

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

**NEPR**

**Received:**

**Oct 27, 2022**

**9:30 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 Clarify Regarding  
Amendment to 404 HMGP Application  
Package

**MOTION TO CLARIFY REGARDING AMENDMENT  
TO 404 HMGP APPLICATION PACKAGE**

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

1. On October 22, 2022, PREPA submitted the *Request for Order Regarding Repairs, Request for Reconsideration, and to Inform Regarding Batteries*. Yesterday, PREPA submitted the *Motion to Submit 404 HMGP Application Package and Request for Leave to Present to COR3 and FEMA*. PREPA submitted to the Energy Bureau in both motions that it was seeking approval to acquire eleven (11) new simple-cycle gas turbines.

2. PREPA hereby withdraws its request for the approval of eleven (11) new simple cycle gas turbines and respectfully requests the Energy Bureau grant PREPA leave to submit an amended 404 HMGP Application Package to acquire four (4) black-start units to be located at Costa Sur and Yabucoa and seven (7) simple cycle gas turbines. The application package that will be amended is attached as Annex A.

3. Also, and in furtherance of this new course of action, PREPA requests the Energy Bureau to grant leave to submit the draft letter attached as Annex B, or a form substantially similar, to the Central Office for Recovery, Reconstruction and Resiliency ("COR3") and the Federal Emergency Management Administration (FEMA). In the letter, PREPA informs both agencies of the amendment of the simple cycle gas turbines project already approved by FEMA.

4. 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, yesterday, October 26, 2022, and attached herein as Annex C. In the letter, engineer Berrios states that the scope of the 404 HMGP Application Package “should consider the works related to the peak units considered in the Integrated Resource Plan as operational and representing a total of 7 units for approximately 147MW. These works are independent of the scope for the black-start units to be installed in the Costa Sur and Yabucoa centrals.”

**WHEREFORE**, PREPA respectfully requests that the Energy Bureau grant PREPA leave (a) to amend the 404 HMGP Application Package to acquire four (4) black-start units to be located at Costa Sur and Yabucoa and seven (7) simple cycle gas turbines and, also, (b) to submit the draft letter attached as Annex B to this motion, or a form substantially similar, to COR3 and FEMA.

In San Juan, Puerto Rico, this 27<sup>th</sup> day of October 2022.

/f/ Katiuska Bolaños Lugo  
Katiuska Bolaños Lugo  
TSPR No. 18,888  
[kbolanos@diazvaz.law](mailto:kbolanos@diazvaz.law)

**DÍAZ & VÁZQUEZ LAW FIRM, P.S.C.**  
290 Jesús T. Piñero Ave.  
Oriental Tower, Suite 803  
San Juan, PR 00918  
Tel. (787) 395-7133  
Fax. (787) 497-9664

**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](mailto:margarita.mercado@us.dlapiper.com) and [laura.rozas@us.dlapiper.com](mailto:laura.rozas@us.dlapiper.com).

In San Juan, Puerto Rico, this 27<sup>th</sup> 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.

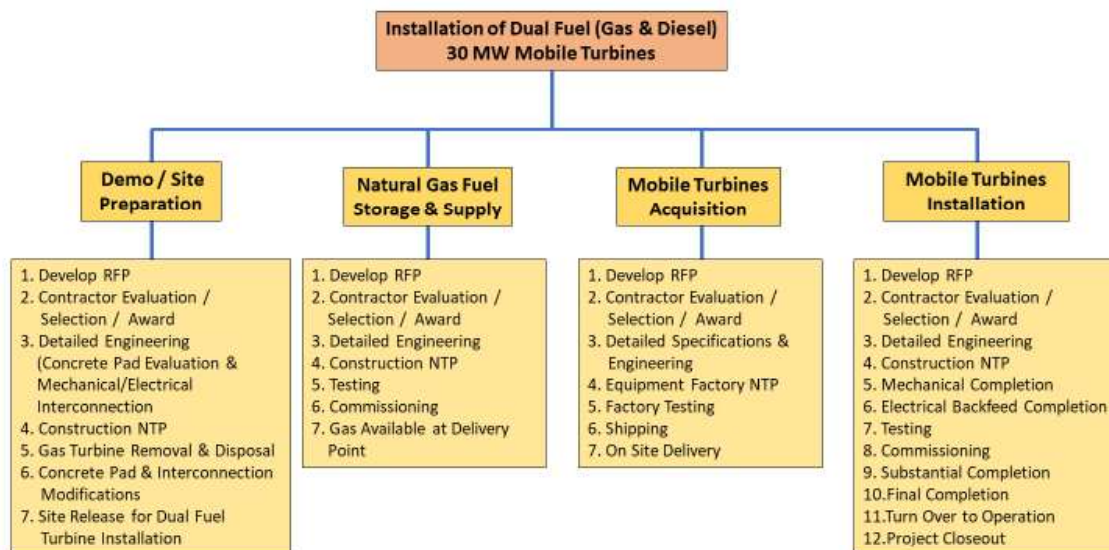
The Generation Units must comply with US Environmental Protection Agency and Puerto Rico Environmental Quality Board (EQB) requirements that include but are not limited to the Clean Air Act, Clean Water Act, New Source Performance Standards, Spill Prevention Control & Countermeasure requirements, Facility 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**



