

CREDIT OPINION

1 December 2022

New Issue



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RATINGS

AES Panama Generation Holdings S. de R.L.

Domicile	Panama
Long Term Rating	Baa3
Type	LT Issuer Rating - Fgn Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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AES Panama Generation Holdings S. de R.L.

Update to credit analysis

Summary

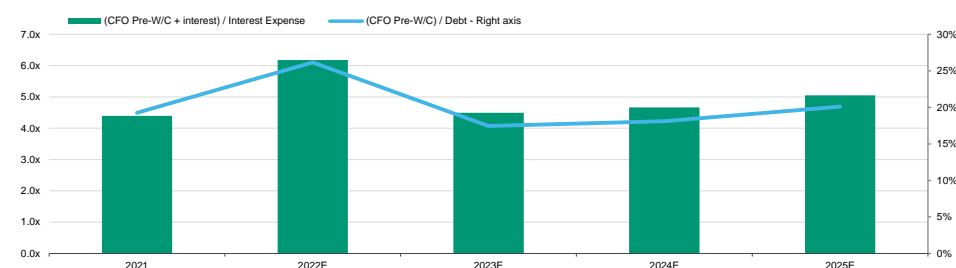
The Baa3 rating assigned to [AES Panama Generation Holdings S. de R.L.](#)'s (AES PGH) \$1,380 million senior secured partially amortizing notes (due 2030), reflects the company's strategic, competitive and highly contracted portfolio of generation assets in Panama.

Over half of AES PGH's portfolio consists of hydropower generation assets and the rest includes natural gas, wind and solar assets, mitigating exposure to hydro volatility. Most of the company's energy capacity is contracted with three partially government-owned distribution companies (DISCOs) in [Panama](#) (Baa2 negative).

AES PGH's high leverage constrains the rating, particularly in the first few years of the transaction. As of June 2022 (last twelve months), AES PGH reported cash from operations pre-working capital (CFO pre-WC) + interest/interest of 4.5x and CFO pre-WC/debt ratio of 21%.

Exhibit 1

Strong performance as of June 2022; high leverage constrains credit quality on a projected basis



Source: AES Panama Generation Holdings; Moody's

Credit strengths

- » AES PGH has a strategic, competitive and highly contracted portfolio of energy assets.
- » Natural gas generation mitigates its exposure to low hydro generation.
- » [AES Corporation](#) (Baa3 stable) is a strong sponsor with a long track record in Panama and Latin America.
- » Credit enhancements include a \$50 million liquidity facility, additional debt and dividend lockups.

Credit challenges

- » AES PGH's leverage and refinancing risk are high.
- » AES Colón's liquefied natural gas (LNG) storage and regasification business is only partially contracted.
- » Dividend distributions of the largest operating company, AES Panama, are subject to the approval of the [Government of Panama](#) (Baa2 negative), its majority owner.

Rating outlook

The rating outlook is stable, reflecting our view that AES PGH will maintain stable and visible cash flow for the next 12-18 months. Specifically, we expect its CFO pre-WC/debt and interest coverage ratio to average around 17% and 4.0x, respectively, throughout the life of the transaction.

Factors that could lead to an upgrade

- » We could upgrade AES PGH's ratings if the company reduces its debt balance or increases its cash flow, such that its CFO pre-WC/debt exceeds 20% and interest coverage ratio remains at or above 4.5x on a sustained basis.

Factors that could lead to a downgrade

- » We could downgrade AES PGH's rating if the company records funds from operations/debt below 15% or if the interest coverage ratio remains below 3.0x on a sustained basis. Projected debt/EBITDA above 4.0x on a sustained basis could also strain the ratings.

Key indicators

Exhibit 2

AES Panama Generation Holdings S. de R.L.

As of 31/12	2021	2022E	2023E	2024E	2025E
(CFO Pre-W/C + interest) / Interest Expense	4.4x	6.2x	4.5x	4.7x	5.1x
(CFO Pre-W/C) / Debt	19.2%	26.2%	17.5%	18.1%	20.1%
RCF / Debt	12.6%	5.7%	7.1%	2.3%	3.6%

Source: Combined financial statements and Moody's Investors Service

Profile

[The AES Corporation](#) (Baa3 stable), through its subsidiary AES GPH, owns an interest in and operates a large portfolio of power generation and LNG assets in Panama.

