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Genera's Fuel Optimization Plan

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CONFIDENTIAL 1

Draft submitted to PREB on XXXX, 2026

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DISCLAIMER

This Fuel Optimization Plan is prepared pursuant to the Puerto Rico Thermal Generation Facilities Operation and Maintenance Agreement (“OMA”), executed January 24, 2023, by and among the Puerto Rico Electric Power Authority (“PREPA”), the Puerto Rico Public-Private Partnerships Authority (“P3 Authority” or “Administrator”), and Genera PR LLC (“Genera”). It also conforms to the requirements set forth by the Puerto Rico Energy Bureau of the Public Service Regulatory Board (“PREB”) in Docket **No. NEPR-MI-2023-0004—In Re: Genera PR LLC Fuel Optimization Plan.**

This updated version of the Fuel Optimization Plan includes initiatives previously approved by the PREB as well as other initiatives that will result in ratepayer savings for work performed by Genera while improving the availability and reliability of the Legacy Generation Assets.

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Background

High fossil fuel prices and market volatility directly impact the monthly electricity bills of Puerto Rico residents and businesses. Yet, as of 2026, Puerto Rico's electrical system depends heavily on thermal generation, making it difficult to reduce fossil fuel costs for ratepayers. Severe weather conditions, liquidity constraint, and the credit rating of the Puerto Rico Electric Power Authority ("PREPA") exacerbate the challenge.

On July 1, 2023, Genera PR LLC ("Genera"), became the operator of the thermal generation units owned by PREPA, pursuant to the Puerto Rico Thermal Generation Facilities Operation and Maintenance Agreement ("OMA"), dated January 24, 2023. Genera's main objectives include ensuring (1) the people of Puerto Rico benefit from fossil fuel savings identified and achieved by Genera and (2) the availability and reliability of PREPA's generation assets improve. With these objectives in mind, Genera has identified key initiatives to pursue and described them in this updated Fuel Optimization Plan ("FOP").

The revised FOP presents a broad and flexible roadmap of potential initiatives, rather than a discrete list of specific projects. Limited by the scope of the OMA and circumstances faced by Puerto Rico, Genera has multiple levers it can pull to reduce fossil fuel costs on PREPA's behalf. Nearly all these levers fall into one of a few categories. The FOP outlines these categories of Fuel Cost Savings Initiatives and describes a corresponding savings calculation methodology to determine and measure the resultant savings over a given Contract Year and the OMA term.

Each Fuel Cost Savings Initiative includes savings calculation methodologies and examples of the types of projects and activities that it covers. The applicability of a particular initiative and calculation methodology to specific circumstances would be determined by the P3 Authority in accordance with the annual review process set out in the OMA.

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This simplified approach will clarify pathways, accelerate change, and reduce regulatory burden, particularly when new activities that fit within approved Fuel Cost Savings Initiatives are identified and implemented. It will enable fuel savings projects to proceed at speed that benefits both PREPA and the ratepayers.

I. FOP Structure

Each initiative in the FOP includes the same simple sections to ensure transparency and consistency:

- **Objective & Approach**

Describe the broad initiative, including the objectives, tactical levers, and resource alignment used to drive fuel-cost reductions.

- **Savings-Calculation Methodology**

Details the assumptions, formulas, success metrics, and data sources underpinning cost-savings calculation methodology for each initiative category, which may employ different models or time horizons.

II. OMA Compliance

Genera represents that the initiatives set forth below result from affirmative optimization strategies, considered, planned, initiated and completed or to be completed by Genera to reduce fuel costs. All initiatives constitute “Fuel Cost Savings Initiatives” that fall within Genera’s scope and responsibilities in connection with the OMA. Genera cannot pursue activities outside of its scope of services set forth in the OMA.

Each initiative in this FOP is designed to satisfy the Principles for Performance Incentive Mechanisms derived from Regulation 9137: clearly defined and independently verifiable calculation methodologies; performance within Genera’s reasonable control; designed to maximize net customer benefit; and providing Genera with an appropriate incentive, limited by the maximum annual cap included in the OMA.

Genera will include in each Incentive and Penalties Report a narrative identifying, for any Fuel Cost Savings Initiatives for which savings are claimed, incremental actions taken by Genera, beyond routine contract administration

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as PREPA had carried out, that fits within the definition of Fuel Cost Savings Initiative under the OMA.

Any dispute, controversy, or claim arising between the Administrator and the Operator under or in connection with this FOP shall be referred to and finally resolved pursuant to the dispute-resolution procedures set forth in Section 15 of the OMA.

Capitalized terms not defined in this FOP have the meaning given to them in the OMA.

