



NATIONAL POWER SUPPLY PLC

No. 153/2017 16 November 2017

Company Rating: BBB-

Issue Ratings:

Senior unsecured BBB-

Outlook: Stable

Company Rating History:

Date	Rating	Outlook/Alert
28/11/16	BBB	Negative
08/01/10	BBB	Stable
21/07/05	BBB+	Stable

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Rating Rationale

TRIS Rating downgrades the company rating of National Power Supply PLC (NPS) to "BBB-" from "BBB". The downgrade reflects NPS's lower profitability and deterioration in financial profile as well as uneven operating performance at power plants. At the same time, TRIS Rating affirms the ratings of NPS's senior unsecured debentures at "BBB-". The debenture ratings were not notched down from the company rating because the ratio of secured debt to total assets is expected to fall below 20% after completion of refinancing its existing loans with debentures. TRIS Rating also assigns a rating of "BBB-" to NPS's proposed issue of up to Bt3,500 million in senior unsecured debentures. The proceeds from the issuance of the new debentures will be used to refinance the company's maturing debentures and short-term loans.

The ratings continue to reflect the reliable cash flows NPS receives from the long-term Power Purchase Agreements (PPA) it has with the Electricity Generating Authority of Thailand (EGAT) under the Small Power Producer (SPP) scheme and the long-term contracts it has with Double A (1991) PLC (DA). The ratings are partially offset by NPS's high level of leverage and periodic related-party transactions. NPS's ratings are influenced by the company rating of DA, which has the same ultimate shareholder, according to TRIS Rating's group rating methodology.

NPS is the leading operator of biomass power plants in Thailand. DA held a 25.5% stake in NPS as of September 2017. NPS and DA have the same ultimate shareholder. Mr. Yothin Dumnernchanvanit and other related parties currently hold 86.9% of NPS's shares and 87.8% of DA's shares.

NPS owns and operates a total of 10 biomass-fired and coal-fired power plants under the SPP scheme. The 10 plants have a total capacity of 726 megawatts (MW) of electricity and 1,017 tonnes per hour of steam. The power plants owned by NPS and its subsidiaries are located in industrial parks in Prachinburi and Chachoengsao provinces. In addition to producing electricity, NPS has expanded its scope of business to encompass energy-related businesses and supporting businesses in order to secure supplies of fuel and reduce costs.

The power segment remains NPS's major source of revenue and earnings before interest, tax, depreciation and amortization (EBITDA). In 2015 and 2016, 80%-85% of NPS's EBITDA came from the power segment, the balance or 15%-20% came from other businesses.

The majority of NPS's revenue stream is secured by the PPAs and long-term contracts. About 304 MW, out of NPS's electricity generating capacity of 726 MW, is secured under 25-year PPAs with EGAT. The remaining amounts of electricity and steam produced are supplied to DA under long-term contracts and sold to customers in the industrial estates in Prachinburi and Chachoengsao.

NPS's power plants are designed to run on coal and biomass. A biomass-fueled plant yields a cost advantage for the operator and offers flexibility in the choice of fuel. However, a biomass-fired power plant requires higher maintenance and the fuel causes more deterioration in the equipment compared with conventional power plants.

During the past two years, machinery breakdowns at a number of biomassfired power plants caused higher forced outages. Plant availability was significantly





lower than in the past. In 2016, the average plant availability factor fell to 82.46%, with a force outage factor of 9.55%. For the first nine months of 2017, the average plant availability factor declined further to 81.53%, with a forced outage of 7.95%. The lower plant availability factor was partly due to the commissioning of new plant and coal-fired plant was scheduled for major maintenance. Base on NPS's operating record during 2011-2014, the average plant availability factor ranged from 84%-89% yearly, while the forced outage factor varied between 3.5%-5.5%.

