

B. GRIMM POWER PLC

No. 37/2019
28 March 2019

CORPORATES

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

Last Review Date: 21/09/18

Company Rating History:

Date	Rating	Outlook/Alert
09/04/18	A	Stable

Contacts:

Narongchai Ponsirichusopol

narongchai@trisrating.com

Sermwit Sriyotha

sermwit@trisrating.com

Parat Mahuttano

parat@trisrating.com

Wiyada Pratoomsuwan, CFA

wiyada@trisrating.com



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RATIONALE

TRIS Rating affirms the company rating on B. Grimm Power PLC (BGRIM) at "A" with "stable" outlook. TRIS Rating also affirms the ratings on BGRIM's senior unsecured debentures at "A-". The ratings reflect the company's reliable cash flow from long-term power purchase agreements (PPAs) with Electricity Generating Authority of Thailand (EGAT) under the small power producer (SPP) scheme. The ratings also reflect the well-diversified portfolio and proven record of operating cogeneration power plants of the company. However, the ratings are partially weighed down by a high debt level in BGRIM's capital structure during the expansion phase.

KEY RATING CONSIDERATIONS

Diversified power portfolio

As of December 2018, BGRIM owned and operated 40 power plants in Thailand and abroad with a total installed capacity of 2,076 megawatts (MW), or equal to the equity capacity of 1,217 megawatts-equity (MWe) when measured in proportion to BGRIM's ownership of the plants.

The 15 gas-fired combined-cycle cogeneration power plants account for 89% of BGRIM's total equity capacity. These power plants are located in leading industrial estates in central and eastern Thailand, namely Amata City (Chonburi), Amata City (Rayong), Laem Chabang, WHA Chonburi 1, and Bangkadi. The remaining equity capacity of 11% is spread across 22 solar power plants in Thailand, two hydro power plants in the Lao People's Democratic Republic (Lao PDR), and one diesel-fired power plant in Vietnam. No single power plant accounts for more than 10% of the company's total equity capacity.

EGAT is BGRIM's largest customer. Sales to EGAT made up 62% of total revenue during 2016-2018. Electricity and steam sold to industrial users account for 30% of revenue annually. The remainder is electricity sold to industrial users in Vietnam, the Provincial Electricity Authority (PEA) in Thailand, and the Electricite du Laos (EDL).

Predictable cash flow from long-term PPAs

BGRIM's predictable cash flow is mainly secured by long-term PPAs under the SPP scheme with EGAT. Most of BGRIM's power plants have long-term PPAs with EGAT. The term of a typical PPA with EGAT is 21-25 years. The PPAs with EGAT help mitigate market risk since EGAT agrees to dispatch not less than 80% of the contracted capacity based on operating hours. The PPAs also contain a gas price pass-through mechanism.

BGRIM also has PPAs and Steam Purchase Agreements (SPAs) with users in various industries, such as automotive, packaging, and consumer products. Those PPAs and SPAs cover 5-15 years. The contracts with industrial users also specify minimum off-take amounts. The electricity tariffs charged to industrial users are based on the electricity tariff that PEA charges to large general service customers. The tariff generally carries a fuel adjustment charge, or Ft charge, to reflect changes in fuel prices. BGRIM's SPP power plants hold gas supply contracts (GSA) with PTT PLC (PTT) for 21-25 years. The terms of the GSAs usually match the terms of the PPAs with EGAT.

BGRIM's solar power plants have a total equity capacity of 121 MWe. These plants have a 25-year PPA with PEA and Metropolitan Electricity Authority

(MEA) under the Very Small Power Plant (VSPP) scheme. The PPAs carry a Feed-in Tariff (FiT) of Bt4.12-Bt5.66 per kilowatt-hour (kWh). The two hydro power plants located in the Lao PDR, with 14 MWE of capacity, supply electricity to EDL under a 25-year PPA. The PPA for each of the hydro power plants has a flat tariff of US\$0.065 per kWh.