III. Fuel Cost Savings Initiative(s)

PREPA (and Genera through it) has a few levers to pull to reduce fossil fuel costs. The savings calculation methodologies (i.e., the math) for each of these levers does not change materially from one project or activity to the next within each category, though they may vary slightly for specific circumstances or practical considerations. This allows activities to be categorized and bucketed into simple groups that facilitate clear expectations, efficient prioritization, accelerated execution and transparent review in accordance with the OMA. The following initiative descriptions also include summaries of the potential types of activities that Genera may implement during the OMA term.

Initiative Number One (1): Changes to the Type of Fuel at a Legacy Generation Asset (e.g., Converting Legacy Generation Assets to Operate on New, Alternative Fuels)

- **Objective & Approach**

Objective: Reduce fuel costs by changing the type of fuel from higher-cost ones such as Ultra-Low Sulfur Diesel (ULSD) or Fuel Oil No. 6 (FO6) currently used at Legacy Generation Assets (LGA) to a lower-cost alternative, such as natural gas. This change may include (i) swapping fuel at an LGA already physically capable of operating on the lower-cost alternative but historically restricted from doing so for other reasons such as permitting, approvals, environmental limitations or otherwise or (ii) converting an LGA to a unit capable of operating on a more economic fuel source where technically and commercially feasible, whether by physical work conducted on that unit or by procuring equipment to supplement that unit.

This initiative covers, but is not limited to, item (ii) in the definition of “Fuel Cost Savings Initiatives” of the OMA, which includes “converting any Legacy Generation Assets to be able to operate on any new alternative fuel(s)”.

Approach: Genera’s fuels, engineering, and procurement teams will systematically identify thermal generation assets with dual fuel or convertible capabilities and evaluate their suitability for fuel swap or conversion arrangements. This evaluation will consider technical compatibility, available storage and logistics infrastructure, supplier availability for alternative fuels such as natural gas or blend stocks, and the projected economic benefit under current and forward fuel price scenarios.

Going forward, once candidate units are identified, Genera will present the fuel swap or conversion project, as applicable, to the Puerto Rico Energy Bureau (PREB) for approval. Genera will negotiate swap or conversion contracts as

applicable and ensure qualified fuel suppliers are available (working with the 3PPO as required), targeting volume commitments that provide pricing stability while preserving flexibility to respond to market movements.

Conversions will be prioritized based on the speed of capital recovery, with gas capable turbines and distillate engines representing the highest value opportunities given their existing infrastructure and operational flexibility. Federal funds may be utilized to mitigate the burden of conversion costs to PREPA and ratepayers. Project / construction cost savings versus budget arising from federal funding will not form part of savings claimed under this initiative.

For clarity, in addition to fuel swaps and conversion of existing LGA, this initiative may also include the replacement of existing, older, higher-cost peaking generation that cannot currently operate on natural gas with new, more efficient natural gas capable peaker units at the same site (MW for MW).

Genera expects to introduce new peaker units at those sites during 2027 and 2028, which will replace existing peaking units at certain sites that rely on higher cost fuels to improve the overall efficiency of the generation fleet. These projects will be funded primarily through federal funding programs in order to reduce the capital cost burden on the ratepayers. For the avoidance of doubt, project cost savings attributable to the use of federal funding (including any reduction in project costs relative to budget) will not be claimed under this initiative. Rather, any savings claimed will be limited to the operational benefits arising from lower fuel costs, improved generation efficiency, reduced heat rates, and a more economic dispatch resulting from the replacement of existing peaking generation. This initiative may also include the installation of power generation or fuel-related infrastructure, including regasification equipment, pipelines, storage tanks, and other fuel supply facilities, necessary to enable generation assets to operate on lower-cost fuels.

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The key concept running through all potential activities would be existing MW at a site that becomes capable of operating on lower-cost fuel. Through implementation, Genera will monitor fuel burn rates, heat rate impacts, delivered fuel costs, and any changes to maintenance requirements, adjusting swap volumes and conversion schedules as needed to maximize economic return while maintaining grid reliability.

Genera has already carried out a fuel swap of the Palo Seco mobile packs and submitted other conversion projects to the PREB, which would qualify under this initiative. Genera has also initiated the procurement and development of the new LNG capable peaker projects, which, upon completion and receipt of all required approvals, are expected to qualify under this initiative. Examples of potential sites for future fuel swap or conversions following PREB approval include:

- San Juan, including units 7 & 9
- Palo Seco, including units 3 & 4
- Mayaguez combustion turbines
- Cambalache, including units 2 & 3
- New peaker installation at Jobos
- New peaker installation at Dagua
- New peaker installation at Yabucoa
- New peaker installation at Costa Sur

For clarity and alignment of intent with PREB guidance, Genera will not claim savings for a fuel swap or conversion going forward until PREB has approved such project to move ahead. However, having the methodology and framework approved in this FOP will allow approved projects to proceed as quickly as possible with clarity and transparency.

