

B. GRIMM BIP POWER 1 LTD.

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CreditNews

| CORPORATES | |
|------------------|--------|
| Company Rating: | A- |
| Issue Rating: | |
| Senior unsecured | A- |
| Outlook: | Stable |

RATIONALE

TRIS Rating assigns the company rating of B. Grimm BIP Power 1 Ltd. (BIP1) at "A-"with "stable" outlook. At the same time, TRIS Rating assigns the rating of "A-" to BIP1's proposed issues of up to Bt3,350 million in senior unsecured debentures. The proceeds from the proposed debentures will be used to refinance BIP 1's outstanding project loans.

The ratings reflect the company's reliable cash flow from a long-term power purchase agreement (PPA) with the Electricity Generating Authority of Thailand (EGAT) under the Small Power Producer (SPP) scheme and a proven record of operating gas-fired combined cycle cogeneration units by its largest shareholder, B. Grimm Power PLC (BGRIM). However, the ratings are partially offset by the company's single asset risk.

KEY RATING CONSIDERATIONS

Reliable cash flow from long-term PPA

BIP1 has a 25-year PPA with EGAT for 90 megawatts (MW) under the SPP scheme. BIP1 also has long-term off-take agreements with an industrial customer to sell 14 MW of electricity. The PPA with EGAT has helped mitigate the market risk as EGAT agreed to dispatch not less than 80% of the contracted capacity based on operating hours. The PPA also contains a gas price pass-through mechanism. For the industrial customer, the contract specifies the minimum off-take amounts. The electricity tariff charged to the industrial customer is based on the electricity tariff that the Provincial Electricity Authority (PEA) charges to large general service customers. The tariff generally carries a fuel adjustment charge or Ft to adjust for changes in fuel price. BIP1 holds a gas supply contract (GSA) with PTT PLC (PTT) for 25 years covering the same terms as the PPA with EGAT.

BIP1 sells around 600-700 gigawatt hour (GWh) of electricity per year. The electricity sold to EGAT accounted for 91% of total electricity sold, while the electricity sold to the industrial customer accounted for 7%, and the rest was sold to B. Grimm BIP Power 2 Ltd. (BIP2) for load management purposes.

BGRIM's expertise in operating cogeneration power plants

BIP1 has its own operation and maintenance teams for day-to-day operations, leveraging BGRIM's expertise in the operation and maintenance of cogeneration power plants. BIP1 also entered into an eight-year long-term service agreement (LTSA) with IHI Corporation (IHI). The agreement has an option for renewal subject to mutual agreement between BIP1 and IHI. The LTSA agreement helps mitigate operational risks and control maintenance costs.

BIP1's operations have met the PPA targets since its inception in April 2015. BIP1's actual availability factor was 97.3% in 2015, 85.2% in 2016, and 97.2% in 2017. The PPA allows 840 hours per year, a 90.4% availability factor, for planned maintenance in a normal year and 1,080 hours per year, an 87.7% availability factor, in a year when a major overhaul is planned. The 85.2% availability factor in 2016 met the PPA requirement since it was the result of an unplanned outage due to a manufacturing defect in a steam turbine. The issues were completely resolved by BIP1's maintenance team and supplier in 2016. BIP1 had limited damaged from this issue as the supplier absorbed all repair

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costs and the insurer paid the business interruption claim.

The plant heat rate was about 7,740-7,810 British Thermal Unit/kilowatt-hour (BTU/kWh) during the past three years, better than the PPA allowance of 8,000 BTU/kWh. In terms of energy efficiency, BIP1's plant has managed to achieve the primary energy saving (PES) threshold and received an additional tariff of 0.36 Bt/kWh of fuel saving (FS) payment from EGAT.

Proven technology in gas-fired combined cycle cogeneration plant

BIP1's power plant employs proven technology used in its combined cycle cogeneration plant. The GE LM 6000PD gas turbine has a proven track record with a fleet of more than 1,000 units in operation and more than two million operating hours. BIP1's plant is composed of two gas turbine units, two heat recovery steam generators (HRSGs), and one steam turbine. The steam turbine is made by Siemens.