In terms of energy generation, AES GPH is the largest energy supplier in Panama (a 39% market share as of June 2022) with 1,161 megawatts (MW) of installed capacity and \$2,458 million in assets.

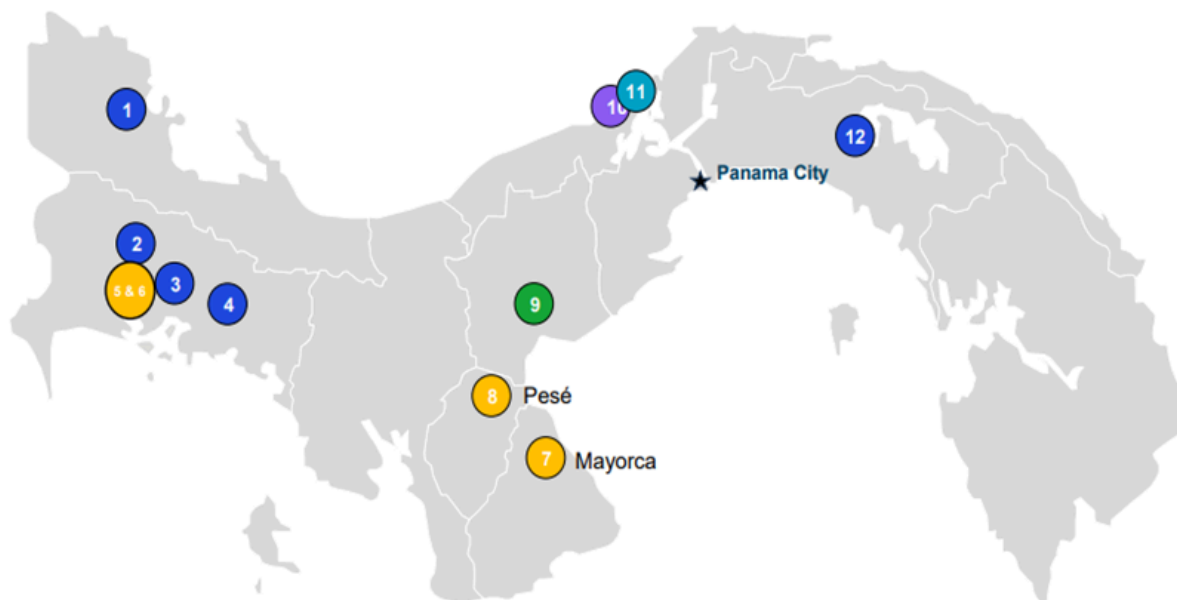
The company operates nine power plants across the country:

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- » Bayano: a hydroelectric power plant with an installed capacity of 260 MW
- » Chiriquí: three hydroelectric power plants with total installed capacity of 222 MW
- » Changuinola: a hydroelectric power plant with an installed capacity of 223 MW
- » Colón: a natural gas power plant with an installed capacity of 381 MW and an LNG terminal
- » Cedro and Caoba: two solar farms with a total installed capacity of 10 MW
- » Mayorca: a solar farm with an installed capacity of 10 MW
- » Penonome: a wind plant with an installed capacity of 55 MW
- » Pesé: a solar farm with an installed capacity of 10 MW

Exhibit 3

AES GPH's portfolio



1. Changuinola
5. Cedro
9. Penonemé I

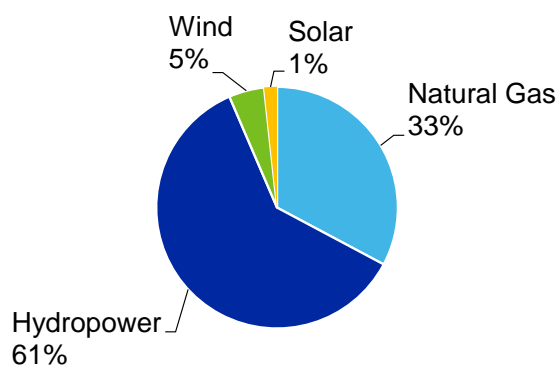
2. Chiriquí – La Estrella
6. Caoba
10. Colón – Power Plant

3. Chiriquí – Los Valles
7. Mayorca
11. Colón – LNG Terminal

4. Chiriquí – Estí
8. Pesé
12. Bayano

Source: AES Panamá Generation Holdings, S. de R.L.

