S&P Global Ratings

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Mr. Gustavo Alves
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Dear Mr. Alves:

Thank you for requesting that S&P Global Ratings provide you with feedback through its Rating Evaluation Service (RES) on the potential impact on our existing 'brAAA' rating on Usina Termelétrica Pampa Sul S.A. (UTE Pampa or the project). The scenario analyzed contemplates the change in the controlling shareholder of the power plant. We have reviewed the specific scenario you have provided, and the following is a summary analysis reflecting our RES committee response.

Scenario Presented

In the scenario presented, we assumed a change in the shareholder structure of UTE Pampa, more precisely we considered that ENGIE Brasil Energia S.A. and ENGIE Brasil Energia comercializadora Ltda. sell their controlling stakes in UTE Pampa to the equity investment funds (FIP) Grafito Fundo de Investimento em Participações Multiestratégia and Perfin Space X Fundo de Investimento em Participações em Infraestrutura.

According to the current debentures' documentation, a change of control is a non-automatic debt acceleration event, unless approved by majority of debenture holders or if the rating on the notes doesn't change by more than three notches in the national scale, either by S&P, Fitch or Moody's. If there's more than one rating outstanding at the time that the control change is granted, it will only be considered a debt-payment acceleration event if all the agencies that currently rate Pampa´s debt lower the ratings exceeding the number of notches specified above. The rated debentures and BNDES loan are pari passu; therefore, have the same priority of payments under the shared cash waterfall structure.

Summary Of Indicative Rating Conclusion*

	Existing	Scenario
Senior secured debt	brAAA	brAAA
Outlook	Stable	Stable
Recovery	2 (85%)	2 (85%)

**Assumes that the hypothetical scenario submitted to S&P Global Ratings by you is implemented in accordance with information and representations you have provided.*

Indicative Ratings Score Snapshot

	Existing	Scenario analyzed
OPERATIONS PHASE		
Operations phase business assessment (OPBA)*	7	7
Minimum DSCR**	1.50x	1.51x
Median DSCR	1.65x	1.66x
Downside resiliency impact	Moderate	Moderate
Median DSCR impact	Neutral	Neutral
Debt structure impact	Neutral	Neutral
Liquidity impact	Neutral	Neutral
Refinancing impact	N/A	N/A
Future value modifier impact	Neutral	Neutral
Holistic analysis impact	Neutral	Neutral
Structural protection impact	Neutral	Neutral
Counterparty assessment limitation	Neutral	Neutral
MODIFIERS		
Parent linkage	Capped	Delinked
Sovereign rating limitation	brAAA/Stable/--	brAAA/Stable/--
SENIOR SECURED ISSUE RATING	brAAA	brAAA
OUTLOOK	Stable	Stable

Project Description

UTE Pampa is a special purpose entity (SPE) that fully owns an operational, since June 2019, coal-fired thermoelectric power plant located in Candiota, in southern Brazil. Concession term is 30 years starting in November 2014 (after winning a bid at the government auction) with a 25-year auction-based power purchase agreement (PPA) (294.5 MWav) with 38 distribution companies in Brazil, which started in January 2019. The project's total installed capacity is 345 MW (approximately 0.18% of the country's total capacity and 11.4% of its coal-fired capacity in 2022, while its net capacity is 309 MWav). The project receives coal from a mine located 4.4 km from the plant's site, with an estimated 600 million tons reserve, which is owned by Copelmi.

Supporting Rationale

Upon UTE Pampa's announcement that the transfer of shares has been concluded, we would expect to respond with a publication consistent with our policies and procedures for communicating the rating information derived from this evaluation. This would typically be through a research update. The specificity of our comments regarding the ratings would depend on the availability of definitive information regarding the event. Once the transaction was concluded and that the shares currently owned by ENGIE are transferred to the new owners, and assuming this occurs according to the scenario analyzed, we would indicate the rating conclusions as detailed below in our external communication.

Rationale

In the scenario presented, we would likely affirm our existing ‘brAAA’ rating and our ‘2’ recovery rating on the first and second senior secured debentures issuances, provided that the transaction is implemented in accordance with information and representations provided to us by the project and its current sponsor.

In this scenario, we're evaluating the impact of a change in the controlling structure of UTE Pampa. As part of ENGIE's decarbonization strategy, on Sept. 15, 2022, its board approved the sale of 100% of the shares held by ENGIE Brasil Energia and ENGIE Brasil Energia Comercializadora in UTE Pampa to Grafito Fundo de Investimento em Participações Multiestratégia and Perfin Space X Fundo de Investimento em Participações em Infraestrutura.