Proven record in operating cogeneration power plants

BGRIM has expertise in developing and operating gas-fired combined-cycle cogeneration power plants. BGRIM has its own teams for day-to-day operations and maintenance. The cogeneration plants have high availability factors (AF) and low numbers of unplanned outages. The plant heat rates meet the criteria specified in the PPAs. During the past three years, the actual AFs of the cogeneration power plants ranged between 90%-100%, better than the PPA targets. The heat rate (HR) of each plant was also better than the heat rate specified in the PPAs.

In addition, most of BGRIM's power plants employ proven technology from reputable suppliers, such as Siemens and GE Power (GE). The cogeneration power plants have up to 16-year long-term service agreements (L TSA) to ensure the reliability of the turbines and keep maintenance costs under control.

Acquisition of GLOW SPP1

On 13 March 2019, BGRIM completed the purchase of 100% shares in GLOW SPP1 Co., Ltd. (GSPP1) from Glow Energy PLC (GLOW). BGRIM will pay the price of Bt3,300 million for the acquisition.

GSPP1 owns and operates a 124-MW cogeneration power plant located in WHA Eastern Industrial Estate (WHA EIE), Map Ta Phut, Rayong province. GSPP1 holds two PPAs with EGAT, covering total capacity of 110 MW. Two EGAT PPAs will expire in 2021. However, these two EGAT PPAs are eligible for a 3-year extension and a 25-year replacement scheme in accordance with the Power Development Plan 2018 (PDP2018).

Exposure to solar projects in Vietnam

BGRIM is developing two sizable solar power plants in Vietnam, with a total installed capacity of 677 MW. Total project costs will be around Bt21,600 million. Vietnam Electricity (EVN) is the sole off-taker for both projects with a FiT of US\$0.0935 per kWh. However, this FiT will apply to projects that achieve commercial operation by June 2019. Delays in construction would jeopardize the return on the projects since the Vietnamese government's policy on solar tariffs for projects starting after the deadline is uncertain.

In our view, the investments in Vietnam carry relatively higher risks than the projects in Thailand. BGRIM, as with other power producers, is exposed to Vietnam's country risk, regulatory risk, off-taker risk, and exchange rate risk. However, revenue from the solar power in Vietnam is forecast to contribute less than 10% of BGRIM's total revenues over the next three years.

Pressure on capital structure during expansion phase

The continuing expansion will keep BGRIM's balance sheet highly-leveraged. At the end of 2018, BGRIM's reported total debt was worth Bt61,700 million, including financial obligation relating to the Amata B. Grimm Power Plant Infrastructure Fund (ABPIF). Its adjusted debt to capitalization ratio was 64% at the end of 2018. The ratio will likely to increase to approximately 70% in 2021. Adjusted debt to earnings before interest, tax, depreciation and amortization (EBITDA) will be around 6 times in 2021.

BASE-CASE ASSUMPTIONS

- During 2019-2021, TRIS Rating assumes the availability factor of cogeneration power plants of BGRIM will be in the range of 90%-99%.
- During 2019-2021, its revenue will range between Bt43,100-Bt47,300 million per year. EBITDA is forecast at Bt11,600-Bt14,400 million per year, and cash on hand will be at least Bt12,000 million.
- BGRIM's capital expenditure is forecast at Bt17,000-Bt20,000 million per year over the projection period.
- Debt repayments will run around Bt1,100-Bt6,700 million per annum over the projection period.

RATING OUTLOOK

The "stable" outlook reflects our expectations that the power plants in BGRIM's operation will run smoothly and generate cash flow as planned. The outlook also reflects the expectation that BGRIM will be able to manage its capital structure in accordance with the company's policy of having net interest bearing debt to equity ratio less than 2.0 times.

RATING SENSITIVITIES

A rating upgrade could occur if BGRIM can enlarge its portfolio while maintaining healthy capital structure. A rating downside case may occur if the capital structure weakens significantly, resulting from dramatic growth of debt-funded investment.