Exhibit 4

Installed capacity by fuel type**Total: 1,161 MW**

As of June 2022.

Source: AES Panamá Generation Holdings, S. de R.L.

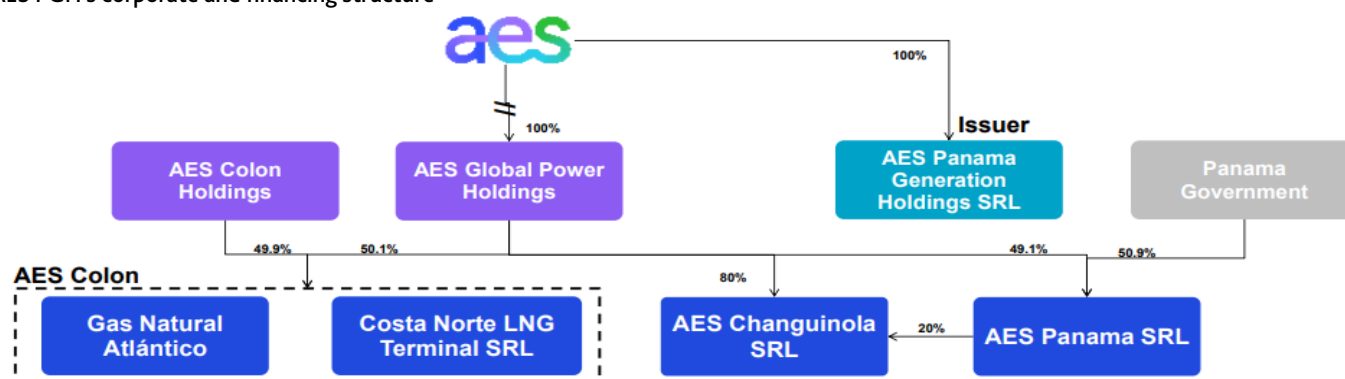
Organizational structure

AES PGH is an entity that was created with the sole purpose of issuing consolidated debt of the operating companies of AES Global Power Holdings (AES GPH) in Panama, as shown in Exhibit 4. In 2020, AES PGH issued a total of \$1,485 million of senior secured debt, which is supported by the consolidated cash flow of the portfolio of power generation and LNG assets in Panama, operated under four entities. The notes and loan proceeds refinanced most of the existing debt at the operating companies, which in turn entered into secured loans with the issuer.

Total debt is comprised by the \$1,380 million Reg S/144 A senior secured notes (maturing in 2030), that rank pari passu with a three-year fully amortizing \$105 million senior secured loan (due 2023).

The notes and the liquidity facility are secured by the issuer's rights under the ICLs; AES GPH's equity interests in the operating companies; and the issuer's collection and operating accounts and AES GPH's dividend collection accounts. Dividends from the operating companies will flow into AES GPH's dividend collection accounts, which are pledged as collateral, and will only be released to AES GPH if, among other conditions, no default exists under the notes, the loan facility or the liquidity facility.

Exhibit 5

AES PGH's corporate and financing structure

Source: AES Panamá Generation Holdings, S. de R.L. and Moody's Investors Service

Recent developments

On September 30, AES PGH's Estí hydroelectric power project (Estí) stopped operations after it was flooded because of the overflowing of the Estí river amid heavy rains. This event is credit negative for the company's business because the downtime of the plant will likely last 11 months until the asset is fully repaired.

The potential implications of the Estí event for AES PGH's credit quality are mitigated in the near term by the following four characteristics:

- » Estí only represents 10% of the installed capacity of the complete generation portfolio that provides cash flow to AES PGH to meet its debt service payments. Thus, we expect the remaining capacity to mitigate the impact of the Estí event on the back of strong hydro conditions in the country.
- » The energy obligations under the PPA may be fulfilled with generation from other assets of AES Panama, S.R.L. or from AES Changuinola. Given the strong hydro generation conditions in the country, these entities are likely to generate enough electricity to at least partially compensate for Estí's operational shutdown. In addition, PPA can be fulfilled through market transactions, and current market prices are below the PPA prices.
- » Insurance policy covers business interruption for roughly 10.5 months of lost revenue, or 12 months except the first 45 days. The company estimates that the 45-day loss will translate to a loss of \$8 to 9 million of EBITDA, or 1.7% of total projected EBITDA for 2022.
- » Property damage insurance is also likely to fully cover the capital spending associated with the repairs or equipment replacement at Estí, and the deductible expense is of \$2.5 million, which is not material with respect to the company's total revenue.
- » The bonds benefit from structural considerations that include a \$50 million liquidity facility to compensate any cash shortfall, including when an operating company fails on its debt agreement with AES PGH. In addition, dividend streams from the four operating companies are trapped in a different special-purpose vehicle as collateral, and are only distributed to AES GPH if all the loans between AES PGH and the operating companies are current and the liquidity facility is fully available.

