



ELECTRICITY GENERATING AUTHORITY OF THAILAND

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CORPORATES

Company Rating: AAA
Outlook: Stable

Last Review Date: 27/06/19

Company Rating History:

Date Rating Outlook/Alert 30/06/17 AAA Stable

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RATIONALE

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

KEY RATING CONSIDERATIONS

Key role in Thailand's power sector

EGAT's business profile reflects its critical role in the electricity industry in Thailand. EGAT is the major SOE responsible for securing electricity supplies 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 by purchasing power 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 2020, EGAT owned and operated 50 power plants, with a total capacity of 15,425 megawatts (MW), representing 33.8% of dependable capacity in Thailand. The remainder is purchased from private power producers in Thailand (53.7%) and imported from the Lao People's Democratic Republic (Lao PDR) and Malaysia (12.5%).

As the sole owner and operator of the national grid, EGAT operates the National Control Center (NCC) to ensure electricity supplies meet electricity demand for the whole country. All power plants connected to the national grid are under the supervision of the NCC for their generation schedule.

Proven record of managing the power system in Thailand

EGAT has a proven track record, with over 50 years of experience in operating various types of power plants. At the end of March 2020, EGAT owned and operated 7,652 MW of combined cycle power plants, 3,687 MW of thermal power plants, 4,022 MW of hydroelectric power plants, and 64 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 70% of the electricity EGAT produces and purchases is sold in bulk to PEA (rated "AAA" with a "stable" outlook by TRIS Rating) and to MEA (28%). PEA and MEA are also state-owned enterprises. PEA is responsible for distributing electricity to end users in provincial areas, while MEA distributes electricity in the metropolitan area (Bangkok, Samut Prakarn, and Nonthaburi provinces).

Investment costs recovered through cost-plus tariff structure

Electricity tariffs in Thailand are regulated by the Energy Regulatory Commission (ERC). The tariff structure is designed to enable EGAT to recover its investment costs plus a return on invested capital (ROIC) of 5.63%. This rate of return is meant to generate sufficient cash flow to cover EGAT's investments in both power plants and the transmission network. Under the





structure of electricity tariffs, changes in the price of fuel or the price EGAT must pay for purchasing power are incorporated into the fuel adjustment charge (or the F_t) and passed on to end users. The ERC calculates and publishes the F_t every four months. EGAT consequently has limited exposure to fluctuations in fuel price.

Consumption to drop in 2020 caused by COVID-19 pandemic

Electricity consumption in Thailand is forecast to drop by about 3% in 2020. The drop in consumption reflects a slowdown in economic activities due to the coronavirus (COVID-19) pandemic. The real gross domestic product (GDP) growth rate is forecast to decline by 5%-7%. In response to measures taken to prevent and control the spread of COVID-19, the Thai government has implemented relief measures for electricity consumers such as discounts on electricity bills and extensions of the bill payment grace period, etc. Although EGAT has not been directly affected by these measures, EGAT might have to extend credit terms for PEA and MEA to help relieve the burden on those two SOEs for 2020.

Prudent financial policy

EGAT has adopted a conservative financial policy. It has a policy to keep minimum cash on hand of Bt45 billion. It also has internal guidelines to ensure financial discipline is maintained. The key financial guidelines include maintaining a debt to equity ratio of less than 1.5 times, a self-financing ratio of more than 25%, 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 2019, EGAT's adjusted debt was Bt310.5 billion, including power purchase commitments with other power producers worth Bt240.4 billion. EGAT's capital structure was very healthy, with a debt to capitalization ratio of 39.5% at the end of 2019.

EGAT also has a very strong liquidity profile. It had cash on hand and cash equivalents of Bt80 billion and undrawn credit facilities of Bt10 billion at the end of 2019. Its funds from operations (FFO) over the next 12 months are expected to be around Bt80 billion. On the other hand, EGAT had debt due over the next 12 months of around Bt10 billion, made up of long-term loans and bonds.

Strong support from the government

EGAT receives strong support from the government of Thailand. Under the EGAT Act B.E. 2511, the government of Thailand will provide extra support to EGAT in the event that EGAT's revenue is not sufficient to cover its 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 centralized generation to more distributed generation. Changes in regulations, technology improvements, and digitalization allow end users to produce their own power and connect to each other via the smart grid.