NPS's financial performance in 2016 and in the first nine months of 2017 was weaker than expected. This was attributed to machinery problems, higher operating costs, and a lower electricity tariff rate. The machinery breakdowns pushed production costs higher. At the same time, NPS's fuel margin was narrowed because of a mismatch in the tariff formula. The company's electricity tariff for the power sold to EGAT is linked to the price of coal, fuel oil, and natural gas. However, NPS uses coal and biomass as fuel. The price of biomass fuel did not move in tandem with prices of coal, fuel oil, or natural gas. The prices of fuel oil and natural gas have been in a slump from 2014 through the first nine months of 2017. The drops in the prices of conventional fuels led to a drop in average price of power sold to EGAT. In addition, a fall in the fuel adjustment charge (Ft) also caused a decrease in average price of electricity sold to industrial customers. Including the production problem, the gross margin of the power and utility segment tumbled from 24%-28% yearly in 2012-2014 to 14.9% in 2016 and 14.8% in the first nine months of 2017. NPS's ethanol segment improved significantly after a plunge in the price of tapioca, the main raw material. However, it could not offset the weak performance of the power segment. The operating margin (operating income before depreciation and amortization as percentage of sales) was over 25% before 2015 but declined to 19.25% in 2016 and 18.08% in the first nine months of 2017. NPS's EBITDA dropped from Bt2,967 million in 2015 to Bt2,539 million in 2016. For the first nine months of 2017, NPS's EBITDA declined to Bt1,897 million, a 3% drop over the same period of the prior year.

On 5 September 2017, the Committee on Energy Policy Administration (CEPA), chaired by the Minister of Energy, approved in principal a change in the tariff structure. SPPs which use biomass fuel can choose to apply for the Feed-in-Tariff (FiT) scheme to replace their existing tariff scheme. The switch will relieve the pressure on the operating margin. Biomass power plants with a capacity of less than 10 MW can apply for an FiT of Bt4.24/kWh (kilowatt-hour) while larger biomass power plants (capacities of greater than 10 MW) can apply for an FiT of Bt3.66/kWh. The proposed change needs final approval from the National Energy Policy Council (NEPC) to be effective. NPS plans to apply for this scheme once it is in force. The company's EBITDA is projected to increase by Bt350-Bt500 million per year under the new FiT scheme, depending on the amount of power NPS produces.

NPS's leverage is high. Total debt outstanding increased from Bt14,451 million at the end of 2012 to a peak at Bt22,424 million at the end of December 2015. The sharp rise was owing to capacity expansions at two power plants and the ethanol production plants, as well as generous dividend payments. The expansions were completed gradually in 2014-2016. Once the capital expenditures eased, total debt outstanding declined slightly to Bt21,198 million at the end of September 2017. However, the company's net losses in 2016 and the first nine months of 2017 eroded the equity base. NPS's total debt to capitalization ratio has continued to rise, climbing to 71.34% as of September 2017, compared with 69.17% at the end of 2015 and 60.2% at the end of 2012. The deterioration in EBITDA and the increase in total debt outstanding weakened NPS's cash flow protection. The EBITDA interest coverage ratio fell in 2015 through the first nine months of 2017, ranging from 2.05 times to 2.43 times, compared with about 4 times before 2015. The ratio of funds from operations (FFO) to total debt was 6.58% in 2016 and 5.31% (annualized, from the trailing 12 months) for the first nine months of 2017, down from over 17% during 2012-2014. The weak financial performances increased risk of financial covenant compliance. NPS breached some covenants with some banks, but received waivers from the banks. NPS has limited headroom to comply with the financial covenant with its bondholders. NPS's debt to equity ratio was 2.41 times at the end of September 2017, slightly less than 2.5 times specified in the debentures covenant. TRIS Rating expects the company to comply with its covenant or seek timely waiver.

As of September 2017, the company's outstanding deposits paid to related companies for land purchases for an Independent Power Producer (IPP) project remained at Bt1,768 million in total. Since 2008, NPS had made deposit payments to related companies for land it intends to purchase for the future power projects. The land purchase prices in these transactions are well above the appraised value of Bt678 million set by an independent appraiser. However, the land purchase agreements have a condition that the purchased area and the prices for the land will be finalized after required permits are approved. The final price will be based on the latest appraised values, according to the agreements.