- **Savings-Calculation Methodology**

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Fuel swap or conversion savings under this initiative will be calculated on a net system basis that accounts for the impact of increased dispatch of the fuel-swapped unit on other generators in the system. This is intended to address concerns raised by the PREB in its initial FOP review.

Savings will be equal to the fuel-cost reduction at the converted unit less the cost of avoided fuel from generation displaced elsewhere in the system as a result of the converted unit's higher post-swap capacity factor, but only to the extent such displaced generation was more economical than the new generation. Genera shall coordinate with LUMA to obtain the system dispatch information necessary to perform these calculations and shall include supporting dispatch data in each annual Fuel Optimization Report

The methodology for this initiative will begin by establishing a baseline for each candidate unit, documenting historical fuel consumption volumes, prevailing heat rate performance, and the contracted price for ULSD, FO6, or other fuels currently in use. With that information in hand, Genera will work with LUMA (who must be instructed by P3A to cooperate) or Genera will acquire a simulator or modeling tool license, to model the swap or conversion scenarios, substituting defined percentages of ULSD or FO6 with lower cost alternatives such as natural gas or approved blend stocks, to forecast both the per-barrel and total monthly cost impact under different market conditions.

As fuel swap or conversion projects are executed, Genera will track actual fuel burn rates, delivered fuel costs, heat rate performance, and changes in maintenance expenditures or operational availability attributable to the fuel change. Periodically, realized fuel expenditures are compared against the established baseline to quantify the savings achieved.

Initiative Number Two (2): Savings Opportunities Related to Portfolio Optimization

- **Objective & Approach**

Objective: Reduce overall fuel costs by improving the commercial terms, mix, and/or management of contracts under which Genera acquires fuel for PREPA's generation fleet to optimize the portfolio versus what PREPA would have otherwise incurred.

This initiative encompasses multiple complementary sub-activities, including:

1. driving down contract adder reduction versus the year prior to when Genera started – *a sub-initiative corresponding to the previously approved initiative #1 in the original version of the FOP;*
2. managing the timing of fuel deliveries and purchases to take advantage of market fluctuations;
3. aligning contract price escalator formulas with market dynamics; and
4. leveraging spot purchases to capture savings whenever market prices fall below the contracted tariffs of longer-term contracts – *a sub-initiative corresponding to the previously approved initiative #4 in the original version of the FOP.*

Whereas Initiative One involves changing fuels, through Initiative Two, Genera may achieve savings by improvements in design and negotiation of commercial terms in existing fuel type contracts or the portfolio as a whole. These activities lower overall fuel expenditures and ensure that ratepayers benefit from favorable market conditions as they arise. The sub-activities generally require third-party consent to implement, and so cannot be guaranteed to occur in any particular year. Yet, to the extent they do occur and can be demonstrated according to the methodology below, they will qualify as savings under the OMA.

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This initiative covers, but is not limited to, item (v) in the definition of “Fuel Cost Savings Initiatives” of the OMA, which includes “pursuing savings opportunities related to credit and portfolio optimization” including by replacement or renegotiation of Fuel Contracts.

Approach: For each sub-activity, Genera’s fuels, legal, and procurement teams will work to achieve improved contract terms or execution that produce identifiable savings for the ratepayers. This initiative can be carried out through site-specific or island-wide RFPs, direct negotiation (whether with third-parties or Affiliates, through the 3PPO), or otherwise.

This includes the following example activities:

1. Genera will conduct comprehensive market tenders at regular intervals of every 12 to 36 months, benchmarking and negotiating supplier proposals across commercial terms such as pricing (e.g., direct, upfront adder reductions), payment terms (e.g., direct, conditional adder reductions for faster payment), and net adder reductions through value-added services such as technical support and shared storage rights, which translate directly into identifiable per barrel savings. Genera will use supplier scorecards that evaluate performance across price, delivery reliability, payment terms, and value-added services, ensuring that competitive awards reflect total value rather than price alone. Multi-year contracts will be structured to spread fixed costs and capture quantity discounts.

For payment term acceleration, Genera confirms that savings will be achieved without creating a new contractual obligation enforceable against ratepayer funds unless otherwise approved by PREB. Genera will provide PREB, in a separate docket if directed, reasonable documentation of any financing mechanism, cost allocation, and risk

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borne by each party before agreeing to such a financing. With that proviso, Genera does not view such financing as central to this sub-initiative.