Grafito FIP is managed by Starboard Asset, a subsidiary of Starboard Holding, which manages private equity and credit funds. Perfin Space X FIP is managed by Perfin Infra, an asset manager that has been investing in the electricity sector, of more than R$5 billion, through several equity funds and that manages projects in the infrastructure sector. Through the sale, ENGIE Brasil Energia will receive up to R$450 million in cash for its equity stake, while UTE Pampa's R$1.8 billion debt will remain at the project level. The conclusion depends on some precedent conditions, including BNDES’s consent which are expected to be satisfied over the next few months.

According to the information presented by the management team, upon conclusion of the sale, the guarantee that ENGIE Brasil Energia currently provides to the project--valid until it achieves its financial completion--will be replaced by a bank guarantee, fees for which will be covered the project. We're assuming, according to the sponsor's request, that the bank guarantee will be provided by an institution that will have a minimum national scale rating of 'brAAA' from S&P. The definition of financial completion will continue to include: declaration of completion of the project by BNDES; full reserve accounts; achievement of operational parameters acknowledged by an independent engineer report; definitive connection at the Candiota 2 substation; completion of the repair works of the feeder channel limestone in order to keep emissions within parameters defined by the operation license; submission of a statement from the independent engineer testing the achievement for at least 12 months consecutive of the availability index average (80%); debt service coverage ratio (DSCR) of 1.45x for at least 12 months. We consider that change as neutral for the project from a credit perspective.

Currently, we apply a cap to the rating due to the existence of an explicit automatic cross-default provision in BNDES's debt documentation and explicit non-automatic provision in the debentures. As such, we perform a credit estimate on the sponsor, ENGIE Brasil Energia. This is the reason for the existing "capped" parent linkage assessment score. For this RES, we assumed that there won't be any other changes to the existing documentation or to the project's capital structure. We also assumed that BNDES's cross-default clause (21.h.) won't refer to the new controllers due to their nature. Therefore, the wording will follow that of the debentures.

Considering the new assumptions and the absence of any cross-default wording and/or payments dependent on the new sponsors, we would re-assess the parent linkage score as “delinked” but we would affirm our ‘brAAA’ rating and our ‘2’ recovery rating on the first and second senior secured debentures issuance, while the main credit drivers would remain, in our view, unchanged.

The indicative rating reflects the following strengths:

- Long-term PPAs: 100% of the project's output is sold through the regulated market through long-term capacity-based PPAs (25 years) with fixed prices (inflation adjusted) until December 2043. We believe this is favorable to the project's credit quality because it enhances the predictability and stability of cash flows.

- The plant operates a proven technology: The plant uses a subcritical Circulating Fluidized Bed (CFB) boiler; a technology created in the 1970s. The technology has a proven track record and has been performing as expected; therefore, we assess this sub factor as neutral.

- Modest exposure to raw materials: UTE Pampa’s operations rely in two resources: coal (fuel) and limestone (sulfur dioxide reducer). Long-term agreements are in place with third parties to supply the feedstock and its transportation. Alternative suppliers with similar pricing costs are also available.

- No refinancing risk: The concession ends in 2050 while the debenture matures in 2036, providing a 14-year cushion to absorb potential refinancing needs.

- Attractive Custo Variável Unitário (CVU): The latter is the regulatory declared unitary cost corresponding to the PPA’s operations and maintenance (O&M) and fuel cost allowance to dispatch above the plant's baseload. The declared CVU is around R$67/MWh (October 2019), the current coal cost to dispatch above the baseload is around R$26/MWh (40% of the CVU). Therefore, the plant’s costs are unlikely to be higher than the declared CVU, mitigating possible risks of mismatches between costs of operation and variable revenue.

These strengths are partly offset by the following:

- Exposure to spot prices due to planned stoppages: During years with longer planned maintenance outages, the project has exposure to spot prices, given that during the planned outages, the project will be unable to meet its minimum dispatch, having to acquire energy in the spot market to honor its dispatch obligations.

- Lower attractiveness of fossil fuel-fired plants: We believe both market and environmental, social, and governance (ESG) factors, with ongoing substitution of fossil fuel generation by renewables, present market challenges to coal plants, as they become more vulnerable. Increasing environmental regulation could reduce the attractiveness of fossil-fuel investments and financing conditions.