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

BASE-CASE ASSUMPTIONS

- Electricity sales to drop by 3% in 2020 and to grow by 1%-2% per annum during 2021-2022.
- EBITDA to be about Bt110 -Bt125 billion per year during 2020-2022.
- Capital expenditure and investment to be about Bt136 billion over the period 2020-2022.
- The ratio of debt to EBITDA is forecast to stay at around 2-3 times during 2020-2022.

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, through the merger of 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 electricity supplies for the whole country. At the end of March 2020, EGAT owned and operated 45 power plants, with a total capacity of 15,425 MW, accounting for 33.8% of the total installed capacity in Thailand. The remaining 66.2% was produced by private power producers or 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 2019, revenue from the sale of electricity to PEA accounted for 67.2% of EGAT's total revenue, MEA accounted for 28.5%, and 3.5% came from EGAT's direct customers, including exports to the Lao PDR, Malaysia, and Cambodia. In addition to electricity sales, EGAT generates revenue by providing operations and maintenance services for private power plants, telecommunication services, and others. These services accounted for 0.8% of EGAT's total revenue in 2019.

KEY OPERATING PERFORMANCE

Table 1: EGAT's Electricity Generation Capacity Breakdown

Unit: MW

	Mar 2020	2019	2018	2017	2016	2015
EGAT's own plants	15,425	15,131	15,814	16,091	16,385	15,548
<u> </u>	13,423	13,131	13,614	10,031	10,363	13,340
Purchase from						
IPP	14,949	14,949	14,949	14,949	14,949	14,767
SPP	9,502	9,498	8,757	7,536	6,345	5,137
Import	5,721	5,721	3,878	3,878	3,878	3,387
Total purchase	30,172	30,168	27,854	26,363	25,172	23,291
Total generation capacity	45,597	45,299	43,398	42,454	41,557	38,839
% of total						
EGAT's own plants	33.8	33.4	36.4	37.9	39.4	40.0
Purchase from						
IPP	32.8	33.0	34.5	35.2	36.0	38.0
SPP	20.8	21.0	20.2	17.8	15.3	13.3
Import	12.6	12.6	8.9	9.1	9.3	8.7
Total purchase	66.2	66.6	63.6	62.1	60.6	60.0
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

	Jan-Mar 2020	2019	2018	2017	2016	2015
PEA	33,039	134,607	131,970	130,238	125,798	124,376
MEA	13,558	55,002	53,302	52,646	56,586	51,577
Others	1,551	3,729	2,117	2,247	2,663	3,584
Total Sales	48,148	193,338	187,389	185,131	185,047	179,537
% of Total						
PEA	68.6	69.6	70.4	70.3	68.0	69.3
MEA	28.2	28.4	28.4	28.4	30.6	28.7
Others	3.2	2.0	1.2	1.3	1.4	2.0
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				
	2019	2018	2017	2016	2015
Total operating revenues	562,551	526,092	495,488	498,141	547,154
Earnings before interest and taxes (EBIT)	76,298	88,297	87,565	88,337	77,835
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	118,967	126,572	130,457	131,610	116,296
Funds from operations (FFO)	81,119	85,840	86,179	87,505	82,267
Adjusted interest expense	36,892	39,564	42,777	43,224	32,621
Capital expenditures	53,529	59,228	55,994	50,057	35,254
Total assets	1,003,951	1,021,211	985,876	963,020	876,493
Adjusted debt	310,479	312,821	316,858	339,636	287,578
Adjusted equity	474,654	452,830	426,557	403,055	380,673
Adjusted Ratios					
EBITDA margin (%)	21.15	24.06	26.33	26.42	21.25
Pretax return on permanent capital (%)	8.74	10.29	10.44	11.05	11.22
EBITDA interest coverage (times)	3.22	3.20	3.05	3.04	3.57
Debt to EBITDA (times)	2.61	2.47	2.43	2.58	2.47
FFO to debt (%)	26.13	27.44	27.20	25.76	28.61
Debt to capitalization (%)	39.54	40.86	42.62	45.73	43.03

RELATED CRITERIA

- Rating Methodology Corporate, 26 July 2019
- Key Financial Ratios and Adjustments, 5 September 2018
- Rating Methodology Government-Related-Entity, 6 June 2017

Electricity Generating Authority of Thailand (EGAT)

Company Rating:	AAA
Rating Outlook:	Stable

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