---

[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	\$ -	\$ -	\$ -
<b>Totals:</b>		<b>\$ 431,892,883.00</b>			

## **Annex B**



GOVERNMENT OF PUERTO RICO  
PUERTO RICO ELECTRIC POWER AUTHORITY

<DRAFT>

October [ ], 2022

Ms. Marlena V. Riccio Paniagua  
Hazard Mitigation Grant Program Director  
Central Recovery and Reconstruction Office of Puerto Rico  
Puerto Rico Public-Private Partnerships Authority

Dear Ms. Riccio:

**Re: FEMA HMGP (Sub-Grant Application 4339-HM-HMGP-001888)**  
**FEMA Project Number 4339-0010**  
**11 Simple Gas Turbines**  
**Cost Overrun / Scope of Work Amendment Request**

The Puerto Rico Electric Power Authority (PREPA) requests a scope of work amendment and an overrun on the above-referenced project. We include copy of this project's original application package. The project as currently approved is to install eleven simple gas turbines or peaking units at existing power plants at five sites across the island of Puerto Rico to modernize and harden the grid, increasing the reliability and resiliency of the electrical system.

The emergency generation capacity provided by peaking units allows faster restoration of the electrical service to critical and essential loads after major events like hurricanes. In addition, the integration of their black-start capabilities increases the reliability and resilience of the power system by allowing on-site auxiliary generators to restart the primary generator(s) without the need of external power supply. Isolated power stations can be started individually and gradually reconnected to one another to form an interconnected system again following a blackout.

PREPA hereby submits this amendment to the approved scope of work to include black-start capabilities for project locations at Yabucoa and Costa Sur, which would be achieved with four units in total. With this amendment, PREPA aims to distribute the originally approved eleven units into seven simple cycle gas turbines or peaking units on existing locations around the main island and four units with black-start capabilities at Yabucoa and Costa Sur. Thus, the total of peaking units requested and originally approved remains unaltered.

As you can see in the Revised Budget Narrative included with this letter, one portion of the overrun is due to the inclusion of four black-start generators and associated infrastructure at Yabucoa and Costa Sur, addressed in the scope of work amendment. The second portion of the overrun is due to increases in costs



---

PO Box 364267 San Juan, Puerto Rico 00936-4267

"We are an equal opportunity employer and do not discriminate on the basis of race, color, gender, age, national or social origin, social status, political ideas or affiliation, religion; for being or perceived to be a victim of domestic violence, sexual aggression or harassment, regardless of marital status, sexual orientation, gender identity or immigration status; for physical or mental disability, for veteran status or genetic information."



for materials, labor, and construction since the original project budget was developed in 2020. After careful revision, the total project cost is modified to a total of \$583,000,000.

This amendment request includes this official signed request letter, revised budget detailing the increased cost, an updated benefit-cost analysis (BCA), and updated SF-424 and SF-424C forms.

If you should have any questions or concerns, please contact Jaime A. Umpierre Montalvo at 787.521.7314.

Sincerely,

Jaime A. Umpierre Montalvo  
Division Head  
HydroGas & Cambalache Power Plants

Annexes:  
Revised Budget Narrative  
BCA  
SF-424 and SF-424C

## **Annex C**

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