

**GOVERNMENT OF PUERTO RICO
PUBLIC SERVICE REGULATORY BOARD
PUERTO RICO ENERGY BUREAU**

NEPR

Received:

Oct 26, 2022

9:41 PM

IN RE: REVIEW OF THE PUERTO RICO
ELECTRIC POWER AUTHORITY'S 10-
YEAR INFRASTRUCTURE PLAN –
DECEMBER 2020

CASE NO.: NEPR-MI-2021-0002

SUBJECT: Motion to Submit 404 HMGP
Application Package and Request for Leave
to Present to COR3 and FEMA

**MOTION TO SUBMIT 404 HMGP APPLICATION PACKAGE AND
REQUEST FOR LEAVE TO PRESENT TO COR3 AND FEMA**

COMES NOW the Puerto Rico Electric Power Authority (PREPA), through its counsel of record, and respectfully submits and requests as follows:

1. On March 26, 2021, the Energy Bureau¹ issued a *Resolution and Order* (“March 26 Order”) through which it ordered PREPA to submit each specific capital investment project for approval before their submittal to COR3 and the Federal Emergency Management Agency (FEMA).

2. PREPA has persistently reiterated to the Energy Bureau that it is of the utmost importance that PREPA buys eleven (11) new Emergency Generation Units to replace existing combustion turbine peaking units. *See Motion to Inform Reallocation of FEMA404 HMGP Funds and Request for Approval of Generation Projects* (August 2, 2022) and *Request for Order Regarding Repairs, Request for Reconsideration, and to Inform Regarding Batteries* (October 22, 2022). One of the most critical aspects that PREPA has stated is that purchasing these units would come at *no cost* to the customers because FEMA can reimburse the total cost under the 404 HMGP. This most recent request is *sub judice*.

3. However, the deadline to submit revisions to the 404 HMGP packages to FEMA **expires Monday, October 31, 2022**. Considering this pressing deadline, PREPA completed the

¹ All capitalized terms used herein and not otherwise defined shall have the meaning ascribed to them in the *Request for Order Regarding Repairs, Request for Reconsideration, and to Inform Regarding Batteries* (October 22, 2022).

Emergency Generating Units project application package, equivalent to 428 FAASSt projects SOWs, and submits it as Annex A for the consideration of the Energy Bureau. The submittal is made following the March 26 Order requirements. PREPA herein requests the Energy Bureau to grant PREPA leave to submit to COR3 and FEMA the attached Emergency Generating Units HMGP Project Application package.

4. Further, this submittal is made following Engineer Francisco Berrios Portela, Auxiliary Secretary of Energy Affairs, directives included in the letter sent to Engineer Josué A. Colón Ortiz, Executive Director of PREPA, today (“October 10 Letter”) and attached as Annex B. In the October 10 Letter, Secretary Berrios directs PREPA to submit to the Energy Bureau the scope of works for the peaking units approved by FEMA under the 404 HMGP and that the scope must be aligned with the peaking units considered in the integrated resource plan (IRP) as operational and which represent a total of seven (7) units, for an approximate of 147 MW. It is also stated that these are separate from the *black-start* units that will be located at Costa Sur and Yabucoa.

5. It is respectfully stated that following the reasoning that the scope must include the units that the IRP considered operational, the total remaining number of units to be acquired is eleven (11), not seven (7).

6. Following Regulation 9021,² Part 4 of the Proposed IRP³ included the description of the existing resources. Proposed IRP at p. 4-1 – 4-30. Section 4.2.1.3 of the Proposed IRP included a list of several distributed gas turbines distributed around the Island, that is, “pairs of two units located: Dagua (2x21), Palo Seco (6x21), Aguirre (2x21), Costa Sur (2x21), Jobos (2x21),

² Energy Bureau, *Regulation on Integrated Resource Plan for the Puerto Rico Electric Power Authority*, No. 9021 (May 23, 2018).

³ *Puerto Rico Integrated Resource Plan 2018-2019, Draft for the Review of the Puerto Rico Energy Bureau, Prepared for the Puerto Rico Electric Power Authority* (June 7, 2019).