COMPANY OVERVIEW

BGRIM was established in 1993 as a holding company for the power business under the conglomerate of the B. Grimm Group. BGRIM generates and sells electricity and steam through its subsidiaries and affiliates. BGRIM was listed on the Stock Exchange of Thailand (SET) on 19 July 2017. As of December 2018, BGRIM's major shareholder was Mr. Harald Link and the B. Grimm Group, with a combined 68% stake. The rest of the company's shares are publically owned.

BGRIM was awarded its first SPP contract through a subsidiary, Amata B. Grimm Power 1 Ltd. (ABP1), in 1998. As of December 2018, BGRIM owned and operated 40 power plants with a total installed capacity of 2,076 MW or equity capacity of 1,217 MW.

According to BGRIM's expansion plan, the total installed capacity will increase to 3,245 MW by 2025.

KEY OPERATING INFORMATION

Table 1: Installed Capacity by Fuel Type

Project	Dec-18		Dec-22	
	MW	%	MW	%
Gas-fired SPP power plants	1,898	91	2,241	71
Diesel-fired power plant	13	1	13	0
Renewable power plants				
- Hydro	20	1	80	3
- Solar	145	7	822	26
- Wind	-	-	16	0
- WTE	-	-	5	0
Total power plants	2,076	100	3,177	100

Sources: BGRIM and TRIS Rating's estimates

Table 2: Installed Capacity by Country

Project	Dec-18		Dec-22	
	MW	%	MW	%
Thailand	2,043	98	2,407	76
Lao PDR	20	1	80	3
Vietnam	13	1	690	21
Total Power Plants	2,076	100	3,177	100

Sources: BGRIM and TRIS Rating's estimates

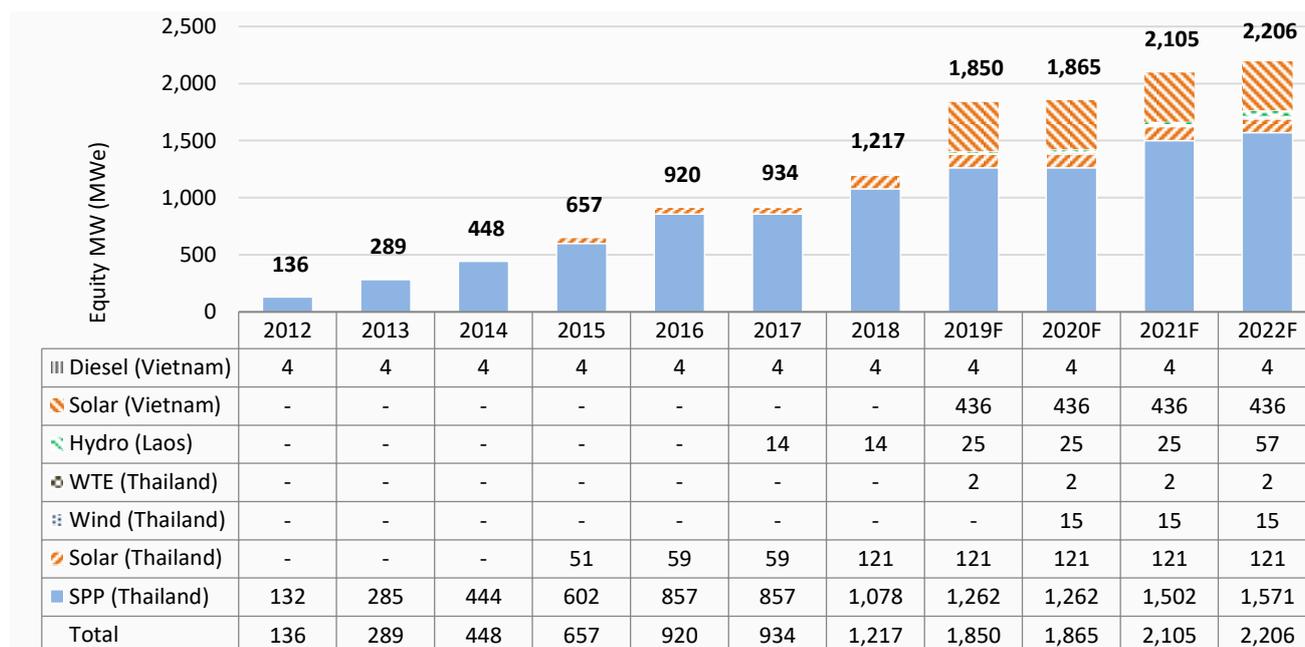
Table 3: Power Plants' Key Operating Performance

