	30,506
Adjusted Ratios					
EBITDA margin (%)	41.13	45.32	50.77	51.87	57.71
Pretax return on permanent capital (%)	1.81	3.61	4.16	2.70	3.08
EBITDA interest coverage (times)	2.91	3.42	3.30	2.40	2.90
Debt to EBITDA (times)	7.59	5.71	5.36	6.57	5.94
FFO to debt (%)	8.71	12.35	12.81	8.81	10.97
Debt to capitalization (%)	38.68	39.19	44.00	43.46	41.60

* Consolidated financial statements

RELATED CRITERIA

- Group Rating Methodology, 13 January 2021
- Rating Methodology – Corporate, 26 July 2019
- Key Financial Ratios and Adjustments, 5 September 2018

CK Power PLC (CKP)

Company Rating:	A
Issue Ratings:	
CKP216A: THB4,000 million senior unsecured debentures due 2021	A-
CKP22NA: THB1,000 million senior unsecured debentures due 2022	A-
CKP23NA: THB1,500 million senior unsecured debentures due 2023	A-
CKP27NA: THB1,500 million senior unsecured debentures due 2027	A-
CKP286A: THB2,500 million senior unsecured debentures due 2028	A-
Up to THB4,000 million senior unsecured debentures due within 10 years	A-
Rating Outlook:	Stable

TRIS Rating Co., Ltd.

Silom Complex Building, 24th Floor, 191 Silom Road, Bangkok 10500, Thailand Tel: 02-098-3000

© Copyright 2021, TRIS Rating Co., Ltd. All rights reserved. Any unauthorized use, disclosure, copying, republication, further transmission, dissemination, redistribution or storing for subsequent use for any purpose, in whole or in part, in any form or manner or by any means whatsoever, by any person, of the credit rating reports or information is prohibited, without the prior written permission of TRIS Rating Co., Ltd. The credit rating is not a statement of fact or a recommendation to buy, sell or hold any debt instruments. It is an expression of opinion regarding credit risks for that instrument or particular company. The opinion expressed in the credit rating does not represent investment or other advice and should therefore not be construed as such. Any rating and information contained in any report written or published by TRIS Rating has been prepared without taking into account any recipient's particular financial needs, circumstances, knowledge and objectives. Therefore, a recipient should assess the appropriateness of such information before making an investment decision based on this information. Information used for the rating has been obtained by TRIS Rating from the company and other sources believed to be reliable. Therefore, TRIS Rating does not guarantee the accuracy, adequacy, or completeness of any such information and will accept no liability for any loss or damage arising from any inaccuracy, inadequacy or incompleteness. Also, TRIS Rating is not responsible for any errors or omissions, the result obtained from, or any actions taken in reliance upon such information. All methodologies used can be found at www.trisrating.com/rating-information/rating-criteria