Yabucoa (2x21), and Vega Baja (2x21).” Further, it provides that “[t]hese **nine pair** of distributed units, while in operating condition, are fairly old and have very poor heat rates. *Id.* (emphasis added). Fourteen of these units are retired early in the IRP capacity expansion plan and **replaced** by new peakers.” *Id.* (emphasis added). Thus, PREPA did not consider retiring any of the eighteen (18) gas turbines; rather, it clearly stated that those units would be *replaced*.

7. Section 4.2.1.3 further stated that “[t]he two 21 MW GTs at Aguirre and two 21 MW GTs at Costa Sur are necessary to provide black-start capability to their respective combined cycle and steam turbine at each location.” Thus, the units modeled as available generation resources in the Proposed IRP were eighteen (18). The Energy Bureau determined that PREPA’s description of the existing resources complied with Section 2.03(D)(1)(b) of Regulation 9021.⁴

8. Out of these eighteen (18) units, the Energy Bureau already approved the replacement of 147 MW of gas turbine capacity with fossil-fuel generators providing peaking support services. *See Resolution and Order* entered on September 15, 2022 at p. 3, Sec. II. C. This peaking capacity includes the *MegaGen* mobile units totaling 66 MW installed at Palo Seco. *Id.* This leaves up to 81 MW of new capacity to procure, which PREPA will pursue through the new black starts systems at Costa Sur and Yabucoa. *Id.* Therefore, the Proposed IRP modeled a total of eighteen (18) units. After subtracting the three (3) MegaGens and the four (4) black-start units approved by the Energy Bureau, there are still eleven (11) emergency generators to be acquired.

9. Therefore, following the rationale of submitting a scope with the peaking units considered in the IRP, PREPA requests the Energy Bureau to grant leave to proceed with the submittal of the Emergency Generating Units HMGP Project Application, which includes eleven (11) new

⁴ See p. 81, ¶ 310 of the *Final Resolution and Order on the Puerto Rico Electric Power Authority Integrated Resource Plan* entered in case no. CEPR-AP-2018-0001, *In Re: Review of the Puerto Rico Electric Power Authority Integrated Resource Plan*.

Emergency Generating Units, which are the units still left to procure, and that will be reimbursed with FEMA funds, to complete the eighteen (18) units modeled in the Proposed IRP.

WHEREFORE, PREPA respectfully requests the Energy Bureau to note the submittal of the Emergency Generating Units HMGP Project Application package and grant PREPA leave to submit it to COR3 and FEMA to request the approval of eleven (11) new Emergency Generation Units.

In San Juan, Puerto Rico, this 26th day of October 2022.

/s/ Katiuska Bolaños Lugo
Katiuska Bolaños Lugo
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CERTIFICATE OF SERVICE

It is hereby certified that, on this same date, I have filed the above motion with the Office of the Clerk of the Energy Bureau using its Electronic Filing System at <https://radicacion.energia.pr.gov/login>, and a courtesy copy of the filing was sent to LUMA through its legal representatives at margarita.mercado@us.dlapiper.com and laura.rozas@us.dlapiper.com.

In San Juan, Puerto Rico, this 26th day of October 2022.

f/ Katuska Bolaños Lugo
Katuska Bolaños Lugo

Annex A

HMGP Project Application

F. Project Photographs

- Vega Baja (Commercial Operation Date – 1971)



HMGP Project Application

- Yabucoa (Commercial Operation Date – 1971)



HMGP Project Application

- Jobos (Commercial Operation Date – 1973)



HMGP Project Application

- Aguirre (Commercial Operation Date – 1972)



- Dagua (Commercial Operation Date – 1972)



HMGP Project Application

- Palo Seco (Commercial Operation Date – 1972 & 1973)



- South Coast (Commercial Operation Date – 1972)



HMGP Project Application

G. Scope of Work

The installation of eighteen (18) new mobile distributed generation smaller units at seven (7) strategical locations will provide the much need generation resiliency during emergencies. This project will help to provide rapid power restoration after a major hurricane hits giving life, health and property protection. The reestablishment of lifeline systems to provide affordable and reliable energy, telecommunications, water and transportation to the nearby neighborhoods will be guarantee with this project.

