Research Brief: PLN's Coal IPP Funding Gap Suggests Tariffs Must Rise in 2020

Is Indonesia's State-Owned Utility Telling Its Ratepayers the Same Thing It Is Saying to Global Bond Investors?

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Introduction

Global bond investors rely on a certain relentless logic when it comes to the debt of state-owned power companies.

An investment-grade rating rests on the view that the debt is effectively guaranteed by the government and backed by its willingness to raise revenue or tariffs, if necessary, to repay any debt. This view is stated plainly in Moody's Investors Service's supportive April 25 rating announcement concerning Perusahaan Listrik Negara (PLN), Indonesia's state-controlled power company.[1] Moody's states that the Baa2 senior unsecured rating for a proposed US$5 billion global medium-term note program by PLN assumes that "…the longstanding and ongoing subsidies from the government ensure its financial viability and operational soundness."

While this is conventional fixed-income market logic, nowhere in Moody's press release does the ratings agency say how much PLN's subsidies from the Indonesian government need to rise or when tariffs will go up for ratepayers to keep international bond investors and the rating's agency happy. This matters because on March 12, Moody's released a note commenting that the utility's decision to freeze tariffs was a credit negative event, but that PLN's investment-grade rating was still justified based on the assumption that its operating losses would continue to be offset by government subsidies.[2]

This scenario may prove unsustainable, however, if the government is to keep its good standing with global investors. As a result, ratepayers likely will be expected to step up to relieve the pressure on the Indonesian government.

How Big Is PLN's Funding Hole?

To explore this question, IEEFA has analyzed PLN's financial outlook and its rising operating income losses over the next four years. Historically, the utility's operating losses have been covered by a combination of direct government subsidies and tariff increases. Our numbers indicate that PLN's aggressive coal-fueled growth plans will result in a sharp increase in required subsidies and tariff increases over the next four years, with required support nearly tripling by 2021.

To put this in context, in 2017 the government pumped IDR50.6 trillion (US$3.6 billion) in cash into PLN. Our forecast suggests that the annual subsidy required by 2021 could be as much as IDR133.7 trillion (US$9.5 billion)— an amount the government likely would be hard-pressed to cover with subsidies alone.

The need for tariff increases is an issue that investors cannot ignore, particularly given the expectation of sharply rising operating losses in the next four years. But it is one that the

[1] https://www.moodys.com/research/Moodys-assigns-PBaa2-rating-to-PLNs-proposed-global-MTN-program--PR_382504

[2] https://www.moodys.com/credit-ratings/Perusahaan-Listrik-Negara-PT-credit-rating-600070417?emsk=2&isMaturityNotDebt=0&isWithDrawnIncluded=0&emvalue=Perusahaan%20Listrik%20Negara%20(P.T.)

government and PLN likely do not want to talk about now with local elections looming later this year and a presidential election in 2019.

Table 1: PLN Forecast Income Statement (in Millions IDR)

	2017 Rp	2018E Rp	2019E Rp	2020E Rp	2021E Rp
REVENUES					
Sale of electricity	246,586,856	263,652,568	282,406,098	304,469,075	327,635,200
Sales GWh	223,530	239,000	256,000	276,000	297,000
Sales YOY% Change	3.5%	6.9%	7.1%	7.8%	7.6%
Other revenue	8,708,387	9,373,159	10,089,199	10,860,494	11,691,342
Total Revenues	**255,295,243**	**273,264,728**	**292,751,298**	**315,605,569**	**339,623,542**
OPERATING EXPENSES					
Fuel and lubricants	116,947,824	136,712,006	153,254,159	165,207,983	177,763,790
Purchased electricity	72,426,641	79,665,218	86,932,466	119,166,407	169,735,723
YOY% Change	21.3%	10.0%	9.1%	37.1%	42.4%
Depreciation	29,160,597	32,076,657	35,284,322	37,048,538	38,900,965
Other expense	56,939,032	58,005,035	59,097,688	60,217,657	61,365,626
Total Operating Expenses	**275,474,094**	**306,458,915**	**334,568,635**	**381,640,587**	**447,766,105**
OPERATING LOSS BEFORE SUBSIDY	**(20,178,851)**	**(33,194,188)**	**(41,817,338)**	**(66,035,018)**	**(108,142,563)**
Government's electricity subsidy	45,738,215	48,903,652	67,376,702	91,594,382	133,701,927
YOY% Change	-21.2%	6.9%	37.8%	35.9%	46.0%
OPERATING INCOME AFTER SUBSIDY	**25,559,364**	**25,559,364**	**25,559,364**	**25,559,364**	**25,559,364**

Source: IEEFA 2017 PLN annual report and IEEFA estimates; see also IEEFA April 2018 report "Perusahaan Listrik Negara (PLN): A Power Company Out of Step With Global Trends"

PLN's Core Problems: IPPs, Grid Spending and Structural Operating Losses

The biggest funding challenge for PLN over the next four years is to find a way to pay for its planned increase in spending on new IPP capacity and the associated grid expansion needed to ensure that the new capacity can be dispatched.

Indonesia's latest power sector plan, the 2018 RUPTL, includes aggressive steps toward reducing the financial impact of commitments to buying power from costly foreign independent power producers (IPPs) during the period leading up to the 2018 and 2019 elections. Because much of the new contracted capacity is already under construction, PLN's only option, politically speaking, has been to soften the near-term impact by delaying expensive new units. This decision will result in relatively muted cost increases in 2018 and 2019 of 10.0% and 9.1%, respectively.

