

## B. GRIMM BIP POWER 2 LTD.

No. 26/2020  
12 March 2020

### CORPORATES

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

Last Review Date: 19/03/19

#### Company Rating History:

| Date     | Rating | Outlook/Alert |
|----------|--------|---------------|
| 25/04/18 | 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 of “A-” on B. Grimm BIP Power 2 Ltd. (BIP2) with a “stable” outlook. TRIS Rating also affirms the rating of “A-” on BIP2’s senior unsecured amortizing debentures of Bt3.35 billion.

The ratings reflect the company’s predictable cash flows from a long-term power purchase agreement (PPA) with the Electricity Generating Authority of Thailand (EGAT) under the small power producer (SPP) scheme as well as the company’s proven record in the operation of its gas-fired combined-cycle cogeneration power plant. However, the ratings are weighed down by the company’s single asset risk.

### KEY RATING CONSIDERATIONS

#### Predictable cash flows from long-term PPA

BIP2’s predictable cash flows are secured by a 25-year PPA with EGAT under the SPP scheme. The contract covers a capacity of 90 megawatts (MW). Under the terms of a standard PPA for an SPP cogeneration power plant, EGAT agrees to dispatch at least 80% of the contracted capacity, based on plant operating hours. The PPA is on a take-or-pay basis, which stabilizes the cash flow BIP2 receives. In addition, the PPA contains a formula that includes adjustments for changes in fuel prices and currency exchange rates. This largely mitigates the risks associated with changes in the price of fuel and currency fluctuations.

BIP2 also has long-term PPA with industrial customers in Bangkadi Industrial Park (BIP). The agreement covers 18.5 MW of electricity. The contracts specify the minimum amount of electricity the customers are obligated to purchase. The electricity tariff charged to the industrial customers is based on the tariff that the Provincial Electricity Authority (PEA) charges to large general service customers. This tariff also carries a fuel adjustment charge, or Ft, to adjust for changes in the price of fuel. However, the Ft adjustment carries a time lag and is subject to the authorities’ discretion regarding the timing and size of the adjustments. BIP2 also has a 25-year gas supply contract with PTT PLC (PTT).

BIP2 sells around 730-760 gigawatt hours (GWh) of electricity per year. In a typical year, the electricity sold to EGAT accounts for 87%-89% of the total electricity sold, while the industrial customer accounts for 9%-13%. The rest is sold to B. Grimm BIP Power 1 Ltd. (BIP1) for load management purposes.

#### Proven technology mitigates operational risks

BIP2’s combined-cycle cogeneration plant employs proven technology. The GE-LM6000PD gas turbine made by GE Power (GE) has a proven track record. GE has made and sold more than 1,000 turbines, logging more than two million operating hours. BIP2’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.

#### Proven track record

BIP2 has a proven track record in the operation of its cogeneration power plant. For day-to-day operations, BIP2 has its own operation and maintenance teams. The teams leverage the expertise of B. Grimm Power PLC (BGRIM), BIP2’s parent company. BGRIM has extensive expertise in the

operation and maintenance of cogeneration power plants.

BIP2 also entered into an eight-year long-term service agreement (LTSA) with IHI Corporation (IHI). The LTSA helps mitigate operational risks and control maintenance costs. The agreement has an option for renewal, subject to mutual agreement between BIP2 and IHI.

The power plant BIP2 operates has met the targets specified in the PPA since the plant started up in 2016. In 2019, BIP2 sold about 664 GWh of electricity to EGAT, 98 GWh to the industrial customers, and 0.1 GWh to a related company for load management purposes. The actual availability factor was 99.2% while the heat rate was 7,731 British thermal units per kilowatt-hour (BTU/kWh), better than the threshold of 7,950 BTU/kWh specified in the PPA. In terms of energy efficiency, BIP2's power plant achieved the primary energy saving (PES) threshold and received an additional tariff of Bt0.36 per kWh from EGAT as a fuel-saving (FS) payment.