Despite the expected limited credit implications, the event illustrates AES PGH's exposure to environmental risks, driven mainly by a moderate exposure of its assets to physical climate events, such as floods, hurricanes or droughts. However, because Estí is not located close to any town or city, the recent flooding has no direct social implications. In our evaluation of AES PGH's environmental, social and governance (ESG) considerations, we determine its Credit Impact Score as moderately negative (CIS-3), indicating that ESG attributes have an overall limited impact on the current rating, with greater potential for negative impact over time if further events occur.

Detailed credit considerations

Highly contracted generation assets with creditworthy counterparties

AES PGH's portfolio is more than 84% (as of June 2022) contracted, providing stable and visible cash flow, a key credit strength. A large portion is contracted with three DISCOs, which are partially owned by the Government of Panama and operate as regional monopolies.

As such, the counterparty risk of these DISCOs reflects the broader electricity demand risk in the country. If an issue with a DISCO arises, the local law allows the regulator to step in and grants it expansive powers to implement remedies. Ultimately, the regulation ensures the continuity of service in the region. In terms of guarantees, the DISCOs are required to provision a payment guarantee equivalent to one month of payments and a performance bond equivalent to two months of payments.

Natural gas generation mitigates exposure to low hydro generation

Most of AES PGH's capacity is related to hydro assets but the portfolio also includes natural gas, solar and wind generation assets, which mitigate the exposure to the hydro generation variability. The asset diversification works as a natural hedge, where under low-hydro-generation scenarios, natural gas generation and energy market prices increase and offset the loss in revenue from the hydro assets. The company has also developed four new solar projects to diversify the portfolio, two of which started operations in May 2021 and the other two since December of 2021.

Although AES Colón's LNG storage and regasification business provides additional diversification to the portfolio, it is only partially contracted. The company expects to increase the contracted part of its portfolio in the next few years, improving its cash flow.

AES Corporation is a strong sponsor with a long track record in the country and in Latin America

AES Corporation is a key participant in the electricity generation market in Panama, with a 39% market share in terms of generation (as of June 2022). AES Corporation started operations in Panama in 1998 and has 29% of the country's installed capacity, at 1,161 MW.

Before the 1998 privatization of the Panamanian generation and distribution sectors, the electricity sector was under the management of the state-owned integrated electric utility Insituto de Recursos Hidráulicos y Electrificación (IRHE). In 1998, as part of the privatization process, the Panamanian government divided IRHE's assets and operations into four generation companies, three distribution companies and one transmission company.

Following a public auction in 1998, 51% shares in each distribution company were sold by the government, followed by the sale of 49% shares in each of the three state-owned hydroelectric generation companies and 51% shares in the main thermoelectric generation company.

AES GPH in Panama has majority stakes in AES Changuinola and AES Colón and a 49% stake in AES Panama, which is majority owned by the Government of Panama.

Financial profile and key credit metrics

AES PGH has performed roughly in line with our expectations for 2022. In the first six months of 2022, the consolidated group's revenue was \$378 million and EBITDA was \$148 million. For full-year 2022, the company expects to achieve consolidated revenue of \$1,143 million and EBITDA of \$514 million. Also, as of June 2022, the issuer reported a cash interest coverage of 4.5x and a CFO pre-WC/debt of 21%. The strong performance is mainly driven by strong hydrology that has reduced the natural gas electricity generation from AES Colón. At the same time AES Colón has been able to sell its contracted natural gas at the high market prices.

AES PGH's high leverage and exposure to refinancing risk constrain its credit quality, but the refinancing risk is partially mitigated given that AES PGH's portfolio is competitive and essential to the Panamanian energy matrix.