The project comprising up to approximately 450 MW of strategically important power to be installed at PREPA flexible distributed generation units' sites. It should include a minimum of two (2) units per location, with no single unit larger than 30 MW, to be initially located at:

- Aguirre SP: units with a total capacity of up to approximately 60 MW
- South Coast SP: units with a total capacity of up to approximately 60 MW
- Daguaao: units with a total capacity of up to approximately 60 MW
- Jobos: units with a total capacity of up to approximately 60 MW
- Palo Seco SP: units with a total capacity of up to approximately 90 MW
- Vega Baja: units with a total capacity of up to approximately 60 MW
- Yabucoa: units with a total capacity of up to approximately 60 MW

The Generation Units must be capable of burn Distillate #2 fuel (diesel) and natural gas (NG), either fuel on a primary basis and without any modifications to the supplied packages. The units must be equipped with modern environmental control and monitoring equipment, as well as control logics to meet all local, state, and federal current requirements.

Each generating unit package must have unrestricted fast start capability, including unrestricted time for hot starts, with the capability to reach full load from standby in 15 minutes or less. All units must be designed and constructed to be capable of operating at an annual average equivalent availability factor of 98% or greater (not including planned outages).

All of the new Generation Units will be installed in or near the foot print of the existing units removed.

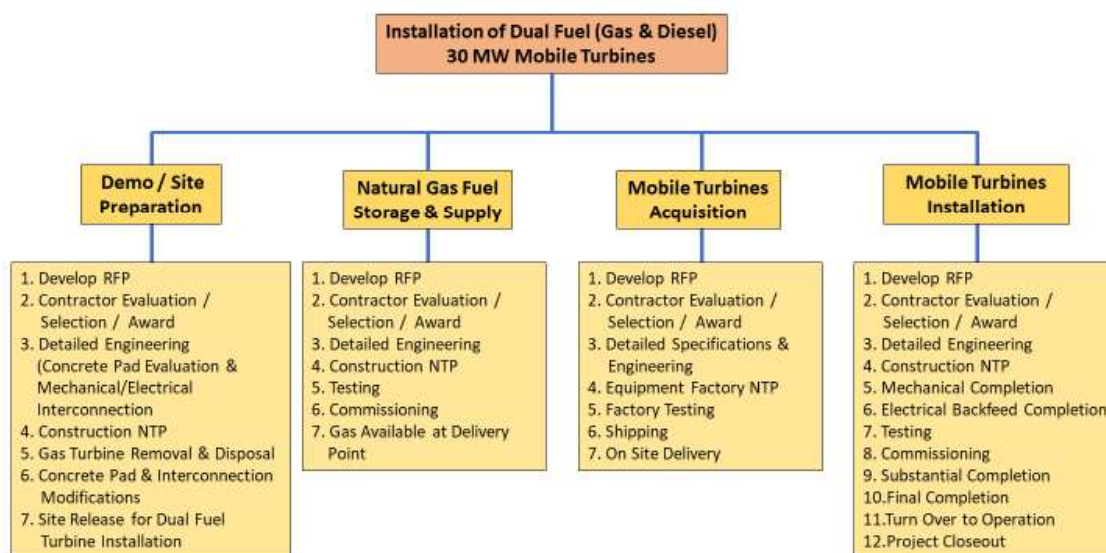
The Generation Units must comply with US Environmental Protection Agency and Puerto Rico Environmental Quality Board (EQB) requirements that include but are not limited to the Clean Air Act, Clean Water Act, New Source Performance Standards, Spill Prevention Control & Countermeasure requirements, Facility Response Plans, waste disposal regulations, construction and operating permits, and the regulations promulgated thereunder.

