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

IN RE: REVIEW OF THE PUERTO RICO ELECTRIC POWER AUTHORITY'S 10-YEAR INFRASTRUCTURE PLAN – DECEMBER 2020 CASE NO.: NEPR-MI-2021-0002

SUBJECT: Evaluation of PREPA's January 28, 2022, Request for approval of twenty (20) SOWs and Request for Confidential Designation and Treatment.

RESOLUTION AND ORDER

I. Introduction

On March 26, 2021, the Energy Bureau issued a Resolution and Order ("March 26 Resolution") through which it ordered the Puerto Rico Electric Power Authority ("PREPA") to submit each specific capital investment project for approval, to avoid potential noncompliance with the Approved Integrated Resource Plan ("IRP") and Modified Action Plan^{1,2} The Energy Bureau required PREPA to submit the specific projects to the Energy Bureau for approval at least thirty (30) calendar days before their submittal to the Puerto Rico Central Office for Recovery, Reconstruction and Resiliency ("COR3") and the Federal Emergency Management Agency ("FEMA").³

On November 15, 2021, PREPA filed before the Energy Bureau a document titled *Motion to Submit Fourth Group of Generation Projects* ("November 15 Motion"). Through the November 15 Motion, PREPA submitted one hundred-four (104) Work descriptions in Attachment A ("Proposed Generation Projects") containing a general description of works of conservation, repairs, and retrofitting of generation units and their auxiliary equipment, including, without limitation, boilers, turbines, rotors, generators, motors, pumps, breakers, and control systems for their generation power plants. The works are to be performed in the following Plants: San Juan Power Plant, Aguirre Power Plant and Combined Cycle, Costa Sur Power Plant, Palo Seco Steam Plant, Hydrogas Turbine Peakers, Cambalache, Mayagüez Gas Turbines, and a list of jobs to be performed in all the power plants. PREPA prepared a comprehensive list of repairs works projects of its generation assets and for which PREPA will seek reimbursement under several FEMA programs (*i.e.*, Section 404, Section 428 Public Assistance, etc.).

On January 4, 2022, the Energy Bureau issued a Resolution and Order ("January 4 Resolution") through which it conditionally approved the generation projects described in Attachments A to H, pending the submittal by PREPA of the Scope of Works ("SOWs") of each project. To complete the evaluation on the Proposed Generation Projects, the Energy Bureau requested:

- 1. The status of each unit in the Proposed Generation Projects;
- 2. If and how the expenditure will help bring the unit back to availability for operation;
- 3. When the unit would be available for operation if the expenditure was made;
- 4. The expected duration of availability status of the unit after the expenditure is made, and any other required explanation;

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¹ Resolution and Order, *In re: Review of the Puerto Rico Electric Power Authority's 10- Year Infrastructure Plan,* Case No. NEPR-MI-2021-0002, March 26, 2021 ("March 26 Resolution").

² Final Resolution and Order on the Puerto Rico Electric Power Authority's Integrated Resource Plan, In re: Review of the Integrated Resource Plan of the Puerto Rico Electric Power Authority, Case No. CEPR-AP-2018-0001, August 24, 2020 ("IRP Order").

³ March 26 Resolution, pp. 14-15. The Energy Bureau determined that this directive equally applies to LUMA Energy, LLC and LUMA Energy ServCo, LLC (collectively, "LUMA"). See, In Re: Review of the Puerto Rico Electric Power Authority's 10-Year Infrastructure Plan – December 2020, Case. No. NEPR-MI-2021-0002, Resolution and Order, June 8, 2021.

- 5. An updated snapshot of the status of repairs and expected availability over the next three years for the units at San Juan, Palo Seco, Costa Sur, and Aguirre; and
- 6. Either the "Draft released to PREPA" of the "10-Year Thermal Generation Retirement, Addition and Conversion Plan" as listed on page 7 of the December 2021 Status Report scheduled for finishing by March 2022⁴ or a synopsis of PREPA's current understanding of how planned retirements of the fossil fleet are considered when requesting approval for maintenance and capital investment funding through the instant procedure.

