Media Release:

Taiwan Cogeneration Corp. Assigned 'twA-/twA-2' Ratings; Outlook Stable

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Rating Action Overview

- Taiwan Cogen benefits from a sizeable cash dividend from its investment in four gas-fired independent power plants that have low-risk business models through their long-term power purchase agreements with Taipower.
- Taiwan Cogen's high capital expenditure needs driven by planned capacity expansion in renewable energy will lead to a deterioration in credit metrics over the next two years.
- On May 25, 2020, Taiwan Ratings Corp. assigned its 'twA-' long-term and 'twA-2' short-term issuer credit ratings to Taiwan Cogeneration Corp.
- The rating outlook is stable to reflect our expectation that a likely increase in EBITDA contribution from its growing renewable energy business and stable dividend contribution from IPPs will help to sustain Taiwan Cogen's ratio of FFO to debt above 12% over the next two years. That's despite a likely material elevation in the company's debt to support its business expansion plans.

Rating Action Rationale

Established in 1992, Taiwan Cogeneration Corp. (Taiwan Cogen) is a listed company in Taiwan engaged in power generation business. Its key businesses include equity investment in four gas-fired independent power plants (IPPs) in Taiwan with an aggregate capacity of 2.44 gigawatt (GW) in which the company's shareholding ranges from 35%-43%. The company also fully owns a 48 megawatt (MW) cogeneration power plant in Guantian, Tainan, and involves in power plant engineering, procurement and construction (EPC). The cash dividend from the IPPs, EPC, and cogeneration plant contributed 64%, 20%, and 12% respectively, of the company's EBITDA in 2019.

IPPs' low-risk business model translates into lower business risk for Taiwan Cogen. All four IPPs have signed a long-term power purchasing agreement (PPA) with Taiwan Power Co. (Taipower) that offers guaranteed hours and cost-pass-through pricing. The guaranteed hours effectively limit market competition and contain IPPs' volume risk by offering a minimum hour of power purchase. In addition, the government's energy policy has outlined its intention to increase the market share of gas-fired power plants to tackle pollution problems. It is therefore likely that Taipower will increase power procurement from the IPPs over the next two to three years. The energy fee adjustment in the PPA pricing scheme reflects monthly price

changes in natural gas and inflation, thus nearly eliminating margin risk for IPPs. These protections will continue to support stable operating cash flow generation of IPPs and therefore support their cash dividend contribution to Taiwan Cogen.

Less stable cogeneration and EPC business creates volatile operating cash flow for Taiwan Cogen. The cogeneration plant mainly sells electricity and steam to industrial users nearby, and sells any residual electricity to Taipower. The plant's revenue fluctuation stems from demand fluctuation from industrial users through economic cycles as well as from Taipower's need to procure additional electricity when it experiences a power shortage. Furthermore, the plant's limited ability to reflect cost increases in the electricity fare, which is based on that of Taipower, results in substantial margin volatility. Taipower typically does not adjust its fare in full in response to price fluctuations in raw materials, and resultantly, Taiwan Cogen's profitability suffered severely when coal price was particularly high.

We expect Taiwan Cogen's EPC business to generate positive earnings over the next two years, though its profit margin is likely to remain volatile, stemming from project execution risks. Its performance stability has improved over the past five years, since the company started to focus only on power plant projects where it has accumulated some project knowhow. The business suffered heavy losses in 2011-2013 when the company executed a water treatment plant and aviation hangar in which it was less-experienced.

Weakness in small operating scale offset by plant diversity. We estimate Taiwan Cogen's total capacity to reach 1.15 GW by the end of 2020, including its share of capacity in invested power plants and expected capacity expansion in renewable energy. Nevertheless, its scale remains small compared with that of larger domestic and regional peers. Such weakness is offset by Taiwan Cogen's better plant diversity through investing in power plants located in different parts of Taiwan. Furthermore, a planned rapid capacity expansion in renewable energy over the next four years could provide a higher degree of diversification benefit through its stable operation. Meanwhile, the expansion could narrow the capacity gap compared with larger peers, though uncertainty exists in the actual execution rate of the expansion plan.

The high cost base of gas-fired IPPs caps utilization. Gas-fired power plants have a high cost base due to their fuel usage of more expensive natural gas, which is likely to continue to cap the four IPPs' utilization at levels lower than those of coal-fired plants. We believe their average utilization rate will remain below 65% over the next two to three years, though increasing from an average of about 55% in 2019. The lower utilization rate could lead to a lower EBITDA margin compared with peers.