Steady earnings from cogeneration power plant

In 2017, BIP1 had Bt2,026 million in revenue, up from Bt1,823 million in 2016. This 11% growth was mainly from the power plant being fully operational in 2017. Earnings before interest, tax, depreciation, and amortization (EBITDA) for 2017 were at Bt599 million, up from Bt456 million in 2016. The high growth of EBITDA was partly due to the Bt58 million business interruption claims. Looking forward to the next three years, TRIS Rating expects BIP1's revenue will be around Bt2,200 million and EBITDA will be in the range of Bt500-Bt600 million per year.

Acceptable capital structure

At the end of 2017, BIP1's debts totaled Bt3,312 million with a debt to capitalization ratio of 70%. The company's debt to capitalization ratio is expected to improve to 65% in the next three years while the total debt to EBITDA ratio is forecast to remain at lower than 6 times.

Satisfactory liquidity and cash flow adequacy

BIP1's liquidity is good. Cash on hand was Bt665 million as of December 2017. Debt repayments will run at Bt100-Bt200 million per annum over the next three years.

RATING OUTLOOK

The "stable" outlook reflects the expectation that BIP1 will maintain smooth operations, which will generate a reliable stream of earnings (EBITDA) of Bt500-Bt600 million per year.

RATING SENSITIVITIES

An upside for BIP1's ratings is limited over the next 12-18 months. A rating downside case may occur if BIP1's performance deteriorates significantly, hurting its cash flow generation.

COMPANY OVERVIEW

BIP1 was established in 2008 to own and operate a gas-fired combined cycle cogeneration power plant under the SPP scheme. The plant is located in Bangkadi Industrial Park (BIP), Pathumthani province. The power plant has an installed capacity of 114.6 MW plus 20 tonnes of steam per hour. BIP1 started its commercial operation in April 2015. As of December 2017, BIP1's shareholders were BGRIM (74%), BIP (12%), and Nikornkij& Son (BIP Group -- 14%).





KEY OPERTING PERFORMANCE

| Plant Performance Statistics of BIP1 | | | | | |
|--------------------------------------|---------|-------|-------|-------|--|
| Plant Performance | Unit | 2017 | 2016 | 2015 | |
| Net output energy * | GWhe | 696.3 | 607.6 | 442.9 | |
| Plant heat rate | BTU/kWh | 7,740 | 7,770 | 7,810 | |
| Primary energy saving factor | % | 12.0 | 11.9 | 11.3 | |
| Availability | % | 97.2 | 85.2 | 97.3 | |
| Unplanned outage | % | 2.0 | 13.6 | 1.3 | |
| Planned outage | % | 0.8 | 1.2 | 1.5 | |

* Net output of electricity and steam

FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS

Unit: Bt million

| | Yea | Year Ended 31 December | | |
|---|-------|------------------------|-------|--|
| | 2017 | 2016 | 2015 | |
| Revenue | 2,026 | 1,823 | 1,478 | |
| Gross interest expense | 190 | 198 | 88 | |
| Net income from operations | 233 | 80 | 119 | |
| Funds from operations (FFO) | 411 | 265 | 160 | |
| Earnings before interest, tax, depreciation, and amortization (EBITDA) | 599 | 456 | 333 | |
| Total assets | 5,182 | 5,051 | 5,101 | |
| Total debts | 3,312 | 3,510 | 3,626 | |
| Shareholders' equity | 1,423 | 1,337 | 1,248 | |
| Operating income before depreciation and amortization as % of sales | 26.5 | 24.9 | 22.4 | |
| Pretax return on permanent capital (%) | 8.9 | 5.7 | 5.7 | |
| Earnings before interest, tax, depreciation, and amortization (EBITDA) interest coverage (times) | 3.2 | 2.3 | 3.8 | |
| FFO/total debt (%) | 12.4 | 7.6 | 4.4 | |
| Total debt/capitalization (%) | 70.0 | 72.4 | 74.4 | |

Note: All ratios have been adjusted by operating leases.





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B. Grimm Power BIP 1 Ltd. (BIP1)

| Company | Rating: |
|---------|---------|
|---------|---------|

| Issue Rating: | |
|---|--------|
| Up to Bt3,350 million senior unsecured debentures due within 15 years | A- |
| Rating Outlook: | Stable |

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