2. Genera will actively monitor regional and international fuel markets and execute purchases within contractual allowances to capture favorable pricing when available. Genera may adjust the timing of purchases to use storage volumes to bridge temporary period of high volatility without compromising prudent utility practices. For example, during periods of war in which higher market prices may result outside of hurricane season, using additional stored fuel inventories than typical practice may ease financial burdens on ratepayers if replacement volumes may be purchased at lower prices later.
3. Genera will review the current fuel price escalator formula embedded in existing supply contracts. By incorporating forward curve data, spot market indices, and refined weighting for bunker, Brent, and regional price benchmarks, the revised methodology will trigger price adjustments only when supported by sustained market movements, capping upside exposure during periods of rapid price increases while enabling Genera to capture savings when global rates decline.
4. Additionally, when ULSD, Fuel Oil or natural gas becomes available at a price below the incumbent contract rate, Genera may exercise spot purchases, acquiring such fuel at a lower price than longer-term contract benchmarks, and integrate those volumes seamlessly into existing storage, logistics, and dispatch plans. Such purchases must use the same indexation, formulas, as the benchmarks to ensure apples-to-apples comparison. This sub-activity incentivizes Genera to seize

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opportunistic purchases as and when they become available. To qualify for savings, such purchases must not result in payments for quantities not taken under the longer-term contract.

When exercising a spot purchase option, Genera will act reasonably to solicit competing offers from multiple suppliers to preserve competitive tension. Spot fuel purchases should meet the fuel quality specifications established in the then-current annual supply contracts for ULSD and fuel oil, including sulfur content, BTU content, viscosity, and other applicable ASTM standards; where deviating, pricing must be reconciled to ensure apples-to-apples comparison. Genera will maintain contemporaneous documentation for each spot transaction demonstrating compliance with these requirements, which will be provided to the P3 Authority during the incentive claim process.

- **Savings-Calculation Methodology**

The methodology for this initiative encompasses several complementary activities, each with its own nuances to the measurement approach. However, in each case, Genera will be comparing the actual purchases versus a baseline: $(\text{Baseline Premium} - \text{Current FY Premium}) \times \text{standardized quantity of fuel}$.

1. For improvement to contract adders relating to a particular fuel (ULSD, FO6 or Gas), savings for each fiscal year (FY) will be calculated as $(\text{Baseline Premium} - \text{Current FY Premium}) \times \text{standardized quantity (e.g., barrels)}$ of such fuel purchased in that FY, where the Baseline Premium represents the contract adder for that fuel applicable in the FY2023 contract year (i.e., the year before Genera began operating PREPA's fleet) and the Current FY Premium represents the reference premium for the

purpose of the savings claim (whether fixed upfront or applicable from a point in time when a particular condition was met).

More specifically, an “upfront” Current FY Premium means the adder reflected in the contract itself from day one. A “conditional” adder would be the adder to come into effect once an underlying condition is met. The most likely example of the latter would be accelerated payment; suppliers have offered reductions in adders for accelerated payment in RFPs conducted for the last few years. If Genera became able to exercise these accelerated payment options, the price achievable with accelerated payment would constitute the “Current FY Premium” from the point in time when Genera exercised that option. Pricing under this initiative will be documented and reported through the Incentives and Penalties Report.

Genera proposes to fix the “Baseline Premium” for each fuel to address PREB concerns that it may benefit from adder volatility in the year-to-year comparison method proposed in the initial FOP (i.e., have no incentive to keep adders consistently low). In other words, an increase in the premium above the Baseline Premium in any year will not create a higher reference point for purposes of calculating savings in subsequent years, except where Genera can demonstrate an increase in premium is due to conditions beyond Genera’s control as contemplated by the OMA.

For clarity and in response to PREB guidance, the reduced Current FY Premium should comprise similar basic cost elements (logistics, storage, financing, insurance, and bonding) as the Baseline Premium. Materially shifting risk to PREPA does not create qualifying savings on its own. Cost reductions achieved by reapportioning costs to other funds or rate

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components shall be excluded from the savings calculation. However, the reverse – shifting material risk or cost items to suppliers while achieving the same or reduced adder may result in qualifying net adder reductions if reducing overall costs in clearly identifiable and documented ways.

Additionally, again for clarity on this sub-activity, savings will be measured solely by the reduction in the adder or fixed premium charged above the benchmark commodity price, except where Genera can demonstrate fundamental changes in the market that increased adder or premium.

2. For market timing of purchases, Genera will compare the expected cost of a fuel quantity versus the realized cost of such fuel quantity, in each case in absolute terms. Such pricing comparisons must include the same indices and formulas to allow for apples-to-apples comparison. To ensure transparency, Genera must communicate with the P3 Authority in advance of employing this methodology, so that then current and eventual purchased pricing may be corroborated. No savings would be claimed here without reasonable, near contemporaneous communication.
3. For the fuel-price escalator reform, Genera will back test the proposed revised formula against at least five years of historical price data to validate that the proposed volatility thresholds reflect actual market behavior. The revised escalator will be incorporated into upcoming RFPs and contract renewals, and performance will be monitored on a quarter-over-quarter basis by comparing contract prices against relevant market benchmarks to confirm the formula is functioning as intended.