On January 13, 2022, PREPA filed before the Energy Bureau a document titled *Partial Compliance with the January 4 Order and Request for Extension of Time* ("January 13 Motion"). Through the January 13 Motion PREPA submitted twenty-five (25) initial SOWs for certain Proposed Generation Projects for the review and approval of the Energy Bureau. Of the twenty-five (25) SOWs, twenty-four (24) were conditionally approved while one (1) was classified as Deferred Project, as stated in the January 4 Order. Attachment A of the January 13 Motion describes the Proposed SOWs for these twenty-five (25) Proposed Generation Projects.

On January 25, 2022, PREPA filed before the Energy Bureau a document titled *Motion to Submit Additional Generation Projects SOWs* ("January 25 Motion"). Through the January 25 Motion PREPA submitted ten (10) additional SOWs for the review and approval of the Energy Bureau. Of these Generation SOW's, seven (7) were conditionally approved while three (3) were classified as Deferred Project, as stated in the January 4 Order.

On January 28, 2022, PREPA filed before the Energy Bureau a document titled Second Motion to Submit Additional Generation Projects SOWs ("January 28 Motion"). Through the January 28 Motion PREPA submitted twenty (20) additional SOWs for the review and approval of the Energy Bureau. Of these Generation SOW's, nineteen (19) were conditionally approved while one (1) was classified as Deferred Project, as stated in the January 4 Order. Attachment A of the January 28 Motion describes the Proposed SOWs for these twenty (20) Proposed Generation Projects.

Through the January 28 Motion, PREPA also requested confidential designation and treatment of Attachment A for certain global positioning system ("GPS") information for the projects. PREPA states that such GPS information is considered Critical Energy Infrastructure Information ("CEII") and is therefore confidential PREPA requested to publish the public redacted version of the referenced Attachment A, as filed in the January 28 Motion.⁵

On February 2, 2022, PREPA filed before the Energy Bureau a document titled *Third Motion to Submit Additional Generation Projects SOWs* ("February 2 Motion"). Through the February 2 Motion PREPA submitted fourteen (14) additional SOWs for the review and approval of the Energy Bureau. Of these Generation SOW's, twelve (12) were conditionally approved while two (2) were classified as Deferred Projects, as stated in the January 4 Order. Attachment A of the February 2 Motion describes the Proposed SOWs for these fourteen (14) Proposed Generation Projects.⁶

On February 8, 2022, PREPA filed before the Energy Bureau a document titled *Fourth Motion to Submit Additional Generation Projects SOWs* ("February 8 Motion"). Through the February 8 Motion PREPA submitted ten (10) additional SOWs for the review and approval of the Energy Bureau. Of these Generation SOW's, four (4) were conditionally approved while six (6) were classified as Deferred Projects, as stated in the January 4 Order. Attachment A of





⁴ See Motion to Submit December 2021 Status Report in Compliance with Order, *In re. Preliminary Studies for New Combined Cycle Power Plant in Palo Seco*, Case. No. NEPR-MI-2021-0003, December 15, 2021.

⁵ January 28 Motion, p.4.

⁶ February 2 Motion, p. 3.

The Energy Bureau is presently evaluating the ten (10) SOWs filed.

the February 8 Motion describes the Proposed SOWs for these 10 (10) Proposed Generation $Projects.^8$

On February 10, 2022, the Energy Bureau issued a Resolution and Order ("February 10 Resolution") through which it addressed the January 13 Motion. Through the February 10 Resolution the Energy Bureau approved twenty-four (24) SOWs which were conditionally approved through the January 4 Order. The Energy Bureau determined not to approve SOW 4069 (Procurement and delivery of water wall boiler tubes and economizer unit Palo Seco 3), as described in Attachment B of the February 10 Resolution⁹

On February 14, 2022, PREPA filed before the Energy Bureau a document titled *Motion to Complete Generation Projects SOWs Submittal and Partial Responses to RFI and Request for Extension of Time to Submit Additional Responses to RFI ("February 14 Motion")*. Through the February 14 Motion PREPA submitted twenty-three (23) additional SOWs for the review and approval of the Energy Bureau. Of these Generation SOW's, twenty-two (22) were conditionally approved while one (1) was classified as Deferred Projects, as stated in the January 4 Order. Attachment A of the February 14 Motion describes the Proposed SOWs for these twenty-three (23) Proposed Generation Projects. 11

