



GLOW ENERGY PLC

No. 74/2015 21 August 2015

Company Rating: A+

Issue Ratings:
Guaranteed A+

Outlook: Stable

Company Rating History:

Date	Rating	Outlook/Alert
09/09/14	A+	Stable
04/05/06	Α	Stable
25/07/03	A-	Stable
27/07/00	BBB+	Stable

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Rating Rationale

TRIS Rating affirms the company and existing guaranteed debenture ratings of GLOW Energy PLC (GLOW) at "A+". At the same time, TRIS Rating assigns a rating of "A+" to GLOW's proposed issue of up to Bt4,000 million in guaranteed debentures. The company will use the proceeds from the new debentures to refinance existing loans.

The ratings continue to reflect GLOW's proven track record in the power generating industry in Thailand, reliable cash flows from long-term power purchase agreements (PPA) with the Electricity Generating Authority of Thailand (EGAT), and long-term contracts with a diverse group of industrial customers. These strengths are partially offset by customer concentration risk, as most of GLOW's customers are in the petrochemical industry and are located in the Map Ta Phut area.

GLOW is the leading private power producer in Thailand. The company was established in 1993 as a Small Power Producer (SPP) in the Map Ta Phut Industrial Estate. Its business scope includes cogeneration and Independent Power Producer (IPP) projects, both in Thailand and neighboring countries. ENGIE (the new name of GDF Suez) remains the major shareholder of GLOW. ENGIE is one of the world's leading energy providers, supplying energy throughout the world, but primarily in Europe.

As of June 2015, GLOW's power generating capacity totaled 3,207 megawatts (MW), consisting of 1,525 MW in IPP plants and a total of 1,682 MW in cogeneration units. GLOW's IPP plants include a 713-MW gas-fired plant located in Chonburi province, a 152-MW hydro power plant located in the Lao People's Democratic Republic (Lao PDR), and a 660-MW coal-fired power plant located in Rayong province. GLOW's cogeneration segment, with plants located in the Map Ta Phut Industrial Estate and the Eastern Seaboard Industrial Estate in Rayong province, mainly caters to petrochemical plants which require highly stable supplies of utilities. Around 2% of GLOW's total generating capacity serves the automotive industry in Pluak Daeng district, Rayong province.

From GLOW's total capacity of 3,207 MW of electricity, 2,345 MW has been contracted to EGAT under several PPAs spanning 21-25 years. PPAs have remaining terms of two to 23 years. The remainder of GLOW's electricity and steam generating capacities, together with treated water, are supplied to industrial customers via long-term contracts. These long-term commitments provide GLOW with reliable sources of cash inflow. Sales of electricity to EGAT comprise approximately 65% of total annual revenue. Sales to industrial customers accounted for the remainder (35%).

Currently, GLOW has two PPA contracts under SPP scheme that will be expired in 2017. The expiring PPA contracts comprise 180 MW of electrical generating capacity or approximately 6% of GLOW's total capacity. GLOW's PPAs under SPP scheme are likely to be granted extension for three to five years similar to other SPP contracts that will be expired during 2017-2018, according to the





latest power development plan (PDP2015). The selling price is expected to be adjusted downward to reflect cost of generating power only. TRIS Rating views that the expiration of SPP contracts has no significant impact on GLOW's financial performance because the expiring contracts account for a small portion of GLOW's total capacities. Additionally, the company plans to sell the electrical generating capacity to industrial customers if the PPAs are not extended.

The availability factor for overall operations in 2015 is likely to be lower than in 2014 as the IPP units underwent scheduled maintenance outages. During the first half of 2015, the equivalent availability factor (EAF) of the IPP segment was at 85.8%. The net output of electricity from the IPP segment fell to 3,554 gigawatt hours (GWh), compared with 5,609 GWh in the same period last year. The drop in net output reflects the major maintenance of GHECO-One Co., Ltd. (GHECO-One) and a lower dispatch rate for Glow IPP Co., Ltd. (GIPP) on the back of high reserve margin in electricity generating capacity in Thailand. GLOW's cogeneration segment operated slightly below the plan due to some force outages. The EAF for the cogeneration segment was 93.9% in the first half of 2015, compared with 95.9%-97.5% during 2012-2014. The net output of electricity sold to industrial customers was 2,505 GWh, a slight drop from 2,549 GWh produced in the same period of 2014 because of sluggish economic condition.

GLOW's revenues are expected to drop owing to a low dispatch rate of GIPP, falling in fuel prices, downward adjustments in the Ft charge, and a decrease in Available Payment Rate (APR) of GIPP as per the PPA contract. The fuel price risk and low dispatch of GIPP will have a limited impact on GLOW's cash flow generation as the risks are largely mitigated by the tariff mechanism in the PPAs. Under TRIS Rating's base-case scenario, GLOW is expected to generate predictable cash flows of Bt12,000-Bt14,000 million per annum over the next three years. The debt to capitalization ratio is expected to decline progressively since the company still has no major investments in the foreseeable future.