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Savings from changes to the fuel-price escalator will also be measured against the fixed Baseline Premium, holding that escalator constant, so that savings reflect only Genera's reduction of the adder and never commodity-price or escalator-index movement, except where Genera can demonstrate an increased adder is the result of fundamental changes in the market. Generally, adder comparisons between suppliers will be normalized for BTU content. Any proposed change to the fuel oil escalator will be accompanied by a cost-component reconciliation demonstrating that savings are genuine and not attributable to cost reapportionment.

4. For spot purchase transactions, the per-barrel saving for each transaction will be computed as the difference between the applicable contract price—whether the prevailing contract rate on the purchase date or a volume-weighted average—and the executed spot price, using the same escalators and equalized for the same general risk and cost allocation. That price differential will be multiplied by the purchased volume to quantify realized savings for each transaction, and results will be aggregated monthly and annually.

Initiative Number Three (3): Displace Higher-Cost Generation Units with Lower-Cost MW in the Production Mix

- **Objective & Approach**

Objective: Reduce aggregated fuel costs by increasing the MW capacity of generation units located at existing LGA sites that run on lower-cost fuel or run more efficiently on the same fuel versus other sites. By identifying and addressing physical limitations that either constrain output or impair the efficiency of existing generation units, or by bringing in new generation units, in each case, Genera can use those units to displace higher cost generation elsewhere. This increase of capacity and shift of loads will reduce the overall system fuel cost and improve the economics of the generation portfolio for ratepayers.

This initiative covers, but is not limited to, item (iii) in the definition of “Fuel Cost Savings Initiatives” of the OMA, which includes “supplementing Legacy Generation Assets with power generation equipment at or in the vicinity of the relevant Generation Site that is more fuel efficient and/or operates on any new alternative fuel(s)”.

Approach: This initiative will include: (1) improvements to existing units that enable additional MW and (2) the making available of additional units through either (a) procurement of the units themselves or (b) power or fuel related equipment enabling their use.

For existing units, Genera will initially target those units already using lower-cost fuel with the highest potential for capacity improvement, focusing primarily on those units experiencing output limitations attributable to degraded components, fouling, or deferred maintenance. Candidate units will be evaluated based on their current capacity shortfall relative to rated output, the cost and nature of the corrective work required, and the dispatch

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economics that would result from restored or expanded capacity. Improvements may include, among others, the installation or replacement of air heater baskets, condenser cleaning, replacement of worn mechanical components, turbine inspections and corrections, and other corrective measures identified during engineering assessments.

For new units, Genera will, for example, seek to introduce new peaker units, such as those from Siemens and GE expected during 2027 and 2028. MW from these units will displace higher cost generation at other sites. Genera will use federal funds for these projects to reduce the impact on rate payers. For clarity, project cost savings versus budget arising from federal funding will not form part of savings claimed under this initiative; savings under this initiative arise from aggregate fuel mix, cost, and efficiency improvements. This initiative may also include making available power generation related equipment, such as regasification equipment, that enables power generation on lower cost fuel.

Examples of potential projects to increase MW include:

- Installation of new air pre-heater baskets
- Compressor cleaning system
- Condenser cleaning system
- Major Inspections
- Improvements by Manufacturer
- New peaker installation at Jobos
- New peaker installation at Daguaao
- New peaker installation at Yabucoa
- New peaker installation at Costa Sur

- **Savings-Calculation Methodology**

Following the completion of identifiable improvements, Genera will use dispatch modeling tools, including PROMOD in coordination with LUMA (who

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must be instructed by P3A to cooperate), or if Genera acquires a license for a simulator or modeling tool, to compare actual unit performance against a simulated baseline representing the unit operating under its prior capacity constraints. This comparison will quantify the displaced energy volume and the associated cost differential between the improved unit and the higher-cost generation sources that would otherwise have been dispatched. The target outcome is a measurable and sustained improvement in available capacity, with a corresponding reduction in system-wide fuel costs. In other words, the savings from the initiatives will be quantified using objective data such as system-dispatch information to determine the fuel costs avoided by operating the supplemental units, measured as the difference between the substituted (lower-cost) fuel actually consumed and the higher-cost generation it displaces on the system.

The methodology is grounded in a before and after comparison supported by dispatch information, simulation modeling, or other objective information or data concerning the use of the units before and after the project. Prior to undertaking any capacity improvement work, Genera will establish a unit specific baseline that documents the unit's rated capacity, its actual constrained output level, historical dispatch volumes, and the identity and cost of the higher cost generation sources that were dispatched in its place due to the capacity limitation.

Once the improvement work is completed, Genera conducts post improvement performance testing to confirm the restored or expanded capacity. Actual dispatch data for the unit following the improvements is then compared against prior data including, where needed, a simulation model prepared using PROMOD or an equivalent industry standard dispatch modeling tool. The simulation reconstructs how the system would have dispatched generation over the same period had the unit continued to operate under its

prior capacity constraint, identifying the volume of higher cost energy that would have been required and its associated cost.