On February 18, 2022, the Energy Bureau issued a Resolution and Order ("February 18 Resolution") through which it addressed the January 25 Motion. In the February 18 Resolution the Energy Bureau approved seven (7) SOWs which were conditionally approved through the January 4 Order. The Energy Bureau determined not to approve three (3) SOWs 4073 (Unit Palo Seco 4 refractory, insulation, scaffolding, and painting application works), 4075 (Procurement turning gear system, Unit Palo Seco 3 and 4) and 4080 (Unit Palo Seco 4, superheater, header number 5 material and installation) as described in Attachment B of the February 18 Resolution.

On February 24, 2022, the Energy Bureau issued a Resolution and Order ("February 24 Resolution") through which it addressed the February 2 Motion. In the February 24 Resolution the Energy Bureau approved twelve (12) SOWs which were conditionally approved through the January 4 Order. The Energy Bureau determined not to approve two (2) SOWs, 1012 (Structural repairs fuel service tank 10, San Juan Power Plant) and 6088 (Unit 1 Rehabilitation - Cambalache) as described in Attachment B of the February 24 Resolution.

II. PREPA's Request for Confidential Information Designation and Treatment ("January 28 Motion")

In the January 28 Motion, PREPA requested confidential designation and treatment of Attachment A for certain global positioning system ("GPS") information for the projects. PREPA alleged that the SOWs in Attachment A of the January 28 Motion contains GPS coordinates of the power plants, which is confidential information in the form of CEII that garners protection from public disclosures pursuant to federal statutes and regulations.¹²

To protect such confidential information, PREPA states it redacted the GPS information from the Generation Projects SOWs submitted with the January 28 Motion. PREPA requests the Energy Bureau to determine that the GPS information is CEII and thus, confidential. PREPA also requested the Energy Bureau to maintain the public files with the redaction already provided. PREPA requests the Energy Bureau to grant confidential designation and treatment to the referred GPS information in Attachment A of the January 28 Motion. Table









⁸ February 8 Motion, p. 3.

[§] SOW 4069 was classified as a deferred project through the January 4 Resolution.

¹⁰ The Energy Bureau is presently evaluating the twenty-three (23) SOWs filed.

¹¹ February 14 Motion, pp. 3-4.

¹² 6 U.S.C. §§ 671-674; 18 C.F.R. §388.113 (2020).

1 below details the list of the GPS information for which PREPA requested confidential designation and treatment:

Table 1: PREPA's Request for Confidential Information Designation and Treatment

SOW NO.	PROJECT DESCRIPTION	CONFIDENTIAL INFORMATION	LEGAL BASIS
1002	Units 5 & 6 New High-Pressure Pumps	GPS Location Page 4, Sec. 2.1 Page 9, Sec. 10.3	CEII
1007	Unit 7 Air Preheater Maintenance and Replacement	GPS Location Page 4, Sec. 2.1 Page 9, Sec. 10.3	CEII
1008	Repairs to Nautilus Water Treatment System	GPS Location Page 4, Sec. 2.1 Page 10, Sec. 10.3	CEII
1010	Replacement of Two Uninterruptible Power Supply Systems for Units 7 and 8	GPS Location Page 4, Sec. 2.1 Page 9, Sec. 10.3	CEII
1011	Units 7-10 New Raw Water Tank	GPS Location Page 4, Sec. 2.1 Page 9, Sec. 10.3	CEII
1014	Units 5-10 Heavy Equipment Rental Services	GPS Location Page 4, Sec. 2.1 Page 11, Sec. 10.3	CEII
1015	Water Treatment and Technical Assistance Cooling Water System	GPS Location Page 4, Sec. 2.1 Page 9, Sec. 10.3	CEII
1023	Unit 6 - Major Overhaul (CT Repairs)	GPS Location Page 4, Sec. 2.1 Page 9, Sec. 10.3	CEII
1026	Unit 6 - Major Overhaul (Steam Turbine)	GPS Location Page 4, Sec. 2.1 Page 9, Sec. 10.3	CEII
2029	Unit 1 South Wall Boiler Tubing Replacement and Boilers Repairs	GPS Location Page 4, Sec. 2.1 Page 12, Sec. 10.3	CEII
2036	Procurement of Stages 1, 2, 3 Turbine Rotor Bucket Set, Aguirre Combined Cycle	GPS Location Page 4, Sec. 2.1 Page 9, Sec. 10.3	CEII
2037	New Water Condensate Tank for the Aguirre Combined Cycle	GPS Location Page 4, Sec. 2.1 Page 10, Sec. 10.3	CEII
2038	Major inspection Unit 1-3	GPS Location Page 4, Sec. 2.1 Page 17, Sec. 10.3	CEII
2044	Purchase and Installation Breakers 480 V	GPS Location Page 4, Sec. 2.1 Page 9, Sec. 10.3	CEII
3046	Travelling Screens Replacement Costa Sur Power Plan – Unit 5 & 6	GPS Location Page 4, Sec. 2.1 Page 10, Sec. 10.	CEII
3047	Procurement and Replacement of Regulator Valves for Boiler Feed Water Units 5 &	GPS Location Page 4, Sec. 2.1 Page 11, Sec. 10.	CEII
3048	Low Pressure Water Heater 3 Repair Work Costa Sur Power Plant – Unit 6	GPS Location Page 4, Sec. 2.1 Page 9, Sec. 10.3	OCIAD SEII