Original equipment manufacturer (OEM) equipment for the entire project must provide for all required emissions and environmental guarantees, controls, and documentation necessary to obtain required authorizations and approvals for each facility.

HMGP Project Application

Project Activities:

Installation of Dual Fuel (Gas & Diesel) 30 MW Mobile Turbines – Work Breakdown Structure (WBS)



H. Project Work Schedule

	Duration
PHASE I -- ENGINEERING	Months
Engineering support for permitting process (emissions)	16
Fuel gas storage & supply construction planning / logistics	7
Fuel gas storage & supply geotechnical and bathymetric surveys	3
Fuel gas storage & supply engineering for RFP	7
Fuel gas storage & supply bid review, contractor mtgs, evaluations, LOR, contract negotiations	6
Fuel gas storage & supply engineering, contractor design review / approval meetings / technical admin	7
Existing gas turbine removal & disposition / site demolition / concrete pad evaluation/ mechanical & electrical interconnection / prep for engineering RFP	6
Existing gas turbine removal & disposition / prep bid review, contractor mtgs, evaluations, LOR, contract negotiations	3
Existing gas turbine removal & disposition / prep engineering / approval meetings / technical admin	3
Gas turbine specifications & acquisition package prep	2
Gas turbine specifications & acquisition package RFP	4
Gas turbine specifications & package bid review, contractor mtgs, evaluations,	2
Gas Turbine bid, OEM mtgs, evaluations, LOR, contract negotiations	6
Gas Turbine manufacturing (OEM), design review / approval meetings	3
Develop Engineering, Procurement & Construction (EPC) RFP	2
EPC bid review, OEM mtgs, evaluations, LOR, contract negotiations	3
Air permit application process	24
Water permit application process	24
Obtain all permits for construction	8
PHASE II -- DETAILED DESIGN, PROCUREMENT, CONSTRUCTION AND START UP	
Gas Turbine from fabrication to transportation and delivery to site	18
Concrete pad / mechanical & electrical modifications construction	14
Fuel gas storage & supply construction	14
Gas turbine installation	7
Gas turbine start up, testing & commissioning	7

Total Estimated Time for Project Completion = 54 months / 4.5 years

HMGP Project Application

Installation of dual fuel (diesel & gas) 30 MW mobile gas turbines

[illegible]

HMGP Project Application

Form 20-15, Budget Information - Construction Programs

U.S. Department of Homeland Security Federal Emergency Management Agency BUDGET INFORMATION-CONSTRUCTION PROGRAMS				See reverse for instructions and Paperwork Burden Disclosure Notice		O.M.B. No. 1660-0025 Expires August 31, 2011	
1. Name of Applicant PREPA				2. Federal Identification Number			
3. CFDA Number 97-039		4. Budget (Check One) <input checked="" type="checkbox"/> New <input type="checkbox"/> Revised		Budget Period (Month, Day, Year) Beginning Date: May-2020 Ending Date: Nov 2024		5. Grant Program, Functions, Activity HMGP	
COST CLASSIFICATION		a. Total Cost		b. Cost Not Allowable		c. Total Allowable Cost (Column a-b)	
6. Administrative (project management) expense		\$ 20,566,328.00		\$ -		\$ 20,566,328.00	
7. Preliminary technical studies		\$ 966,667.00		\$ -		\$ 966,667.00	
8. Land, structures, right-of-way (if required)		\$ -		\$ -		\$ -	
9. Preliminary basic engineering to issue RFP packages		\$ 3,383,333.00		\$ -		\$ 3,383,333.00	
10. Review of proposals and contract negotiations / awards		\$ 2,000,000.00		\$ -		\$ 2,000,000.00	
11. Environmental and regulatory permits		\$ 2,226,555.00		\$ -		\$ 2,226,555.00	
12. Fuel supply development and construction		\$ 22,500,000.00		\$ -		\$ 22,500,000.00	
13. Relocation expenses		\$ -		\$ -		\$ -	
14. Relocation payments (see instructions)		\$ -		\$ -		\$ -	
15. Demolition, removal and site prep		\$ 2,250,000.00		\$ -		\$ 2,250,000.00	
16. Construction and project improvement		\$ -		\$ -		\$ -	
17. Equipment		\$ 372,600,000.00		\$ -		\$ 372,600,000.00	
18. Miscellaneous (LABOR)		\$ 5,400,000.00		\$ -		\$ 5,400,000.00	
19. SUBTOTAL (Sum of lines 6-18)		\$ 431,892,883.00		\$ -		\$ 431,892,883.00	
20. Contingencies		\$ -		\$ -		\$ -	
21. SUBTOTAL (Line 19 minus line 20)		\$ 431,892,883.00		\$ -		\$ 431,892,883.00	
22. Project (program) income		\$ -		\$ -		\$ -	
23. TOTAL PROJECT (Line 21 minus line 22)		\$ 431,892,883.00		\$ -		\$ 431,892,883.00	
24. Federal assistance requested, calculations as follows: Multiply allowable costs from line 23c, by the (Federal Participation Percentage Approved by FEMA). Enter resulting Federal share in block 25. Enter eligible costs from line 23c X 100%						25. Federal share \$ 431,892,883.00	
26. Signature						Date	