Aggressive scale expansion harms the company's financial strength. Taiwan Cogen plans to invest heavily in green energy over the next five years to take advantage of the government's favorable green energy policy. The company plans to add a total of 450MW-500MW of renewable capacity over the next five years. On May 8, 2020, Taiwan Cogen announced its acquisition of an onshore wind farm with capacity of about 50 MW in Taiwan's Miao Li County. However, the uncertainty of the company being able to fully achieve the capacity addition goal is high because it may encounter competition when bidding for projects. Therefore, we factor in a 50% achievement rate renewable capacity expansion in our base case.

Besides renewables, Taiwan Cogen is likely to inject capital into Redondo Peninsula Energy Inc. (RPE) over the course of construction for a 600WM coal-fired power plant in Subic Bay, Philippines which RPE is building. Taiwan Cogen holds a 25% ownership in RPE, a project development company. These investment plans could elevate Taiwan Cogen's debt to NT$7

billion-NT$8 billion from NT$4.7 billion in 2019, leading to a deterioration in its ratio of funds from operations (FFO) to debt to 17%-19% in 2020 and 2021, from 26% in 2019. This assessment takes into account a higher projected EBITDA contributed by an expanded renewable business.

Association with Taipower to offer some benefits. Taipower owns 27.66% of Taiwan Cogen's shares, and is the single largest shareholder. This association grants the company better access to banking channels. Technical support and technician dispatch from Taipower also enhance Taiwan Cogen's capability in project execution. We therefore assess the company's comparable rating analysis as positive to reflect such advantages compared with similarly rated peers.

Furthermore, we view Taiwan Cogen as a strategically important member of the Taipower group. Taipower's shareholding allows it to cast significant influence over the company's board and operating strategy. The IPPs Taiwan Cogen invests in generate 4.5%-5.5% of aggregate power sold by Taipower and play an increasingly important role in Taipower's grid. As a result, we believe Taipower has the motivation to maintain its shareholding and influence over the company. It is also highly likely for Taipower to provide extraordinary support to Taiwan Cogen, if needed. However, the extent of group support is subject to Taipower's predetermined budget, as it is a state-owned enterprise.

Outlook

The stable outlook mainly reflects our expectation that Taiwan Cogen's ratio of FFO to debt will remain above 12% over the next two years, despite its aggressive capacity expansion plan. Our view is underpinned by an expected increase in EBITDA contribution from its renewable energy business and stable dividend contribution from four invested IPPs.

Downward scenario

We may lower the long-term rating on Taiwan Cogen if

- its ratio of FFO to debt deteriorates to below 12% without prospect of improvement, possibly due to more aggressive capital expenditure or dividend payouts than our base case scenario indicates;
- its liquidity position deteriorates from the current adequate level, possibly due to a significant debt maturity without a sufficient long-term refinancing plan in advance.
- its EBITDA experiences increased volatility. This may occur if cash flow contribution from its power generation business declines substantially due to a severe mechanical incident, or if the company undertakes an EPC project that incurs a large loss.

Upward scenario

We view the likelihood of an upgrade as remote over the next two years. We may raise the rating on Taiwan Cogen if:

- the company takes a more conservative approach in capacity expansion or reduces its cash dividend payment materially, so that its ratio of FFO to debt improves to above 20% on a consistent basis.

Our Base-Case Scenario

We expect Taiwan Cogen's revenue to increase by 2%-6% in 2020 and 7%-11% in 2021, driven by capacity expansion in renewable energy and the establishment of a new green energy operation and maintenance center. Our base case assumptions are:

- Taiwan's GDP to contract by 1.2% in 2020 and rebound by 4.0% in 2021. We believe power consumption generally follows the pattern of GDP growth.
- We expect revenue at Guantian cogeneration plant to decline by 7%-10% in 2020 and rebound by 5%-8% in 2021. The revenue fluctuation reflects fluctuation in clients' demand in electricity and stream due to the adverse impact of COVID-19. We expect the plant's EBITDA margin to increase moderately in 2020, reflecting an 18%-23% price decline in thermal coal.
- Revenue and operating margin of the company's EPC business to remain stable in 2020 and 2021, supported by existing backlogs.
- Dispatchable capacity of renewable energies, including solar, wind, and geothermal to expand by 60MW-70MW in 2020 and 15MW-20MW in 2021. Revenue could reach New Taiwan dollar (NT$) 300 million-NT$350 million in 2020 and NT$700 million-NT$800 million in 2021. Blended EBITDA margin for renewable energy is projected to reach 50%-60% with limited operating cost.
- The new green energy operating center will contribute NT$100 million-NT$200 million of revenue in 2020. Revenue in 2021 could double that of 2020 with a rapid demand increase as the number renewable power plants grows.
- Electricity sold by IPPs will remain largely stable in 2020, underpinned by their stable operations and protection offered by PPAs. We expect electricity sold to increase by 3%-7% in 2021 with an elevation in utilization at Star Energy Power Corp.
- IPPs' unit power sale price will decline by 25%-35% in 2020 and rebound by 5%-15% in 2021, reflecting price changes in natural gas. We expect the lower average selling price (ASP) to slightly lower the IPPs' profitability and resulted in a 2%-6% decline in net income in 2020. However, margin and net income are likely to fully recover in 2021.
- IPPs' dividend payout ratio will average about 85% of previous year's net income in 2020 and 2021.
- Capital expenditure of NT$2.8 billion-NT$3.1 billion in 2020 and NT$1.2 billion-NT$1.6 billion 2021, reflecting investment in renewable energy and capital injection in Philippine-based RPE.
- Cash dividend payout ratio of about 90% of previous year's net income in 2020 and 2021.
- We net 100% of the company's cash and liquid investments with its debt.

Based on the assumptions, we arrive at the following credit measures:

- EBITDA margin of 17%-20% in 2020 and 2021.
- Ratio of FFO to debt of 17%-19% in 2020 and 2021.
- Ratio of FFO cash interest coverage ratio of 19x-23x in 2020 and 2021.

Liquidity

The short-term rating on Taiwan Cogeneration is 'twA-2'. We believe the company has adequate liquidity to cover its needs over the 12 month period ending December 31, 2020. We project the company's ratio of liquidity sources to liquidity uses to be about 2x over the same period, without counting expansionary capital expenditure and cash dividend payment as liquidity uses. We also believe the company will have positive liquidity sources less uses, even if EBITDA declines by 15%.

In our assessment, Taiwan Cogen can absorb high-impact, low-probability events with limited need for refinancing, given the company's higher cash balance than short-term debt as the end of 2019. We also believe the company has a sound relationship with banks, underpinned by its association with Taipower. The company's bank loans generally carry a low interest rate. In addition, the company has maintained sufficient buffer on its financial covenants, and a 15% decline in EBITDA is unlikely to lead to a breach of its financial covenants, in our view.

Principal Liquidity Sources:

- Existing cash: about NT$962 million as of the end of December 2019.
- Cash FFO: NT$1.1 billion-NT$1.4 billion in 2020.

Principal Liquidity Uses:

- Short-term and long-term debt maturity: about NT$900 million in 2020.
- Maintenance capital expenditure: NT$20 million-NT$30 million in 2020.
- Working capital outflow: NT$100 million-NT$140 million in 2020.

Ratings Score Snapshot

Issuer Credit Rating: twA-/Stable/twA-2
Note: The descriptors below are on a global scale.

Business Risk: Satisfactory

- Country risk: Intermediate
- Industry risk: Moderately high
- Competitive position: Satisfactory

Financial Risk: Aggressive

- Cash flow/Leverage: Aggressive

Anchor: twbbb+
Modifiers
- Diversification/Portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Fair (no impact)
- Comparable rating analysis: Positive (+1 notch)

Stand-alone credit profile: twa-

- Group stand-alone credit profile (which excludes external support): twa-
- Entity status within group: Strategically important

Related Criteria

- Understanding Taiwan Ratings' Rating Definitions - June 26, 2018
- Criteria | Corporates | Industrials: Key Credit Factors For The Unregulated Power And Gas Industry - March 28, 2014
- General Criteria: Group Rating Methodology - July 01, 2019
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers - December 16, 2014
- General Criteria: Methodology: Industry Risk - November 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions - November 19, 2013
- Criteria | Corporates | General: Corporate Methodology - November 19, 2013
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments - April 01, 2019
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities - November 13, 2012
- General Criteria: Use Of CreditWatch And Outlooks - September 14, 2009

(Unless otherwise stated, these articles are published on www.taiwanratings.com)

Ratings List

New Ratings	
Taiwan Cogeneration Corp.	
Issuer Credit Rating	twA-/Stable/twA-2

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