SOW NO.	PROJECT DESCRIPTION	CONFIDENTIAL INFORMATION	LEGAL BASIS
3059	CS 5 Major Outage Unit 5 - Boiler Sections Replacement and Repairs & Auxiliary Equipment Repairs	GPS Location Page 4, Sec. 2.1 Page 10, Sec. 10.3	CEII
3060	Water Heater 6 Replacement Work	GPS Location Page 4, Sec. 2.1 Page 9, Sec. 10.3	CEII
4079		GPS Location Page 4, Sec. 2.1 Page 9, Sec. 10.	CEII

Act 57-2014¹³ establishes that any person having the obligation to submit information to the Energy Bureau, can request privilege or confidential treatment to any information that the party submitting understands deserves such protection.¹⁴ Specifically, Act 57-2014 requires the Energy Bureau to treat as confidential the submitted information provided that "the Energy Bureau, after the appropriate evaluation, believes such information should be protected".¹⁵ In such case, the Energy Bureau "shall grant such protection **in a manner that least affects the public interest, transparency**, and the rights of the parties involved in the administrative procedure in which the allegedly confidential document is submitted."¹⁶

Upon review of PREPA's arguments and the law, the Energy Bureau **GRANTS** confidential designation and treatment to the GPS information described in Table 1 above, for the reasons stated by PREPA, pursuant to Article 6.15 of Act 57-2014. The Energy Bureau **TAKES NOTICE** that PREPA submitted a revised redacted (*i.e.*, public) version of the documents described in Table 1.

III. Evaluation of PREPA's January 28 Motion

As part of the January 28 Motion, PREPA included twenty (20) Work descriptions for the generation plants in San Juan Power Plant, Aguirre Power Plant and Combined Cycle, Costa Sur Power Plant, and Palo Seco Steam Plant.

Attachment A of the January 28 Motion contains SOWs for all twenty (20) projects to be performed in the power plants. Out of the twenty (20) Generation Projects SOWs, nineteen (19) were conditionally approved while one (1) was classified as a deferred project (SOW No. 2029 Unit 1 South Wall Boiler Tubing Replacement and Boilers Repairs for the Aguirre Power Plant) as stated in Attachment I of the January 4 Order. This proposed generation project was classified as deferred since the work is intended for units in the Retirement Plan¹⁷.

The remaining nineteen (19) SOWs have the objective to (i) improve the generation asset's reliability, increasing their availability, and providing a continuous generation service, (ii) repair all the damages to equipment and areas within all the Plants; and (iii) restore the facilities to pre-disaster function and approved codes and standards. PREPA states it will seek reimbursement under several FEMA programs (*i.e.*, Section 428 Public Assistance or Section 404 Programs, etc.).

All SOWs described the project and work to be performed, with the corresponding cost estimates, many of which were based in historical prices, equipment specifications, bidding process for those works that requires the method, or corresponding documentation for those







¹³ Puerto Rico Energy Transformation and RELIEF Act, as amended ("Act 57-2014").