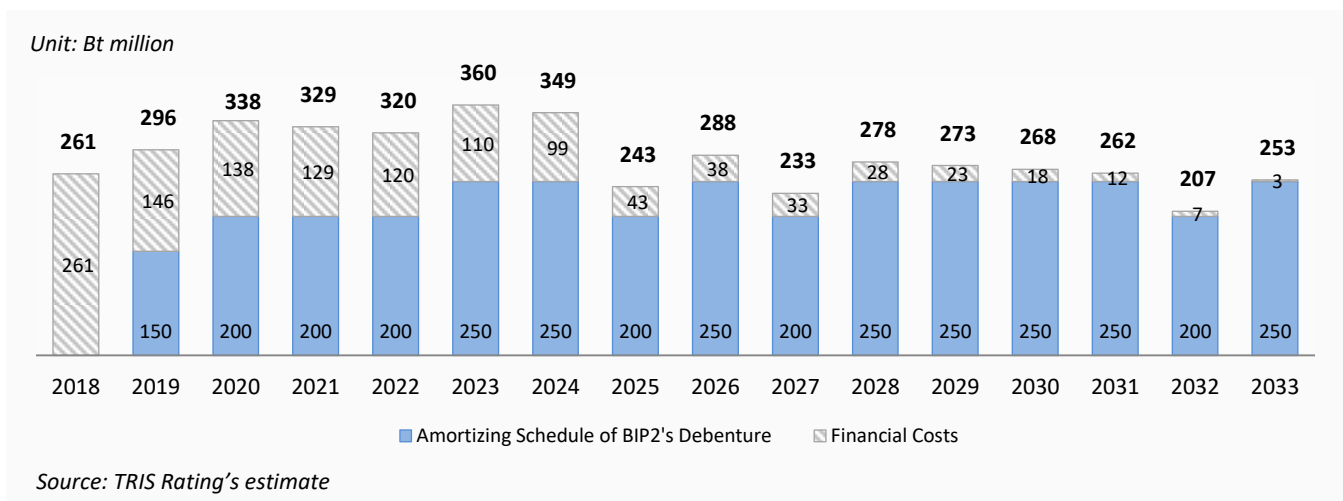
### Financial performance in line with expectation

In 2018, BIP2's revenue was at Bt2.3 billion, up from Bt2.2 billion in 2017. Earnings before interest, taxes, depreciation, and amortization (EBITDA) for 2018 were Bt627 million, 6% lower from Bt664 million in 2017. The decreasing EBITDA was due to the higher gas price while the Ft adjustment remained fixed.

### Adequate debt service capability

TRIS Rating holds the view that BIP2 will be able to generate cash flow to service its debt obligations. In May 2018, BIP2 issued Bt3.35 billion worth of senior unsecured amortizing debentures. The proceeds were used to refinance all its outstanding project loans from banks. The debenture amortization schedule is designed to match the cash flows of the PPA. During 2020-2022, BIP2's debt service obligations will amount to Bt320-Bt340 million per year. The forecast EBITDA of Bt540-Bt590 million per year is enough to service the company's debt obligations.

Chart 1: Debt Service Schedule of BIP2



### Improving capital structure

BIP2's capital structure is forecast to slightly improve as it repays the amortizing debentures. BIP2's reported total debt is projected to decrease to Bt2.6 billion in 2022, from Bt3.3 billion in 2018. The adjusted debt to capitalization ratio will improve to lower than 50% in 2023, from 64% in 2018. The adjusted net debt to EBITDA ratio is forecast to be lower than 3 times in 2023.

### BASE-CASE ASSUMPTIONS

- During 2019-2022, the plant availability factor of BIP2 will be in the 93%-98% range.
- Electricity sales to be around 670-708 GWh per year during 2019-2022. Revenue will be in the range of Bt2.2-Bt2.3 billion per year. EBITDA is projected at Bt540-Bt590 million per year.
- Cash on hand will be in the range of Bt850-Bt910 million per year.
- Maintenance capital expenditure of Bt25 million per year.