Our baseline scenario assumes a P90 generation for the hydro assets in 2023-24 and a cap on AES Colon's storage assets from 2023 to 2030 (up to 20 trillion British thermal units), which represents, on average, a 41% drop in storage revenue, compared with management's case. We also project debt/EBITDA will approach 3.8x in the next three years as the issuer reduces its debt balance. While the metrics are likely to be relatively weak in the first few years of the transaction, we expect them to gradually improve as the issuer reduces its leverage and increases its cash flow.

Under our base case, the projected financial metrics are consistent with Ba scores according to our methodology. Over 2023-30, in our base case scenario we project average CFO pre-WC + interest/interest of 4.5x, CFO pre-WC/debt of 18% and retained cash flow/debt of 2.0%; retained cash flow/debt is derived from the planned dividend distributions from the operating companies to AES GPH.

In Q4 2021, Costanera Norte LNG Terminal SRL signed a Terminal Use Agreement (TUA) with Generadora Gatun for a 20 year term. Starting 2024, contracted capacity will increase which will translate into additional revenue that will contribute to reduce leverage metrics.

ESG considerations

AES Panama Generation Holdings S. de R.L.'s ESG Credit Impact Score is Moderately Negative CIS-3

Exhibit 6

ESG Credit Impact Score

CIS-3

Moderately Negative



For an issuer scored CIS-3 (Moderately Negative), its ESG attributes are overall considered as having a limited impact on the current rating, with greater potential for future negative impact over time. The negative influence of the overall ESG attributes on the rating is more pronounced compared to an issuer scored CIS-2.

Source: Moody's Investors Service

AES Panama Generation Holdings S. de R.L.'s (AES Panama) ESG Credit Impact Score is moderately negative (**CIS-3**), indicating that its ESG attributes are overall considered as having a limited impact on the current rating, with greater potential for future negative impact over time. Its score reflects moderately negative exposure to environmental, social and governance risks.

Exhibit 7

ESG Issuer Profile Scores



Source: Moody's Investors Service

Environmental

AES Panama's exposure to environmental risks is moderately negative (**E-3** issuer profile score) mainly driven by its moderate exposure to physical climate risks, such as floods, hurricanes, or droughts. Our score also considers neutral to low exposure to carbon transition, water management, waste and pollution and natural capital risks.

Social

Exposure to social risks is moderately negative (**S-3** issuer profile score) reflecting the moderately negative exposure to demographics and societal trends and responsible production that increase public concern over environmental, social, or affordability issues that could lead to adverse regulatory political intervention. These risks are partially balanced by neutral to low exposure to customer relations, human capital, and health and safety considerations.

Governance

Governance risk is moderately negative (**G-3** issuer profile score) due to moderately negative exposures to financial strategy and risk management; organizational structure; and board structure, policies and procedures. Our governance score also considers a neutral to low exposure to management credibility and track record as well as internal controls risks.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Liquidity analysis and structural features

AES PGH's credit quality is underpinned by the credit enhancements embedded in the transaction structure.