The indicative rating would continue to reflect the predictability of cash flow, although with exposure to market risk. The plant uses technology with a proven track record. In addition, we don't see a supply risk, since the main resources for its operation, coal and limestone (calcitic and dolomitic), are supplied through long-term contracts with solid and replaceable counterparties. The reduction of energy due to project's availability in the regulated environment via long-term contracts, with fixed prices and adjusted by inflation, provides predictability and stability to cash flows during the debt's term.

The plant operates on an availability basis, and all PPAs have a contractual inflexibility of 0 MW. This means that, although UTE Pampa is required to provide energy in accordance with the PPAs, there's no obligation to provide a minimum amount of energy. However, we believe that the project will have exposure to market risk in 2027, 2031, and 2036, when stoppages for longer maintenance are scheduled, prompting the project to buy electricity on the spot market. This is because its generation will be insufficient to honor its dispatch obligation, which leads to volatility in cash flow available for debt service (CFADS) close to 10% during those years.

Under this scenario, with a tenor concentration of the second issuance in the long tranche, we expect UTE Pampa to present a minimum annual DSCR of 1.51x in 2031, with a median DSCR of 1.66x. We view that the project's operational risk is reduced owing to its resilience under our downside analysis, as we believe that it will be able to post DSCRs consistently above 1.0x, without any need to use the proposed six-month debt service reserve account (DSRA).

General Assumptions:

The RES also considered UTE Pampa's prospective operating and financial performance.

Macroeconomic and industry variables

- We consider Brazil's inflation as the most important macroeconomic variable for the project. The PPAs (revenues) and operating expenditures are adjusted annually to inflation, which affects the project's operations. In addition, inflation impacts the interest rate on the existing issuance, as it's linked to the IPCA (Brazil's CPI) plus a fixed spread ranging from 4.50% to 5.75% per year . Our assumptions come from our latest article: "Economic Outlook Emerging Markets Q2 2023: Global Crosscurrents Make For A Bumpy Deceleration," published March 27, 2023. We project Brazil's IPCA of 4.8% in 2023, 4.5% in 2024, 3.6% in 2025, and 3.5% afterwards.

- Spot prices: Given that the electricity generation in Brazil heavily depends on hydro power, spot prices are inversely proportional to hydrology – when hydrology is poor (and therefore GSF is below 100%), spot prices are high, and vice versa. In a scenario of weak hydrology, spot prices would be high, but the thermoelectric plants, such as UTE Pampa, would be dispatching energy (low CVU) above the minimum contracted price to meet the country's electricity demand. We forecast an average nominal spot price (PLD) of R$150/MWh starting in 2023.

Revenues

- Energy generation: We assume that the plant is net dispatching (after on merit during 100% of the time [PLD always higher than CVU]).
- Planned and forced outages: Planned--follows the project's schedule. Forced—about 6% annually
- Contracted capacity PPA: R$246.3/MWh (since October 2019) inflation adjusted annually

Costs

O&M costs in accordance with contracts and inflation adjusted annually. Including:

- Transmission costs: TUST;
- O&M: personnel and material, services and others;
- Fuel: coal and limestone costs according to consumption within and above take-or-pay contracts; and
- Insurance and regulatory fees.

Other data

- Maintenance capex following values by PROMON (an independent engineer) and capex reserve account filled with the average investment requirements over the next 24 months.

Key metrics

- Scenario: Minimum DSCR of 1.51x in 2031 and median DSCR until the final maturity of 1.66x.

Resiliency Analysis

Macroeconomic and industry variables

- Inflation in each year to be 100 basis points lower than in our base-case scenario.
- The long-term interest rate (TJLP) at 6%, any amount above this will be capitalized according to the financing contracts.
- Spot prices: Given the project's spot price exposure, we stress the spot prices by increasing the PLD. Our spot-price assumption is close to the highest average spot price for the southern region in the last five years: R$300/MWh. We assume the value of R$300/MWh from 2023 onwards.

Key metrics

- Minimum DSCR of 0.98x in 2036 and median DSCR until the final maturity of 1.21x.

Transaction structure elements:

- Parent linkage: We assume, for the purposes of this RES, that the project will be de-linked from its new sponsors, as the existing cross-default clauses that make reference to ENGIE Energia Brasil will be removed.

- We assume the existence of a SPE and cash management covenants, such as limits on additional debt and asset sales, a security package, a cash waterfall, and the presence of reserve accounts. We also assume that documentation would prevent the project from being consolidated in case of the sponsor's insolvency, given the existence of anti-filing mechanisms that isolate the project.