FEMA Form 20-15, Oct 08

HMGP Project Application

Activity/Task/Line Item	Quarter	Total Estimated Cost	Estimated FEMA Funds	Estimated Other Federal Funds	Estimated Local Funds
Engineering support for permitting process (emissions)	1	\$ 247,395.00	\$ -	\$ -	\$ -
sub-total		\$ 247,395.00	\$ -	\$ -	\$ -
Engineering support for permitting process (emissions) & environmental permits	2	\$ 247,395.00	\$ -	\$ -	\$ -
Gas Turbines specs & adquisition package and site preparation RFP's	2	\$ 316,667.00	\$ -	\$ -	\$ -
sub-total		\$ 564,062.00	\$ -	\$ -	\$ -
Continue support environmental permits	3	\$ 247,395.00	\$ -	\$ -	\$ -
Fuel gas storage & supply construction planning	3	\$ 155,556.00	\$ -	\$ -	\$ -
Gas Turbines specs & adquisition package, site preparation, fuel gas supply RFP's	3	\$ 511,111.00	\$ -	\$ -	\$ -
sub-total		\$ 914,062.00	\$ -	\$ -	\$ -
Continue support environmental permits	4	\$ 247,395.00	\$ -	\$ -	\$ -
Continue fuel gas storage & supply construction planning	4	\$ 155,556.00	\$ -	\$ -	\$ -
Fuel gas storage & supply geotechnical & bathymetric surveys	4	\$ 250,000.00	\$ -	\$ -	\$ -
Complete Gas Turbines specs & adquisition package and site preparation RFP's	4	\$ 375,000.00	\$ -	\$ -	\$ -
Site preparation bid	4	\$ 175,000.00	\$ -	\$ -	\$ -
Fuel gas supply bid review, evaluation, etc.	4	\$ 166,667.00	\$ -	\$ -	\$ -
sub-total		\$ 1,369,618.00	\$ -	\$ -	\$ -
Continue support environmental permits	5	\$ 247,395.00	\$ -	\$ -	\$ -
Complete fuel gas storage & supply construction planning	5	\$ 155,556.00	\$ -	\$ -	\$ -
Complete fuel gas storage & supply geotechnical & bathymetric surveys	5	\$ 250,000.00	\$ -	\$ -	\$ -
Complete fuel gas storage & supply RFP	5	\$ 194,444.00	\$ -	\$ -	\$ -
Continue fuel gas supply bid review, evaluation, etc.	5	\$ 166,667.00	\$ -	\$ -	\$ -
Site preparation bid review, evaluation, award, kickoff meeting etc.	5	\$ 250,000.00	\$ -	\$ -	\$ -
Gas Turbines adquisition bid	5	\$ 375,000.00	\$ -	\$ -	\$ -
sub-total		\$ 1,639,062.00	\$ -	\$ -	\$ -
Continue support environmental & construction permits	6	\$ 247,395.00	\$ -	\$ -	\$ -
Complete fuel gas storage & supply bid review, evaluation, award, kickoff meeting, etc.	6	\$ 166,667.00	\$ -	\$ -	\$ -
Fuel gas storage & supply design review	6	\$ 194,444.00	\$ -	\$ -	\$ -
Complete site preparation bid review, evaluation, award, kickoff meeting etc.	6	\$ -	\$ -	\$ -	\$ -
Continue Gas Turbines adquisition bid review, evaluation, award, kickoff meeting, etc.	6	\$ 375,000.00	\$ -	\$ -	\$ -
sub-total		\$ 983,506.00	\$ -	\$ -	\$ -
Continue support environmental & construction permits	7	\$ 247,395.00	\$ -	\$ -	\$ -
Fuel gas storage & supply design review	7	\$ 194,444.00	\$ -	\$ -	\$ -
Gas Turbines design review	7	\$ 750,000.00	\$ -	\$ -	\$ -
EPC contract negotiations	7	\$ -	\$ -	\$ -	\$ -
sub-total		\$ 1,191,839.00	\$ -	\$ -	\$ -
Continue support environmental & construction permits	8	\$ 247,395.00	\$ -	\$ -	\$ -
Complete fuel gas storage & supply design review	8	\$ 194,444.00	\$ -	\$ -	\$ -
EPC RFP, bid review, evaluation, award, kickoff meeting, etc.	8	\$ 416,667.00	\$ -	\$ -	\$ -
sub-total		\$ 858,506.00	\$ -	\$ -	\$ -
All permits are issued	9	\$ 247,395.00	\$ -	\$ -	\$ -
Complete EPC RFP, bid review, evaluation, award, kickoff meeting, etc.	9	\$ 150,000.00	\$ -	\$ -	\$ -
Release NTP for demolition / site preparation	9	\$ 1,293,231.00	\$ -	\$ -	\$ -
Release NTP for gas turbines fabrication	9	\$ 1,293,231.00	\$ -	\$ -	\$ -
Release NTP for construction	9	\$ 1,293,231.00	\$ -	\$ -	\$ -
sub-total		\$ 4,277,088.00	\$ -	\$ -	\$ -