## RATING OUTLOOK

The “stable” outlook reflects our expectation that BIP2 will maintain its smooth operation, yielding EBITDA of Bt540-Bt590 million per year during 2019-2022.

## RATING SENSITIVITIES

A rating upgrade is limited over the next 12-18 months. Conversely, a rating downgrade may occur if the operating performance or financial result deteriorates significantly, hurting the company’s cash flows.

## COMPANY OVERVIEW

BIP2 was established in 2010 to own and operate a gas-fired combined-cycle cogeneration power plant under the SPP scheme. The plant is located in BIP, Pathum Thani province. The power plant has an installed capacity of 114.6 MW plus 20 tonnes of steam per hour. BIP2 started commercial operation in January 2016. As of December 2019, BIP2’s shareholders were BGRIM (74%), BIP (12%), and Nikornkij& Son (BIP Group) (14%).

## KEY OPERATING PERFORMANCE

Table 1: Plant Performance Statistics of BIP2

| Plant Performance            | Unit    | 2019  | 2018  | 2017  | 2016  |
|------------------------------|---------|-------|-------|-------|-------|
| Net output energy *          | GWhe    | 742.7 | 711.7 | 738.4 | 728.4 |
| Plant heat rate              | BTU/kWh | 7,731 | 7,697 | 7,657 | 7,644 |
| Primary energy saving factor | %       | 11.4  | 12.3  | 11.9  | 11.9  |
| Availability                 | %       | 99.2  | 96.6  | 96.6  | 96.8  |
| Unplanned outage             | %       | 0.0   | 0.4   | 1.3   | 0.5   |
| Planned outage               | %       | 0.8   | 2.9   | 1.1   | 2.6   |

\* Net output of electricity and steam

Source: BIP2

## FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS

Unit: Bt million

|  | -----Year Ended 31 December ----- |       |       |
|--|-----------------------------------|-------|-------|
|  | 2018                              | 2017  | 2016  |
| Total operating revenues   | 2,307                             | 2,231 | 2,210 |
| Earnings before interest and taxes (EBIT)                                | 432                               | 472   | 626   |
| Earnings before interest, taxes, depreciation, and amortization (EBITDA) | 627                               | 664   | 806   |
| Funds from operations (FFO)  | 366                               | 456   | 651   |
| Adjusted interest expense  | 261                               | 208   | 156   |
| Capital expenditures   | 13                                | 12    | 1,996 |
| Total assets   | 5,247                             | 5,606 | 5,565 |
| Adjusted debt  | 2,782                             | 2,660 | 3,167 |
| Adjusted equity  | 1,549                             | 1,597 | 1,670 |
| <b>Adjusted Ratios</b>   |                                   |       |       |
| EBITDA margin (%)  | 27.18                             | 29.77 | 36.50 |
| Pretax return on permanent capital (%)                                   | 8.59                              | 8.97  | 14.95 |
| EBITDA interest coverage (times)   | 2.40                              | 3.19  | 5.18  |
| Debt to EBITDA (times)   | 4.44                              | 4.00  | 3.93  |
| FFO to debt (%)  | 13.15                             | 17.14 | 20.55 |
| Debt to capitalization (%)   | 64.24                             | 62.49 | 65.47 |

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**RELATED CRITERIA**

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- Rating Methodology – Corporate, 26 July 2019
- Key Financial Ratios and Adjustments, 5 September 2018
- Group Rating Methodology, 10 July 2015

**B. Grimm BIP Power 2 Ltd. (BIP2)**

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|  |        |
|--|--------|
| <b>Company Rating:</b>   | A-     |
| <b>Issue Rating:</b>   |        |
| BIPB335A: Bt3,350 million senior unsecured amortizing debentures due in 2033 | A-     |
| <b>Rating Outlook:</b>   | Stable |

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**TRIS Rating Co., Ltd.**

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

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