¹⁴ Section 6.15 of Act 57-2014.

¹⁵ Id.

¹⁶ Id. (Emphasis added).

¹⁷ See Approved IRP, p.284 ("Retirement Plan").

that are performed by unique or sole supplier. Attachment A of this Resolution and Order distinguishes between the original estimate in the November 15 Motion, and the estimate in the January 28 Motion. The difference represents a total decrease of \$511,281.33 from the estimates presented originally in the November 15 Motion, excluding project No. 2029 as it is included in the Deferred List of Projects in the January 4 Order.

Upon review of the SOWs, the Energy Bureau **DETERMINES** that the nineteen (19) SOWs filed in the January 28 Motion ("19 SOWs"), which were classified as Conditionally Approved in Attachment A of the January 4 Order, are necessary to maintain and improve the reliability of the systems in the corresponding PREPA Plants. The 19 SOWs include descriptions and justifications for the corresponding units, the type of project and the corresponding Codes and Standards impacted. Therefore, the Energy Bureau **APPROVES** the 19 SOWs projects in **Attachment A** of this Resolution and Order. The Energy Bureau notes this approval represents an investment of \$ 51,538,718.33 based on the proposed works presented by PREPA through the January 28 Motion.¹⁸

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The Energy Bureau DETERMINES not to approve SOW No. 2029 for the Aguirre Power Plant, as described in **Attachment B** of this Resolution and Order. The SOW No. 2029 is classified as Deferred Proposed Generation Project in the January 4 Order. SOW No. 2029 evaluation is deferred pending more specific information regarding the units' availability and actual conditions and/or a synopsis of PREPA's current understanding of how planned retirements of the fossil fleet are considered when requesting approval for maintenance and capital investment funding through the instant procedure. These SOWs shall be discussed in the proposed Technical Conference.

IV. Conclusion

The Energy Bureau **APPROVES** the projects in **Attachment A** of this Resolution and Order, which shall be presented to FEMA and COR3 to finalize its approval process. These projects were approved based on the information provided by PREPA, should the scope of the project changes, PREPA **SHALL** immediately seek the Energy Bureau's approval of such changes.

The Energy Bureau **ORDERS** PREPA to (i) submit to the Energy Bureau copy of the approval by COR3 and/or FEMA of the projects in Attachment A of this Resolution and Order, which shall contain the costs obligated for each project, within ten (10) days of receipt of such approval; (ii) provide the Energy Bureau the actual contracted cost to construct each project approved in such Attachment A, within ten (10) days from the execution of the contract; and (iii) inform the Energy Bureau once the projects are completed.

The directive instated in the March 26 Resolution related to the submission of projects before the Energy Bureau at least thirty (30) calendar days before submitting such projects to FEMA and/or COR3 remains unaltered.

Be it notified and published.



 $^{^{18}}$ The Energy Bureau has approved a total of \$9,425.456 MM = \$1,240.77 MM (Resolution and Order June 8, 2021) + \$1,789.58 MM (Resolution and Order August 20, 2021) + \$1,376.97 (Resolution and Order September 8, 2021) + \$3,885.17 MM (Resolution and Order September 22, 2021) + \$80.81 MM (Resolution and Order September 28, 2021) + \$117.47 MM (Resolution and Order October 14, 2021) + \$652.58 MM (Resolution and Order October 18, 2021) + \$18.259 (Resolution and Order December 1, 2021) + \$5.189 (Resolution and Order December 20, 2021) + \$253.775 MM (January 5 Resolution) + \$3.707 MM (February 10 Resolution) + \$0.908 MM (February 18 Resolution) + \$0.779 MM (February 24 Resolution) + (\$0.511 MM) (this Resolution and Order) up to date based on the Class Cost Estimates submitted by PREPA and LUMA as part of this process.