Rating Outlook

The "stable" outlook reflects the expectation that GLOW will receive stable streams of cash from its long-term power sales contracts with EGAT and its industrial customers. TRIS Rating also expects GLOW will sustain a good level of operating performance and deliver reliable cash flow streams as planned.

The ratings and/or outlook could be revised upward if there is a significant improvement in the company's balance sheet and cash flow protection. In contrast, the ratings and/or outlook could be revised downward if GLOW's operating performance deteriorates significantly or the company engages in a large debt-financed acquisition or investments that would significantly weaken GLOW's financial profile.

GLOW Energy PLC (GLOW)

Company Rating:	A+
Issue Ratings:	
GLOW173A: Bt1,000 million guaranteed debentures due 2017	A+
GLOW175A: Bt2,000 million guaranteed debentures due 2017	A+
GLOW17OA: Bt1,600 million guaranteed debentures due 2017	A+
GLOW186A: Bt2,500 million guaranteed debentures due 2018	A+
GLOW18NA: Bt1,500 million guaranteed debentures due 2018	A+
GLOW194A: Bt2,000 million guaranteed debentures due 2019	A+
GLOW19OA: Bt1,400 million guaranteed debentures due 2019	A+
GLOW218A: Bt5,555 million guaranteed debentures due 2021	A+
Up to Bt4,000 million guaranteed debentures due within 2025	A+
Rating Outlook:	Stable





Plant Performance Statistics of GLOW

Cogeneration Performance	Unit	Jan-Jun 2015	2014	2013	2012	2011	2010	2009
Net output*	MWhe ('000)	6,248	12,673	12,402	11,724	9,594	8,235	8,152
Availability	%	93.93	96.62	97.51	95.87	95.26	93.57	92.90
Forced outage	%	1.91	0.65	0.50	0.47	0.64	0.39	1.78
Schedule & maintenance outage**	%	4.16	2.73	1.99	3.65	4.10	6.04	5.32
- Plant heat rate* - Gas-fired	BTU/kWh eq	8,066	8,155	8,105	8,091	8,621	8,762	8,813
- Plant heat rate* - Coal-fired	BTU/kWh eq	10,467	10,437	10,513	10,420	10,796	10,165	10,280
IPP Performance***								
Net output	MWhe ('000)	3,554	9,831	9,222	6,661	4,841	5,327	5,100
Availability	%	85.82	96.24	88.42	84.82	96.26	95.37	93.07
Forced outage	%	4.28	0.96	6.77	5.53	1.82	1.80	0.19
Schedule & maintenance outage**	%	9.90	2.80	4.81	9.65	1.91	2.82	6.74
- Plant heat rate - Gas-fired	BTU/kWh eq	7,021	6,980	6,946	6,930	6,924	6,898	6,938
- Plant heat rate - Coal-fired	BTU/kWh eq	8,804	8,940	9,183	9,094	-	-	-

 ^{*} Including power and steam

^{**} Planned and unplanned maintenance outages

^{***} Excluding HHPC





Financial Statistics and Key Financial Ratios*

Unit: Bt million

		Year Ended 31 December						
	Jan-Jun 2015	2014	2013	2012	2011	2010		
Sales	32,030	72,991	69,207	57,204	40,359	35,657		
Gross interest expense	1,559	3,386	3,389	3,446	3,568	3,276		
Net income from operations	3,748	9,200	8,217	4,476	3,864	4,168		
Fund from operations (FFO)	7,776	15,739	13,927	10,201	7,638	7,473		
Total capital expenditures	2,532	854	1,783	4,172	9,873	24,073		
Total assets	117,089	120,322	125,006	130,039	120,235	107,327		
Total debt	53,820	56,451	65,305	74,821	73,693	63,435		
Total liabilities	62,907	67,751	77,746	87,496	81,003	69,374		
Shareholders' equity	54,182	52,571	47,260	42,543	39,232	37,953		
Depreciation & amortization	2,251	4,772	4,869	4,247	3,216	2,829		
Dividends paid	3,652	5,537	3,277	3,021	2,854	2,787		
Operating income before depreciation and amortization as % of sales	27.8	27.0	25.4	21.8	23.0	25.0		
Pretax return on permanent capital (%)	12.6 **	13.8	11.6	7.3	5.8	6.9		
Earnings before interest, tax, depreciation, and amortization (EBITDA) interest coverage (times)	5.7	5.9	5.4	3.7	2.7	2.8		
FFO/total debt (%)	28.2 **	27.9	21.3	13.6	10.4	11.8		
Total debt/capitalization (%)	49.8	51.8	58.0	63.8	65.3	62.6		

Consolidated financial statements

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^{**} Annualized from trailing 12 months