The savings are calculated as the difference between the cost of the actual post-improvement dispatch and the cost of the simulated constrained-capacity dispatch, reflecting the economic value of the additional lower-cost energy made available by the improvement and the corresponding displacement of more expensive generation. Results are compiled on an annual basis and reported as part of the Fuel Optimization Report.

Initiative Number Three-B (3-B): Displace Higher-Cost Generation Units with BESS Battery Project

- **Objective & Approach**

Objective: Reduce system-wide costs by deploying Battery Energy Storage Systems (BESS) at strategic locations to reinforce grid stability, enhance operational resilience, and reduce the island's dependence on fossil fuels for peaking and ancillary services. By integrating battery storage into the generation dispatch framework, this initiative seeks to reduce the volume of high cost, fuel intensive generation required to meet peak demand and provide grid support services, thereby lowering overall fuel expenditures and improving the reliability of power supply for all ratepayers.

This initiative covers, but is not limited to, item (iii) in the definition of "Fuel Cost Savings Initiatives" of the OMA, which includes "supplementing Legacy Generation Assets with power generation equipment at or in the vicinity of the relevant Generation Site that is more fuel efficient and/or operates on any new alternative fuel(s)". This initiative is similar in concept and OMA basis to Initiative Three but requires differences in calculation methodology.

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Approach: Genera has identified and designed BESS locations to capture surplus energy during off-peak and high renewable output periods, and to discharge that stored energy during periods of peak demand or system stress, thereby reducing the need to dispatch high cost, fuel intensive thermal units. The BESS assets will be capable of providing rapid response frequency regulation reserves, voltage support, and black-start services, contributing to overall grid reliability and reducing the risk of extended outages. Integration of battery energy storage with existing and new solar and wind resources will firm intermittent renewable generation, displace portions of peak-hour diesel and fuel oil consumption, and contribute to a reduction in the heat rate and emissions profile of the island's legacy thermal fleet.

Genera will track the fuel displacement achieved through BESS dispatch on an interval-by-interval basis, comparing actual thermal generation levels against the pre-BESS baseline to quantify realized fuel and cost savings. The initiative will be implemented in phases consistent with available project approvals, funding, and interconnection timelines, with each phase subject to rigorous performance monitoring and reporting.

- **Savings-Calculation Methodology**

The methodology for this initiative begins with the collection and organization of the data inputs necessary to establish a credible pre-BESS baseline. This includes historical and forecasted load profiles, renewable generation output curves, fuel price time series for each fuel type used by the legacy thermal fleet, and unit level heat rates for the thermal generators that the BESS is expected to displace during peak and ancillary service periods. Genera will work with LUMA for PROMOD assessments and dispatch modeling to support claims.

Using these inputs, Genera establishes the baseline fuel consumption and associated costs attributable to the generation sources that would be dispatched in the absence of BESS, providing the reference point against which

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post deployment performance is measured. Following BESS deployment, Genera tracks actual battery dispatch on an interval-by-interval basis, recording the energy discharged, the thermal generation avoided, and the fuel cost that would have been incurred had that thermal generation been dispatched instead.

For each dispatch interval, the fuel displacement saving is calculated by multiplying the volume of energy discharged by the battery by the heat rate of the displaced thermal unit and the prevailing fuel price, yielding the avoided fuel cost for that interval. From this gross fuel saving, Genera deducts the cost of energy used to charge the battery, adjusted for round-trip efficiency losses, as well as a pro-rated charge for battery degradation attributable to the dispatch cycle. The net saving for each interval is the gross avoided fuel cost less these charging and degradation costs.

Interval-level results are aggregated over monthly and annual reporting periods to produce a total net savings figure for the initiative. This methodology captures both the direct fuel displacement benefit and the energy arbitrage value of the BESS, and provides a transparent, auditable basis for reporting savings to the P3 Authority. Genera will work closely with LUMA to support data collection and modeling.

Genera will use federal funds for these projects to reduce the impact on rate payers. For clarity, project cost savings versus budget arising from federal funding will not form part of savings claimed under this initiative; savings under this initiative arise from thermal generation avoided, and the fuel cost savings.

Initiative Number Four (4): Improve Fuel Efficiency of the Legacy Generation Assets

- **Objective & Approach**

Objective: Reduce the heat rate (i.e., an industry-standard fuel consumption efficiency metric) of targeted generation units through focused engineering repairs and performance upgrades. This will lower the quantity of fuel required to produce the same quantity of electricity on a dollar per megawatt-hour basis. Improving unit thermal efficiency directly translates into lower fuel expenditures per unit of energy generated, benefiting ratepayers and reducing the environmental footprint of the generation fleet.