Plant Performance	Unit	2018	2017	2016	2015	2014
Gas-fired SPP power plants						
Net output energy ¹	GWhe	10,939.7	9,852.6	8,611.5	6,327.1	5,288.6
Plant heat rate ²	BTU/kWh	7,806.6	7,818.7	7,869.3	7,989.0	7,949.4
Availability factor ²	%	96.6	96.6	95.0	93.0	94.3
Unplanned outage ²	%	1.5	2.8	2.9	4.3	4.7
Planned outage ²	%	2.0	0.6	2.2	2.7	1.0
Solar power plants						
Capacity factor ²	%	17.4	18.0	18.2	n.a.	n.a.

Source: BGRIM

Notes: 1) Net output of electricity and steam

2) Values are weighted average by plant's capacity.

Table 4: Power Portfolio Development (Equity Capacity)


Sources: BGRIM and TRIS Rating's estimates

FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS

Unit: Bt million

	----- Year Ended 31 December -----				
	2018	2017	2016	2015	2014
Total operating revenues	36,631	31,495	27,770	23,958	19,966
Operating income	8,911	8,295	7,140	4,716	3,750
Earnings before interest and taxes (EBIT)	5,834	5,834	5,050	3,018	2,334
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	9,218	8,579	7,408	4,949	3,813
Funds from operations (FFO)	6,085	6,010	4,332	1,505	2,269
Adjusted interest expense	2,956	2,335	2,851	3,473	1,513
Capital expenditures	6,563	6,272	10,003	11,058	7,526
Total assets	100,636	89,241	76,047	62,793	46,334
Reported total debt	61,731	57,941	59,752	49,682	32,483
Adjusted debt	47,801	39,885	50,562	43,857	26,121
Adjusted equity	27,739	25,744	11,534	7,090	11,069
Adjusted Ratios					
Operating income as % of total operating revenues (%)	24.33	26.34	25.71	19.68	18.78
Pretax return on permanent capital (%)	6.63	7.40	7.76	5.94	6.18
EBITDA interest coverage (times)	3.12	3.67	2.60	1.43	2.52
Debt to EBITDA (times)	5.19	4.65	6.83	8.86	6.85
FFO to debt (%)	12.73	15.07	8.57	3.43	8.69
Debt to capitalization (%)	63.28	60.77	81.43	86.08	70.24

RELATED CRITERIA

- Key Financial Ratios and Adjustments, 5 September 2018
- Group Rating Methodology, 10 July 2015
- Rating Methodology – Corporate, 31 October 2007

B. Grimm Power PLC (BGRIM)

Company Rating:	A
Issue Ratings:	
BGRIM200A: Bt500 million senior unsecured debentures due in 2020	A-
BGRIM210A: Bt2,700 million senior unsecured debentures due in 2021	A-
BGRIM230A: Bt1,500 million senior unsecured debentures due in 2023	A-
BGRIM280A: Bt5,000 million senior unsecured debentures due in 2028	A-
Rating Outlook:	Stable

TRIS Rating Co., Ltd.

Silom Complex Building, 24th Floor, 191 Silom Road, Bangkok 10500, Thailand Tel: 0-2098-3000

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