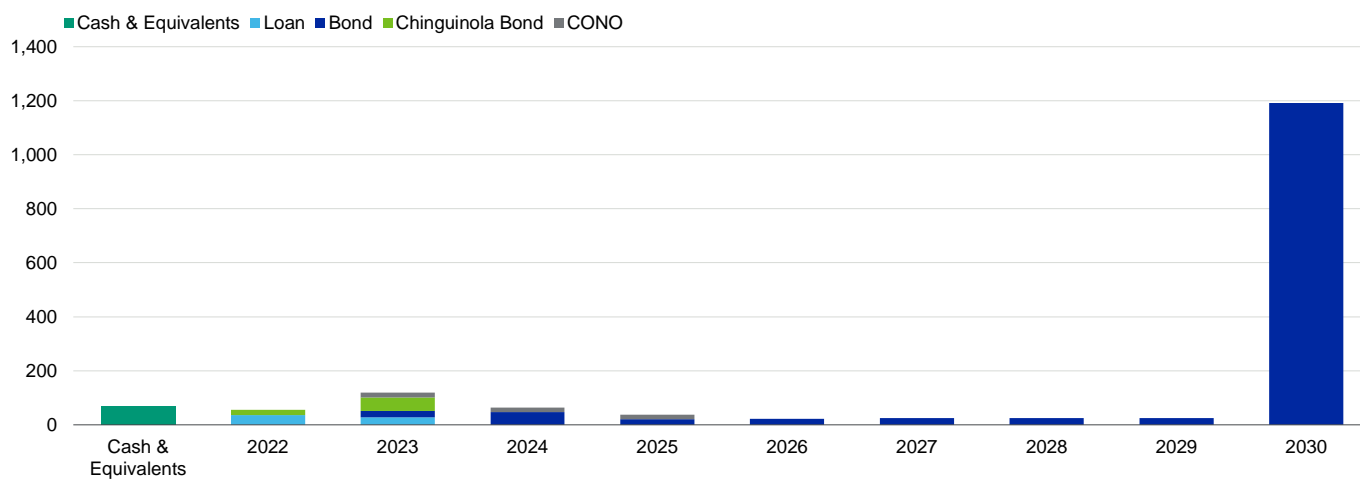
Bondholders benefit from a \$50 million liquidity facility with recourse to shareholders that can be drawn in the event of a cash shortfall to meet debt service payments as a result of an operating company defaulting under the ICLs. The liquidity facility is equivalent to an average of five months of annual debt service for 2020-26. Furthermore, dividends paid by the operating companies to AES GPH flow into its collection accounts, which will be pledged as collateral and can only be released to the company if no default exists under the notes, the loan facility or the liquidity facility, and the liquidity facility is fully replenished. Depending on the type of default, a default under an ICL may block the release of dividends to AES GPH from all operating companies or just from the defaulting operating company. The facility can be replenished with the flow of dividends from the performing operating companies. While dividend distributions from AES Panamá S.R.L. are subject to approval by the Government of Panama, the majority stakeholder, there is a good track record between AES and the Government of Panama.

We do not expect AES GPH to hold significant cash available at the operating companies or the holding company level in addition to the facility. Management projects that the company will hold minimum cash balances at each of the operating companies for their capital investment needs, which will likely be low in the forthcoming years. We expect maintenance capital spending to be around 1% of the property, plant and equipment (PP&E) assets each year, on average, for 2022-30.

Additionally, the notes include covenants that detail the limitations on debt (subject to certain ranges of debt/EBITDA).

Exhibit 8

Outstanding debt amortization profile as of June 2022



Note: Changuinola bond is a local issuance of \$60 million due 2023; CONO is a \$50M Term Loan, the outstanding balance is \$5.5M as of June 30, 2022.

Source: AES Panamá Generation Holdings, S. de R.L.

Methodology and scorecard

The principal methodology used in this rating was [Unregulated Utilities and Unregulated Power Companies](#), published in May 2017. The assigned rating of Baa3 is in line with the scorecard-indicated outcome.

Exhibit 9

Rating factors

AES Panama Generation Holdings S. de R.L.

Unregulated Utilities and Unregulated Power Companies [1] [2]		Current LTM Ending June 2022		Moody's Forward View	
				Metric Average 2023F - 2030F	
Factor 1: Scale	Measure	Score	Measure	Score	
Scale	Ba	Ba	Ba	Ba	
Factor 2: Business Profile					
Market diversification	Ba	Ba	Ba	Ba	
Hedging and integration impact on cash flow predictability	Baa	Baa	Baa	Baa	
Market framework and positioning	A	A	A	A	
Capital requirements and operational performance	A	A	A	A	
3.- Financial Policy					
Financial policy	Baa	Baa	Baa	Baa	
4.- Leverage and Coverage					
(CFO Pre-W/C + interest) / Interest Expense	4.46	Baa	4.50x	Baa	
(CFO Pre-W/C) / Debt	21%	Ba	18%	Ba	
RCF / Debt	14%	Ba	2%	Caa	
Scorecard Indicated Rating:		Baa3		Baa3	
Actual rating assigned		Baa3			

[1] The scorecard used for this issuer corresponds to the 'Unregulated Power Companies', within the Unregulated Utilities and Unregulated Power Companies Methodology.

[2] 2022 financial metrics estimated based in combined unaudited financial statements.

[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Source: Moody's Investors Service

Ratings

Exhibit 10

Category	Moody's Rating
AES PANAMA GENERATION HOLDINGS S. DE R.L.	
Outlook	Stable
Issuer Rating	Baa3
Senior Secured	Baa3

Source: Moody's Investors Service

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