HMGP Project Application

Gas Turbines fabrication	10	\$ 186,300,000.00	\$ -	\$ -	\$ -
Mobilization	10	\$ 2,097,745.00	\$ -	\$ -	\$ -
Site preparation, Mechanical & Electrical modifications, demolition, etc.	10	\$ 450,000.00	\$ -	\$ -	\$ -
sub-total		\$ 188,847,745.00	\$ -	\$ -	\$ -
Gas Turbines fabrication	11	\$ 37,260,000.00	\$ -	\$ -	\$ -
Site preparation, Mechanical & Electrical modifications, demolition, etc.	11	\$ 450,000.00	\$ -	\$ -	\$ -
Fuel gas storage & supply construction	11	\$ 4,500,000.00	\$ -	\$ -	\$ -
sub-total		\$ 42,210,000.00	\$ -	\$ -	\$ -
Gas Turbines fabrication	12	\$ 37,260,000.00			
Site preparation, Mechanical & Electrical modifications, demolition, etc.	12	\$ 450,000.00			
Fuel gas storage & supply construction	12	\$ 4,500,000.00			
sub-total		\$ 42,210,000.00	\$ -	\$ -	\$ -
Gas Turbines fabrication	13	\$ 37,260,000.00			
Site preparation, Mechanical & Electrical modifications, demolition, etc.	13	\$ 450,000.00			
Fuel gas storage & supply construction	13	\$ 4,500,000.00			
sub-total		\$ 42,210,000.00	\$ -	\$ -	\$ -
Gas Turbines fabrication	14	\$ 37,260,000.00			
Complete site preparation, Mechanical & Electrical modifications, demolition, etc.	14	\$ 450,000.00			
Fuel gas storage & supply construction	14	\$ 4,500,000.00			
sub-total		\$ 42,210,000.00	\$ -	\$ -	\$ -
Complete gas turbines fabrication & delivery	15	\$ 37,260,000.00			
Complete fuel gas storage & supply construction	15	\$ 4,500,000.00			
Gas Turbines installation	15	\$ 300,000.00			
sub-total		\$ 42,060,000.00	\$ -	\$ -	\$ -
Gas Turbines installation	16	\$ 300,000.00			
Commissioning & testing	16	\$ 1,500,000.00			
sub-total		\$ 1,800,000.00	\$ -	\$ -	\$ -
Gas Turbines installation	17	\$ 300,000.00			
Commissioning & testing	17	\$ 1,500,000.00			
sub-total		\$ 1,800,000.00	\$ -	\$ -	\$ -
Commissioning & testing	18	\$ 1,500,000.00			
sub-total		\$ 1,500,000.00	\$ -	\$ -	\$ -
Complete tuning	19	\$ 5,000,000.00			
Project turnover to operations	19	\$ 5,000,000.00			
Project close out	19	\$ 5,000,000.00			
sub-total		\$ 15,000,000.00	\$ -	\$ -	\$ -
Totals:		\$ 431,892,883.00			