Edison Avilas Deliz Chairman

Ángel R. Rivera de la Cruz Associate Commissioner

Lillian Mateo Santos Associate Commissioner

Ferdinand A. Ramos Soegaard Associate Commissioner Sylvia B. Ugarte Araujo Associate Commissioner

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Clerk

CERTIFICATION

I hereby certify that the majority of the members of the Puerto Rico Energy Bureau has so agreed on March 9, 2022. I also certify that on March 2, 2022 a copy of this Resolution and Order was notified by electronic mail to the following: laura.rozas@us.dlapiper.com; margarita.mercado@us.dlapiper.com, kbolanos@diazvaz.law; mvazquez@diazvaz.law. I also certify that today, March 2, 2022, I have proceeded with the filing of the Resolution and Order issued by the Puerto Rico Energy Bureau.

For the record, I sign this in San Juan, Puerto Rico, today March 2, 2022.

Attachment A Works Approved by the Energy Bureau for the Power Plants Permanent Repairs

SOW NO.	Facility	Project Name	Proposed Scope of Work	Original ¹⁹ Estimate	Presented ²⁰ Estimate	Diff	Page at Att. A
1002	San Juan Power Plant	Units 5 and 6 New High- Pressure Pumps	Procurement and delivery of two high pressure water centrifugal pumps with a capacity of 276.6 cubic meter per hour and technical assistance to PREPA for the installation.	\$1,600,000.00	\$1,600,000.00	\$0.00	p 13-30
1007	San Juan Power Plant	Unit 7 Air Preheater Maintenance and Replacement	Removal and replacement of the existing air-preheaters cold and hot section's baskets, sector plates, adjusters, static seal, axial plates among other components and repair air heater out casing.	\$600,000.00	\$600,000.00	\$0.00	p 31-43
1008	San Juan Power Plant	Repairs to Nautilus Water Treatment System	Structural repair of steel floor, walls, application of interior and exterior anti-corrosive coating.	\$250,000.00	\$250,000.00	\$0.00	p 44-56
1010	San Juan Power Plant	Replacement of Two Uninterruptible Power Supply Systems for Units 7 and 8	Replacement of Two Uninterruptible Power Supply Systems for Units 7 and 8	\$450,000.00	\$450,000.00	\$0.00	p 57-91



¹⁹ November 15 Motion.

²⁰ January 28 Motion.

SOW NO.	Facility	Project Name	Proposed Scope of Work	Original ¹⁹ Estimate	Presented ²⁰ Estimate	Diff	Page at Att. A
1011	San Juan Power Plant	Units 7-10 New Raw Water Tank	Removal of existing steel raw water storage tank. Design and Build of a new 173,000 gallons steel raw water storage tanks, including interior and exterior coating application, instrumentation system for reading water levels and improvements to the existing tank's concrete base.	\$1,000,000.00	\$1,000,000.00	\$0.00	p 92-102
1014	San Juan Power Plant	Units 5-10 Heavy Equipment Rental Services	Service of heavy equipment such as 30 Ton, 50 Ton, 70 Ton, 100 Ton and 350 Ton cranes, including mobilization for the performance of repairs and major maintenance works of the main and auxiliary components of Units 5 through 10.	\$850,000.00	\$850,000.00	\$0.00	
1015	San Juan Power Plant	Water Treatment and Technical Assistance Cooling Water System	Service of operation and maintenance of a water treatment system for the cooling towers of power plant's auxiliary equipment. The treatment will protect the infrastructure of the cooling towers.	\$250,000.00	\$232,727.04	(\$17,272.96)	p 204-240
1023	San Juan Power Plant	Unit 6 - Major Overhaul (Steam Turbine Replacement and CT Repairs)	Inspection, repairs, and replacements of essential parts of the combustion turbine deteriorated over time.	\$15,000,000.00	\$12,768,424.79	(\$2,231,575.21)	p 241-250 o t