This initiative covers, but is not limited to, item (i) in the definition of “Fuel Cost Savings Initiatives” of the OMA, which includes “improving the fuel efficiency of any Legacy Generation Assets”.

Approach: Genera will focus on units with the greatest potential for heat rate improvement, including assets that are older than 15 years or operating with heat rates materially above the industry benchmark of 10 MMBtu/MWh.

Candidate units will be assessed through engineering inspections and performance diagnostics to identify the then-existing heat rate of the unit (third-party verified) and the root causes of thermal inefficiency. Corrective and improvement activities may include, among others, advanced turbine blade coatings to reduce aerodynamic losses, combustion chamber flow realignment to optimize fuel-air mixing and combustion efficiency, digital governor retrofits to improve load following accuracy and reduce heat rate variability, boiler tube and heat exchanger maintenance, and other targeted interventions identified through engineering review.

In addition to improving the efficiency of existing LGA, this initiative also includes the installation of new, high efficiency peaker generation to replace

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older, less efficient peaking units. Genera is currently developing new peaker installations at Jobos, Dagua, Yabucoa, and Costa Sur utilizing modern Siemens and GE combustion turbine technology. These facilities will achieve significantly lower heat rates than the peaking units they replace, resulting in lower fuel consumption, improved dispatch efficiency, enhanced operational flexibility, and reduced emissions. These projects are funded primarily through federal funding programs in order to minimize the capital cost burden on the ratepayers. For the avoidance of doubt, any savings attributable to the use of federal funding, including reductions in project costs relative to budget, will not be claimed under this initiative. Rather, savings claimed under this initiative will be limited to the operational benefits resulting from improved thermal efficiency, reduced heat rates, and the corresponding reduction in fuel consumption achieved by the replacement of existing peaking generation.

Following completion of each improvement, Genera will commission a formal performance test conducted in accordance with applicable industry standards to independently verify heat rate gains. Ongoing savings will be calculated by comparing post upgrade fuel consumption against the pre-improvement baseline, with results reported transparently and consistently throughout the term of the OMA. For new peaker installations, the baseline may be established by comparing the historical heat rate and fuel consumption of the existing peaking units being replaced against the demonstrated performance of the new units under comparable operating conditions, using performance testing and other accepted engineering methodologies, as approved by PREB.

- **Savings-Calculation Methodology**

The methodology for this initiative begins with the development of unit specific project charters that define the scope of work, expected heat rate improvement targets, budget, and implementation timeline for each targeted

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unit. Prior to beginning any improvement work, a pre-improvement baseline heat rate is established using recent operational data and, where appropriate, a formal pre-work performance test conducted in accordance with applicable industry standards. Upon completion of the improvement work, Genera commissions a post-improvement performance test, also conducted in accordance with industry practice, to independently verify the heat rate gains achieved. Ongoing fuel savings are then calculated by applying the measured heat rate improvement to the unit's actual generation output over the relevant reporting period, multiplying the reduction in heat rate by the volume of energy generated and the prevailing fuel price to arrive at a monetized savings figure.

Results are tracked monthly and compiled annually, using system dispatch data from LUMA, with actual performance compared against the projected savings established in the project charter to assess whether the initiative is delivering the anticipated economic benefit. Any material variance between projected and actual savings is investigated and reported, with corrective actions identified where necessary.

Initiative Number Five (5): Reduce Fuel-Related Maintenance Costs or Other Documented Fuel-Related Costs

- **Objective & Approach**

Objective: Identify and capture cost-saving opportunities across all categories of maintenance and ancillary fuel-related expenditures associated with operating PREPA's generation fleet, beyond fuel procurement alone. This initiative is intentionally broad in scope, encompassing potential savings in maintenance contracting, spare parts procurement, logistics and transportation costs, financing terms for such parts, administrative costs, and any other operational expenditure where Genera identifies and documents a legitimate opportunity to reduce costs without impairing the reliability, availability, or safety of the generation assets. The ultimate objective is to reduce the total cost of operating the fleet, thereby lowering the overall burden on ratepayers and improving the economic sustainability of Puerto Rico's power generation infrastructure.

This initiative covers, but is not limited to, item (iv) in the definition of "Fuel Cost Savings Initiatives" of the OMA, which includes "reducing transportation, testing, delivery or storage (including tank maintenance) costs", including by replacement or renegotiation of Facility Contracts or otherwise.

Approach: Genera will maintain an ongoing and systematic review of all fuel-related operational cost categories, establishing and periodically refreshing, detailed cost baselines against which actual expenditures are tracked. Where opportunities for savings are identified, Genera will investigate root causes and implement corrective measures to reduce costs below target.

