



# **ELECTRICITY GENERATING AUTHORITY OF THAILAND**

No. 96/2019 27 June 2019

# **CORPORATES**

Company Rating: AAA
Outlook: Stable

Last Review Date: 29/06/18

**Company Rating History:** 

DateRatingOutlook/Alert30/06/17AAAStable

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#### **RATIONALE**

TRIS Rating affirms the company rating on Electricity Generating Authority of Thailand (EGAT) at "AAA". The rating reflects EGAT's critical role as a stated-owned enterprise (SOE) responsible for electricity generation for Thailand, its dominant position as the country's largest power generator as well as the sole owner of power transmission throughout Thailand. The rating also takes into consideration its solid financial profile, and strong support received from the government.

## **KEY RATING CONSIDERATIONS**

## Important role in the electricity industry in Thailand

EGAT's business profile reflects its critical role in the electricity industry in Thailand. EGAT has been major SOE responsible to secure electricity supply for Thailand. Under the enhanced single buyer model, EGAT is the main provider of electricity for the country by producing electricity from its owned power plants and purchasing electricity from private producers. EGAT sells electricity in bulk to the Provincial Electricity Authority (PEA) and Metropolitan Electricity Authority (MEA) through the national transmission network (national grid).

At the end of March 2019, EGAT owned and operated 45 power plants, with total capacity of 14,533 megawatts (MW), representing 34.2% of dependable capacity in Thailand. The remaining is purchased from the private power producers in Thailand (56.6%) and power imported from the Lao People's Democratic Republic (Lao PDR) and Malaysia (9.1%).

As the sole owner and operator of the national grid, EGAT operates the National Control Center (NCC) to control the electricity supply to meet electricity demand for the whole country. All power plants connected to the national grid, including EGAT's plants, as well as private and foreign power plants are under the NCC supervision for their generation schedule.

## Proven record of managing power system in Thailand

EGAT has a proven track-record, with almost 50-year experience in operating various types of power plants. At the end of March 2019, EGAT owned and operated 7,358 MW of combined cycle power plants, 3,647 MW of thermal power plants, 3,488 MW of hydroelectric power plants, and 40 MW of renewable and diesel power plants. EGAT also has excellent expertise and a proven track record in managing the national grid.

# Reliable revenue from creditworthy customers

Almost of electricity EGAT produced and purchased is sold in bulk to PEA (rated "AAA" by TRIS Rating) (70.4%) and MEA (28.4%). PEA and MEA are state-owned enterprises in Thailand. PEA is responsible for distributing electricity to end users in the provincial area, while MEA distributes electricity in the metropolitan areas (Bangkok, Samutprakarn, and Nonthaburi provinces).

### Recovered investment cost through the tariff

The electricity tariffs regulated by the Energy Regulatory Commission (ERC) are designed to enable EGAT to recover its investment costs. The current structure of the electricity tariffs are calculated based on a return on invested capital (ROIC) of 5.69% for EGAT. This rate of return is meant to generate cash





flow sufficient to cover EGAT's investments in both power plants and transmission network. Under the structure of electricity tariffs, changes in the price of fuel or the price EGAT must pay for purchasing power will be incorporated into the fuel adjustment charge (or the  $F_t$ ) and passed through to end users. The ERC calculates and publishes the  $F_t$  every four months. Therefore, EGAT has limited exposure to fluctuations in fuel price.

#### **Prudent financial policy**

EGAT has adopted a conservative financial policy. It has a policy to keep a minimum cash on hand of Bt45,000 million. It also has internal guidelines to maintain financial disciplines. The key financial guidelines include maintaining a debt to equity ratio at less than 1.5 times, a self-financing ratio of more than 25.0%, and a debt service coverage ratio of more than 1.5 times.

#### Strong financial profile

EGAT's financial position is strong. At the end of 2018, EGAT's adjusted debt was Bt313,311 million, including power purchase commitments worth Bt265,841 million with other generators. EGAT's capital structure was very healthy, with a debt to capitalization ratio of 40.9% at the end of 2018.

EGAT also has a very strong liquidity profile. It had cash on hand and cash equivalents of Bt93,539 million and undrawn credit facilities of Bt10,000 million at the end of 2018. Its funds from operations (FFO) over the next 12 months are expected to be around Bt85,000 million. On the other hand, EGAT had an amount of debt due over the next 12 months, comprising long-term loans and bonds, of around Bt9,500 million.

#### Strong support from the government

EGAT has strong support from the government of Thailand. Under the EGAT Act B.E. 2511, the government of Thailand will provide extra supports to EGAT in case EGAT's revenue is not sufficient to meet expenses, including interest expenses and debt repayments.

## **Changing electricity industry structure in Thailand**

Under the current power development plan (PDP2018), Thailand's electricity supply structure is likely to gradually change from a centralized generation to a more distributed generation. The changes in regulation, technology improvement, and digitalization allow the end users to become a self-generator and connect to each other via the smart grid.

TRIS Rating foresees this trend will impact the electricity demand from EGAT in the long-term. Electricity produced by Independent Power Supply (IPS) is forecast to increase from 13% of total electricity consumption in 2018 to 17% by 2037 while EGAT's own electricity generation is expected to decline from 34% to 24% by the same period. Although EGAT's role as an electricity producer may decline in the future, TRIS Rating continues to believe that EGAT will continue to play a critical role in securing and maintaining the stability of electricity system for the country.