SOW NO.	Facility	Project Name	Proposed Scope of Work	Original ¹⁹ Estimate	Presented ²⁰ Estimate	Diff	Page at Att. A
1026	San Juan Power Plant	Unit 6 - Major Overhaul	Inspection, repairs and replacements of essential parts of the steam turbine deteriorated over time.	\$10,000,000.00	000,000.00 \$12,768,424.79		p 251-261
2036	Aguirre Power Plant	Procurement of Stages 1, 2, 3 Turbine Rotor Bucket Set, Aguirre Combined Cycle	Buy rotor buckets for spare turbine rotor located at Allied Power Group facilities in Houston, TX. Complete rotor is necessary in case replacement is needed during 2022 HGP inspections (Units 1-1 or 1-2)	\$750,000.00	\$750,000.00 \$497,267.00		p 340-373
2037	Aguirre Power Plant	New Water Condensate Tank for the Aguirre Combined Cycle	Removal of existing steel water condensate storage tank. Design and Build of a new 287,000 gallons steel water condensate storage tank, including interior and exterior coating application, instrumentation system for reading water levels and improvements to the existing tank's concrete base.	\$1,000,000.00	\$410,125.00	(\$589,875.00)	p 374-413
2038	Aguirre Power Plant	Major inspection Unit 1-3	Remove Turbine Rotor for repair and balance, including rotor buckets. Replace turbine casing shrouds. Replace turbine nozzles, transition pieces and combustion liners with refurbished components. Inspect Compressor (rotor and stator). Inspect Generator (rotor and stator). Repair HRSG casing and exhaust duct.	\$2,500,000.00	\$2,559,971.00	(\$59,971.00)	p 414-550

SOW NO.	Facility	Project Name	Proposed Scope of Work	Original ¹⁹ Estimate	Presented ²⁰ Estimate	Diff	Page at Att. A
2044	Aguirre Combined Cycle	Purchase and Installation Breakers 480 V	Procurement and installation of 12 - 600 A, 480 V Breakers and 4 - 1,600 A, 480 V Breakers for Normal Bus 1A EESS	\$400,000.00	\$350,115.05	(\$49,884.95)	p 551-605
3046	Costa Sur Power Plant	Travelling Screens Replacement	Removal and replacement of five galvanized steel travelling screens, with its auxiliary equipment of the power plant's sea water intake for the cooling of the condensers of Units 5 and 6. The work shall include an infrastructure to protect the fish and other marine, in compliance with Section 316 (b) of the Clean Water Act.	\$5,000,000.00	\$5,000,000.00	\$0.00	p 606-617
3047	Costa Sur Power Plant	Procurement and Replacement of Regulator Valves for Boiler Feed Water Units 5 & 6	Replace the main boiler feedwater control valves for units 5&6. Actual valves are in bad conditions and the replacements are as expensive as the whole valve.	\$500,000.00	\$301,664.00	(\$198,336.00)	p 618-657
3048	Costa Sur Power Plant	Low Pressure Water Heater 3 Repair Work	Design, manufacture, provide, deliver, and install new tubes for the Low-pressure heater 3 for Unit 6	\$400,000.00	\$400,000.00	\$0.00	p 658-668
3059	Costa Sur Power Plant	CS 5 Major Outage Unit 5 - Boiler Sections Replacement and Repairs & Auxiliary Equipment Repairs	Procurement and delivery of materials and equipment for the October 2022 programmed outage	\$9,000,000.00	\$9,000,000.00	\$0.00	p 669 680 00

sow no.	Facility	Project Name	Proposed Scope of Work	Original ¹⁹ Estimate	Presented ²⁰ Estimate	Diff	Page at Att. A
3060	Costa Sur Power Plant	Water Heater 6 Replacement Work	Procurement and installation of the High-pressure Heater 6 for unit 5.	\$2,000,000.00	\$2,000,000.00 \$0.00		p 681-713
4079	Palo Seco Steam Plant	Upgrade to Mark Vie	Supply and installation of new Human Machine Interphase for operational and turbine control for both units 3 and 4.	\$500,000.00	\$500,000.00	\$0.00	p 714
			TOTAL	\$52,050,000.00	\$51,538,718.67	(\$511,281.33)	



Attachment B Works Not Approved by the Energy Bureau for the Power Plants Permanent Repairs

SOW NO.	Facility	Project Name	Proposed Scope of Work	Original Estimate	Presented Estimate	Diff	Page at Att. A
2029	Aguirre Power Plant	Unit 1 South Wall Boiler Tubing Replacement and Boilers Repairs	Partial rehabilitation of the south water wall between third and fourth floor on Unit 1 consisting on Boiler Tube Panels replacement.	\$7,000,000.00	\$5,983,862.95	(\$1,016,137.05)	p 262-339
			TOTAL	\$7,000,000.00	\$5,983,862,95	<u>(\$1,016,137.05</u>	