Looking forward, NPS's profitability is expected to improve in 2018. NPS continues to implement its improvement program with an aim to reduce operating costs as well as increase plant reliability. The power plants showed higher availability in the third quarter of 2017, but the plant reliability and the success of the cost reduction efforts need to be demonstrated over an extended period. NPS will benefit from the higher tariff as the reference fuel prices and Ft increase. NPS's leverage is expected to gradually improve after it completed the sizeable investments needed for new plants. During 2017-2020, the FFO





is estimated at about Bt1,500-Bt2,600 million per year. FFO should cover maintenance capital expenditures of about Bt600-Bt1,200 million per annum during 2017-2020. In the fourth quarter of 2017, scheduled debt repayments will amount to nearly Bt2,000 million excluding loans for working capital. In 2018, NPS will have a scheduled repayment for a long-term loan of about Bt850 million plus a redemption of a Bt2,000 million bond. NPS plans to refinance most of the maturing debts by issuing new long-term debentures, augmented with cash flow from operations. In addition, it had outstanding bills of exchange (B/E) worth Bt315 million as of September 2017. Cash on hand of about Bt700 million and undrawn credit facilities of more than Bt500 million will help NPS deal with these debt obligations. TRIS Rating expects that the company will secure refinancing or ensure a sufficient backup credit facility before the debts come due.

Rating Outlook

The "stable" outlook reflects the expectation that the operating performance of NPS's plants will improve gradually and generate cash flow as projected. The company will comply with covenants in its bonds and manage the refinancing of the maturing debts properly. The reliability improvement of the power plants, which will improve its financial profile on the sustainable basis, is a positive factor for the ratings over the medium to long term. In contrast, the negative factors are a further deterioration in operating performance, weaker capital structure, or insufficient backup credit facilities. NPS's ratings are also influenced by the company rating of DA, which has the same ultimate shareholder. Any change in the credit rating of DA would affect the ratings of NPS accordingly.

National Power Supply PLC (NPS)

Company Rating:	BBB-
Issue Ratings:	
NPS184A: Bt1,000 million senior unsecured debentures due 2018	BBB-
NPS19OA: Bt4,000 million senior unsecured debentures due 2019	BBB-
NPS218A: Bt5,000 million senior unsecured debentures due 2021	BBB-
Up to Bt3,500 million senior unsecured debentures due within 5 years	BBB-
Rating Outlook:	stable

Plant Performance Statistics of NPS

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Plant Performance	Unit	Jan-Sep * 2017	2016*	2015	2014	2013	2012	2011
Net output**	GWhe	2,555	3,419	2,995	3,202	3,096	2,876	2,973
Plant heat rate	BTU/kWh eq.	12,482	12,783	13,464	12,886	12,506	13,104	12,886
Availability	%	81.53	82.46	84.79	88.52	86.02	83.29	87.49
Forced outage	%	7.95	9.55	6.43	3.63	4.03	5.26	3.93
Schedule & maintenance outage	%	10.53	7.99	8.78	7.85	9.95	11.46	8.58

^{*} Including ten power plants

^{**} Net output of power and steam





Financial Statistics and Key Financial Ratios*

Unit: Bt million

		Year Ended 31 December					
	Jan-Sep 20 17	2016	2015	2014	2013	2012	
Sales and service revenues	10,094	12,330	12,570	15,377	13,268	11,860	
Gross interest expense	925	1,221	1,218	1,112	972	903	
Net income from operations	(223)	(242)	319	1,660	1,478	1,218	
Funds from operations (FFO)	1,059	1,447	2,009	3,413	3,031	2,646	
Total capital expenditures	323	803	2,981	4,830	5,149	2,893	
Total assets	32,064	33,735	33,927	32,432	28,337	25,982	
Total debt	21,198	21,990	22,424	19,921	16,902	14,451	
Shareholders' equity	8,518	9,045	9,993	10,844	9,450	9,555	
Operating income before depreciation and amortization as % of sales	18.08	19.25	23.09	28.14	29.33	27.64	
Pretax return on permanent capital (%)	2.86 **	2.49	4.57	10.06	10.49	9.31	
Earnings before interest, tax, depreciation, and amortization (EBITDA) interest coverage (times)	2.05	2.08	2.43	3.88	4.14	3.76	
FFO/total debt (%)	5.31 **	6.58	8.96	17.13	17.93	18.31	
Total debt/capitalization (%)	71.34	70.85	69.17	64.75	64.14	60.20	

^{*} Consolidated financial statements

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^{**} Adjusted with trailing 12 months