But the delay is only temporary. In 2020 and 2021, 7,550MW and 6,207MW respectively of new IPP capacity, most of which is coal-fired generating capacity, is to be added to the grid by PLN. As a result, purchased IPP electricity costs are forecast to surge by 37.1% in 2020, followed by a 42.4% increase in 2021. While unit sales growth is forecast to rise during the period, PLN's structural operating losses ensure, according to our analysis, that in the absence of meaningful tariff increases, subsidies must rise dramatically to ensure PLN can service its debt.

PLN's Tariff Increase Challenge

PLN's history of under-recovery is well known, but the extent to which tariffs now lag system costs in combination with the scale of PLN's funding hole is not as widely understood. It's premature to guess how much PLN may seek to increase tariffs, but our scenario analysis can be used to explore how much tariffs might have to rise to cover the significant increase in operating losses expected, especially in 2020 and 2021 due to higher IPP payments. If tariffs were increased to cover the gap between the 2017 subsidy payment and future operating losses, we believe that tariffs could rise sharply in 2020 by as much as 10 to 25% although the impact of the tariff increase on specific user groups may vary.

Tariff increases of this magnitude are always a sensitive issue, especially in more urbanized areas where ratepayers are beginning to join their Asian counterparts in objecting to growing air pollution problems that come with PLN's over-dependence on coal-fired generation. Ratepayers don't want higher rates in any case, but especially not when those increases mean more air pollution too.

In recent years, the national government has aimed to increase effective tariffs by reducing subsidies paid to low-income groups while raising tariffs for large-volume users. While this is a well-accepted strategy, its continued use and possible expansion must contend with fast-changing public perceptions of who is winning and who is losing. Some communities still lack access to power in Indonesia, where the national electrification rate hovers around 95% and where the government has an ambitious target of raising that number to 97% by the end of the year.[3]

Nevertheless, rumors are swirling that PLN has a growing list of potential IPP projects, outside of the RUPTL, that would benefit energy-intensive joint ventures rather than underserved Indonesian consumers.[4]

What Are PLN's Options?

The outlook for PLN is fraught with funding challenges, not least due to last week's turbulence in emerging market bond markets and the Indonesian rupiah's depreciation. Our numbers suggest PLN could have additional new funding needs for at least the next two years.

Bond investors and rating agencies like Moody's may find a way to get comfortable with PLN's quick-fix capex cuts and a new policy to cap runaway coal costs in 2018. Unfortunately, the benefits of these efforts will fade in 2019, putting the issue before the public as the government and PLN are forced to seek ways of covering the utility's mounting losses. And the choices are stark: More government subsidies, higher tariffs for ratepayers, or some combination of the two.

In the past, PLN has been able to avoid the spotlight on its financial performance because, as a state-owned enterprise, it is not subject to the type of scrutiny common to publicly listed power companies. This may change soon, however, as PLN seeks to tap the bond market

[3] https://en.tempo.co/read/news/2018/02/01/056915384/Jokowi-Asks-PLN-to-Accelerate-Electrification-in-East-Indonesia

[4] http://www.thejakartapost.com/news/2018/04/14/indonesia-china-sign-23-3b-in-contracts.html

more aggressively and as realistic financial commentary about PLN becomes more widely available.

For debt investors, PLN's financial fragility matters because the funding environment for coal-heavy sectors vulnerable to climate transition risk is deteriorating. As more banks and investors withdraw from funding coal-fired generation, it is worth remembering that issuers like PLN must try to make the case that coal is the only way to meet the electricity needs of underserved consumers.

This is a hard case for PLN to make. According to a 2017 World Bank study, "Compared to other countries of the world, Indonesia has very favorable potential for [solar] PV for power generation."[5] Alternatives to coal-fired power generation have often been systematically overlooked and, due to hasty decisions taken in the 2018 RUPTL, Indonesia's already-modest renewables program has been dialed back even further to preserve a commitment to coal.

Based on our forecasts, PLN's risk profile seems destined to rise over the next four years, with implications for all the key players: the government, ratepayers, PLN, and the IPPs.

The risk facing existing IPPs is real even though they have guaranteed power purchase agreements. While these operators doubtless would have leverage in a legal dispute, there is often an incentive to compromise short-term if the possibility of future expansion is still a viable option. As a result, it is always possible that the IPPs may be asked to share some of the pain as PLN seeks to rationalize its cash-flow commitments.

This would serve as yet another reminder to coal-focused investors that long-term commitments to coal now carry a new level of risk.

Mapping PLN's Growth Path

Five factors shaping IEEFA's analysis of PLN's finances over the next four years:

1) Revenues will track the unit sales growth forecast in the 2018 RUPTL, which rise at an average annual rate of 7.4% year-over-year.

2) A tariff freeze implemented by the government for 2018 and 2019 creates a potential funding gap that is not addressed in terms of the timing or size of tariff increases required to bridge this gap.

3) The cost of purchased electricity from IPPs grows sharply during the forecast period, in line with the capacity additions specified in the 2018 RUPTL. Cost per megawatt is flat during the period, but unit additions alone drive cost growth of 134.4% between 2017 and 2021.

4) Other operating revenue and expense items have been adjusted to show modest growth in line with recent trends.

5) PLN is subject to various regulatory guidelines concerning target subsidy levels and debt service ratios. PLN does not disclose how it calculates these ratios. As a neutral proxy, we have assumed that PLN will need to report Rp25.6 trillion of operating income after subsidy—the same amount reported in 2017—during the forecast period. Operating income is used as a benchmark for estimating the level of subsidy required each year.

[5] http://documents.worldbank.org/curated/en/729411496240730378/Solar-resource-and-photovoltaic-potential-of-Indonesia

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