- We consider that the following reserve accounts will be present:
  - A fully funded six-month DSRA.
  - A fully funded three-month O&M reserve account.
  - A Capex reserve account filled with the average of the resources needed for investments over the next 24 months.

- Structural protection: Neutral.

Liquidity
We consider the project's liquidity to be neutral. Despite the absence of a forward-looking distribution test, we believe the project has the following liquidity compensating mitigants: a DSRA covering six months of payments for the debentures (equivalent to the next debt service payment), three months of the amortizations of the BNDES loan, while the project also has a three-month O&M account and a capex reserve account (filled with the average of the resources required for investments in capital goods over the next 24 months).

Also supporting the project's liquidity is a cash lock-up mechanism, which ensures that the structure retains cash if the project-defined DSCR were to fall below 1.20x. This trigger will be tested only on a historical 12-month basis and not prospectively.

The project needs to comply with covenants under the debentures, which includes a DSCR of at least 1.10x, measured on a yearly basis. In our forecasts, the project should continue to comply with its financial covenants even if the CFADS were to decline 15%. The project has a comfortable cushion throughout the duration of the debenture and the breach (two consecutives or three alternates) doesn't incur in an automatic debt-payment acceleration. A general debentures holders' assembly must be summoned within five days by the fiduciary agent in the event of the breach.

Future Value Modifier
We don't assign a future value modifier to UTE Pampa. Although it meets the minimum requirements for that (14-year tail and 88% original tenor), we believe the market and ESG factors present challenges to coal plants, as they become more vulnerable and, increasing environmental regulations could reduce the attractiveness of fossil-fuel investing and financing conditions.

Outlook

The stable outlook for UTE Pampa's debt rating reflects its predictable cash flows supported by inflation-adjusted, long-term, and capacity-based PPAs until December 2043. This in turn results in DSCRs above 1.50x.

Downside scenario
We could lower the rating in the next 12 months if the project presents a minimum DSCR below 1.20x during the debentures' term, which could happen in case of unscheduled stoppages, which would result in higher exposure to spot-market prices to meet the project's obligation to dispatch energy or operating costs above expectations.

Upside scenario
UTE Pampa's debentures issuance are already rated at the top of Brazil's National Scale.

Recovery Analysis

Key analytical factors

- We believe that the project would reorganize rather than liquidate under the simulated default scenario. The project's assets are constituted as concession, so we believe the lenders would only retain value in case of debt reorganization.

- The '2' (90%-100%) recovery rating indicates that we expect full recovery in a default scenario, but this is limited by our view of the Brazil's jurisdiction.

Simulated default assumptions

- Simulated default year: 2023
- Our hypothetical default would occur if the project faces an operational issue, most likely to happen due to extended forced or planned stoppages, consequently, increasing its spot-price exposure.
- Our recovery forecast assumes that the operations would resume at the same operational level as in our base-case scenario.
- We discount the cash flows during the PPAs' remaining term at 15% and deduct 5% of administrative expenses to arrive at the net value.
- We add six-month pre-petition interest to the estimated debt at the time of default.

Simplified waterfall

- Debt outstanding during the hypothetical default (including pre-petition interest): R$1.7 billion
- The project's estimated net value: R$2 billion
- Recovery expectations: *Rounded to 100%* (recovery rating of '2').

This evaluation is both preliminary and confidential. It is preliminary in that it is based on hypothetical information presented to us by you. You understand that S&P Global Ratings will not review, modify or surveil this evaluation. Subsequent information or changes to the information previously provided could result in final conclusions that differ from the preliminary proposed conclusions. Please note the conclusions provided herein are based on assumptions you and your team have provided to us. To the extent that these assumptions, our criteria or other factors change, the rating implications could also change. You understand and agree that we are not financial advisors to you and that in performing the RES, S&P Global Ratings is providing indicative rating opinions on the scenario presented; it is not endorsing or advocating any particular course of action. Nothing in this report is intended to create, or should be construed as creating, a fiduciary relationship between you and us and recipients of the indicative rating opinions. We have not consented to and will not consent to being named an “expert” under applicable securities laws. Neither S&P Global Ratings’ RES or any indicative rating set out herein is a credit rating, nor is it a recommendation to buy, hold or sell any financial obligation of an issuer. This letter is subject to the Terms and Conditions attached to the Engagement Letter applicable to the RES (the “applicable T&Cs”).

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Should you have questions, please do not hesitate to contact me.

Sincerely,
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