Budget Narrative**4339-0010 / 4339-HM-HMGP-001888****October 2022**

Narrative	List Item	Unit Description	Number of Units	Unit Cost	Cost
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Phase I Cost: \$ 25,400,000.00**PHASE I: ENGINEERING**

Phase One: Engineering support for EHP permitting Process (emissions) at each of the five sites	Other Architectural/ Engineering Fees	Each	1	\$1,500,000.00	\$1,500,000.00
Phase One: Conduct an environmental due diligence at each site to determine the extent of contaminated soil	Other Architectural/ Engineering Fees	Each	1	\$2,000,000.00	\$2,000,000.00
Phase One: Conduct environmental, topographical and geotechnical surveys at each of the five sites	Other Architectural/ Engineering Fees	Each	1	\$3,000,000.00	\$3,000,000.00
Phase One: Conduct a fuel supply due diligence of existing fuel storage and supply equipment	Other Architectural/ Engineering Fees	Each	1	\$800,000.00	\$800,000.00
Phase One: Develop preliminary engineering for an RFP package to refurbish existing fuel storage tanks or build new tanks	Architectural/ Engineering Design	Each	1	\$1,500,000.00	\$1,500,000.00

Phase One: Fuel supply bid review, contractor meetings, evaluations, letter of recommendation (LOR), contract negotiations	Administrative	Each	1	\$1,000,000.00	\$1,000,000.00
Fuel Storage Tanks And Equipment Supply Contract Award					
Phase One: Power plant site demolition and site preparation for engineering RFP package	Architectural/ Engineering Design	Each	1	\$800,000.00	\$800,000.00
Phase One: Power plant site demolition and site preparation bid review, contractor meetings, evaluations, letter of recommendations (LOR), contract negotiations	Administrative	Each	1	\$1,200,000.00	\$1,200,000.00
Phase One: Power plant site demolition and site preparation detailed engineering, contractor design review/approval meetings/technical administration	Architectural/ Engineering Design	Each	1	\$1,200,000.00	\$1,200,000.00
Power Plant Site Demolition/Preparation Contract Award					
Phase One: Power block (Gas turbine and main step up transformer) engineering RFP	Architectural/ Engineering Design	Each	1	\$600,000.00	\$600,000.00
Phase One: Power block bid review, OEM meetings, evaluations, LOR, contract negotiations	Administrative	Each	1	\$800,000.00	\$800,000.00
Phase One: Power block engineering (OEM), design review/ approval meetings	Architectural/ Engineering Design	Each	1	\$1,000,000.00	\$1,000,000.00