In the area of maintenance, Genera will evaluate contracting strategies, including competitive re-tendering of Facility Contracts, consolidation of vendors to achieve volume discounts, and the in-sourcing of activities where

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internal capabilities allow for cost effective execution. For spare parts and materials, Genera will assess procurement strategies to reduce unit costs, optimize inventory levels, and explore cooperative purchasing arrangements where applicable. In logistics and transportation, Genera will review fuel delivery schedules, routing, and carrier arrangements to identify efficiencies.

Financing terms associated with fuel and materials procurement will also be evaluated, with early-payment or supply chain financing structures considered where they yield net savings.

All identified savings opportunities will be documented, tracked against baseline, and reported as part of Genera's regular Incentives and Penalties Report under the OMA.

- **Savings-Calculation Methodology**

The methodology for this initiative is built on a rigorous baseline and variance framework applied across all relevant cost categories. Genera will begin by establishing detailed cost baselines for each area of expenditure covered by the initiative, drawing on historical invoices, contracts, and operational records. These baselines represent the expected cost of each activity absent any optimization effort and serve as the reference point against which actual expenditures are measured.

As cost saving measures are implemented, whether through contract renegotiation, competitive re-tendering, revised procurement strategies, logistics optimization, financing improvements, or other activities, actual costs are tracked against the applicable baseline. The savings for each category are computed as the difference between the baseline forecast cost and the actual cost incurred during the reporting period, adjusted for any changes in activity levels or scope that would otherwise distort the comparison.

Where savings results from a renegotiated contract or a competitive procurement award, the savings are calculated by comparing the new unit price or total contract value against the prior or incumbent arrangement, applied to actual volumes consumed. All realized savings will be documented with supporting data and reported on an annual basis as part of the Incentives and Penalties Report, with sufficient detail to allow the P3 Authority to verify the methodology and validate the results.

Summary of Savings Calculation Methodology

To support strategic decision-making and evaluate the financial impact of Fuel Cost Savings Initiatives as described above, Genera uses simple arithmetic formulas tailored to each strategy. These formulas help estimate cost savings, improved efficiency, or revenue generation potential, providing a quantitative foundation for forecasting, reporting, and budgeting.

Each formula leverages operational metrics such as fuel price, efficiency gains, contract terms, and volume forecasts to derive actionable insights. The table below summarizes these formulas by initiative:

Initiative	Proposed Formula	Purpose
1. Change to the Type of Fuel (e.g., Convert Legacy Generation Assets)	$\text{Net Savings} = (\text{Natural Gas Price} - \text{Original Fuel Price}) \times \text{Consumed Energy}$	Calculates financial benefit of switching fuels. The fuel prices are in \$/MMBtu.
2. Savings Opportunities Related to Portfolio Optimization	$\begin{aligned} 1) \text{ Adjusted Price} &= \text{Base Price} \times (1 + \text{New Escalator Rate})^{\text{Years}} < \text{Current Price} \\ 2) \text{ Cost Differential} &= (\text{Contract} - \text{Spot Price}) \times \text{Volume Purchased} \\ 3) \text{ Cash Flow Gain} &= (\text{Discount Rate} \times \text{Invoice Amount}) \div 365 \times \text{Days Early} \end{aligned}$	$\begin{aligned} 1) &\text{ Models future adjusted price} \\ 2) &\text{ Evaluates the benefits of opportunistic buys} \\ 3) &\text{ Captures early payment gains} \end{aligned}$
3. Displace Higher-Cost	$\text{Displaced Energy Value} = [\text{Additional Operating Hrs.}]$	Quantifies value of displaced energy

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Generation Units with Lower-Cost MW	(PROMOD 1-yr period) * Displaced Capacity MW] [Displaced Higher Cost \$MWhrs – Energy Lower Cost Energy \$/MWhrs] Same formula just easier to understand Saving = additional MWH x (Cost of Displaced Unit–Cost of improved unit)	
3B. Displace Higher Cost – BESS Battery Project Initiative	Displacement Savings = (Displaced Fuel kWh × Avg Heat Rate × Fuel Price) Battery Discharge(kwh) x Heat Rate (MMbtu/MWh) x Fuel Price (\$/MMBTu)	Quantifies fuel displacement value
4. Improve Fuel Efficiency	MMbtu * [Improved Heat Rate(BTU/kwhrs)]* [Cost per MMBtu]*[Total Kilowatt/hrs Generated]	Quantifies total amount of fuel cost saved
5. Reduce Fuel-Related Maintenance Costs	Savings = Forecast Cost – Actual Cost (OK)	Assesses budget vs. actual performance

By executing a dual-track approach, anchored in a clear strategy and underpinned by disciplined methodology, Genera anticipates capturing 5–10 percent in fuel-related cost savings over the term of the OMA, bolstering reliability, and driving Puerto Rico’s transition toward a cleaner, more resilient power system. Continuous monitoring, transparent reporting, and adaptive governance will ensure these initiatives evolve with market conditions and regulatory requirements.

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