## **BASE-CASE ASSUMPTIONS**

- Gross domestic product (GDP) growth rate is estimated about 3.7%-3.9% per annum during 2019-2021.
- EGAT's EBITDA (earnings before interest, taxes, depreciation, and amortization) is forecast to be in the range of Bt120,000-125,000 million per year during 2019-2021.
- EGAT's capital expenditures and investment is expected at about Bt163,000 million over 2019-2021.

# **RATING OUTLOOK**

The "stable" outlook reflects TRIS Rating's expectation that EGAT will continue to play a critical role in the power industry in Thailand.

#### **RATING SENSITIVITIES**

A credit downside case may arise if EGAT's state-owned enterprise status or its role in the Thai power industry weakens as a result of changes in government policy.

## **COMPANY OVERVIEW**

EGAT was established in 1969, under the EGAT Act B.E. 2511, by merging the three state-owned enterprises responsible for supplying electricity to the country. Currently, EGAT is a state-owned enterprise under the supervision of the Ministry of Energy and the Ministry of Finance.

EGAT is responsible for securing the electricity supply for the whole country. At the end of March 2019, EGAT owns and operates 45 power plants, with a total capacity of 14,533 MW, accounting for 34.2% of the total installed capacity in





Thailand. The remaining 65.8% is owned by private power producers and imported from neighboring countries, who sell electricity to EGAT under the enhanced single buyer model used in the Thai power industry.

Almost all of EGAT's revenue comes from bulk electricity sales. In 2018, revenue from the sale of electricity to PEA accounted for 68.0% of EGAT's total revenue, MEA accounted for 27.7%, and 3.3% came from EGAT's direct customers, including exports to the Lao PDR, Malaysia, and Cambodia. In addition to electricity sales, EGAT also has revenue from providing operations and maintenance services to private power plants, telecommunication services, and others. These services accounted for 1.0% of EGAT's total revenue in 2018.

#### **KEY OPERATING PERFORMANCE**

Table 1: EGAT's Electricity Generation Capacity Breakdown

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	Mar 2019	2018	2017	2016	2015	2014
EGAT's own plants	14,533	<i>15,757</i>	16,071	16,385	15,548	15,482
Purchase from						
IPP	14,949	14,949	14,949	14,949	14,767	13,167
SPP	9,098	8,757	7,536	6,345	5,137	3,615
Import	3,878	3,878	3,878	3,878	3,387	2,405
Total purchase	27,925	27,854	26,363	25,172	23,291	19,187
Total generation capacity	42,457	43,340	42,434	41,557	38,839	34,669
% of Total						
EGAT's own plants	34.2	36.4	37.9	39.4	40.0	44.7
Purchase from						
IPP	35.2	34.5	35.2	36.0	38.0	38.0
SPP	21.4	20.2	17.8	15.3	13.2	10.4
Import	9.1	8.9	9.1	9.3	8.7	6.9
Total purchase	65.8	63.6	62.1	60.6	60.0	55.3
Total generation capacity	100.0	100.0	100.0	100.0	100.0	100.0

Source: EGAT

Table 2: EGAT's Customer Breakdown

Unit: GWh

Unit: GWn						
	Jan-Mar	2018	2017	2016	2015	2014
	2019					
PEA	32,687	131,970	130,238	125,798	124,376	120,200
MEA	13,430	53,302	52,646	56,586	51,577	50,044
Others	723	2,117	2,247	2,663	3,584	3,360
Total Sales	46,840	187,389	185,131	185,047	179,537	173,604
% of Total						
PEA	69.8	70.4	70.3	68.0	69.3	69.2
MEA	28.7	28.4	28.4	30.6	28.7	28.8
Others	1.5	1.2	1.2	1.4	2.0	1.9
Total sales	100.0	100.0	100.0	100.0	100.0	100.0

Source: EGAT





# FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS\*

Unit: Bt million

	Year Ended 31 December				
	2018	2017	2016	2015	2014
Total operating revenues	526,092	495,488	498,141	547,154	559,640
Operating income	119,258	122,502	125,677	112,308	101,208
Earnings before interest and taxes (EBIT)	88,297	87,565	88,337	77,835	68,433
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	126,572	130,457	131,610	116,296	105,196
Funds from operations (FFO)	85,840	86,179	87,505	82,267	77,389
Adjusted interest expense	39,564	42,777	43,224	32,621	26,538
Capital expenditures	59,228	55,994	50,057	35,254	35,438
Total assets	1,021,211	985,876	963,020	876,493	734,965
Adjusted debt	313,311	316,858	339,636	287,578	166,877
Adjusted equity	452,445	426,557	403,055	380,673	372,863
Adjusted Ratios					
Operating income as % of total operating revenues (%)	22.67	24.72	25.23	20.53	18.08
Pretax return on permanent capital (%)	10.29	10.44	11.05	11.22	11.29
EBITDA interest coverage (times)	3.20	3.05	3.04	3.57	3.96
Debt to EBITDA (times)	2.48	2.43	2.58	2.47	1.59
FFO to debt (%)	27.40	27.20	25.76	28.61	46.37
Debt to capitalization (%)	40.92	42.62	45.73	43.03	30.92

<sup>\*</sup> Consolidated financial statement

# **RELATED CRITERIA**

- Key Financial Ratios and Adjustments, 5 September 2018
- Rating Methodology Government-Related-Entity, 6 June 2017
- Rating Methodology Corporate, 31 October 2007





## **Electricity Generating Authority of Thailand (EGAT)**

Company Rating: AAA
Rating Outlook: Stable

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