Power Block Contract Award					
Phase One: Power plant integration basic engineering development for five sites	Architectural/ Engineering Design	Each	1	\$3,000,000.00	\$3,000,000.00
Phase One: Develop engineering, procurement and construction (EPC) RFP	Architectural/ Engineering Design	Each	1	\$800,000.00	\$800,000.00
Phase One: EPC bid review, OEM meetings, evaluation, LOR, contract negotiations	Administrative	Each	1	\$2,000,000.00	\$2,000,000.00
EPC Integrator Contract Award					
Phase One: Air Permit Application Process	Other Architectural/ Engineering Fees	Each	1	\$1,600,000.00	\$1,600,000.00
Phase One: Water Permit Application Process	Other Architectural/ Engineering Fees	Each	1	\$600,000.00	\$600,000.00
Phase One: Obtain all Permits for Construction	Other Architectural/ Engineering Fees	Each	1	\$2,000,000.00	\$2,000,000.00

Phase II Cost: \$ 745,422,500.00

PHASE TWO: DETAILED DESIGN, PROCUREMENT, CONSTRUCTION AND START UP

Phase Two: Gas turbines and main step up transformer fabrication through transportation and delivery to site	Construction	Each	1	\$386,100,000.00	\$386,100,000.00
Phase Two: Refurbish or build a new fuel storage tank with required capacity to be determined in Phase I	Construction	Each	1	\$7,500,000.00	\$7,500,000.00
Phase Two: EPC contractor mobilization to site	Construction			Included	Included
Phase Two: Site demolition and preparation including environmental remediation of contaminated soil	Demolition and Removal	Months	1	\$54,500,000.00	\$54,500,000.00
Phase Two: Power plant engineering and construction of foundation, fuel piping, electrical and controls for new 11 gas turbines	Construction	Each	1	\$156,000,000.00	\$156,000,000.00

Mechanical completion

Phase One: Yabucoa Black Start Generators (2) - 30 MW each <ul style="list-style-type: none"> • One common Generator Step Up (GSU) transformer for both turbine generators including foundation • Connect utilities at the boundary of the existing location of the units including fuel oil piping, oily water drain system and separator, and electrical generator interconnection. 	Construction	Each	1	\$67,800,000.00	\$67,800,000.00
Phase One: Costa Sur Black Start Generators (2) - 30 MW each <ul style="list-style-type: none"> • One common Generator Step Up (GSU) transformer for both turbine generators including foundation • Connect utilities at the boundary of the existing location of the units including fuel oil piping, oily water drain system and separator, and electrical generator interconnection. 	Construction	Each	1	\$67,800,000.00	\$67,800,000.00
Installation of black start generators completion					
Phase Two: Power plant start up, commissioning, and project closeout	Project Inspection Fees	Each	1	\$5,722,500.00	\$5,722,500.00
Sub-Total Phase I - Engineering	\$ 25,400,000.00				
Sub-Total Phase II - Construction	\$ 745,422,500.00				
Total Project Cost Estimate	\$ 770,822,500.00				

Annex B

26 de octubre de 2022

Ing. Josue Colón Ortiz
Director Ejecutivo
Autoridad de Energía Eléctrica

Alcance trabajo
Unidades de pico – peaking units
Fondos FEMA 404 para mitigación de riesgos

Estimado Director Colón Ortiz,

Según discutido recientemente, como parte de los trámites para adelantar los trabajos de tener un sistema energético que provea mayor estabilidad es importante que la Autoridad de Energía Eléctrica (AEE) proceda a la mayor brevedad con la radicación ante el Negociado de Energía (NEPR) de los documentos correspondientes al alcance de trabajo relacionados a las unidades pico (peaking units) aprobados por FEMA bajo los presupuestos de mitigación de riesgos (404) de FEMA. El alcance debe considerar los trabajos relacionados a las unidades pico consideradas en el Plan Integrado de Recursos como operacionales y que representan un total de 7 unidades para aproximadamente 147MW. Estos trabajos son independientes al alcance para las unidades tipo *blackstart* a ser instalados en la Central Costa Sur y Yabucoa.

Agradecemos su compromiso y pronta gestión sobre este asunto.



Francisco Berrios Portela
Secretario Auxiliar para Asuntos Energéticos