

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

<b>NEPR</b>  <b>Received:</b>  <b>Nov 15, 2021</b>  <b>9:27 PM</b>
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**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 Fourth Group  
of Generation Projects

**MOTION TO SUBMIT FOURTH GROUP OF GENERATION PROJECTS**

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

1. In furtherance of the strict compliance with its responsibility and duty to provide a reliable electric service to the People of Puerto Rico in compliance with environmental regulations, PREPA needs to perform constantly works of conservation, repairs, and retrofitting of its generation units and their auxiliary equipment, including, without limitation, boilers, turbines, rotors, generators, motors, pumps, breakers, and control systems. These works are of the utmost importance to PREPA in particular because, as it has become more evident by the recent forced outages, the fleet of generating facilities is old and outmoded. Furthermore, as the generating units and their auxiliary equipment have not received the necessary preventive conservation during recent years, their condition has worsened leading to more frequent and prolonged forced outages. This has created an issue of lack of reliability in the generation assets. To improve the generation assets reliability, increasing their availability, and providing a continuous generation service to the People of Puerto Rico, it is crucial to keep these assets operational and in the best possible condition. Therefore, the prioritization of conservation, repairs, and retrofitting works projects is at the top of PREPA's priority list.

2. PREPA's Executive Director has implemented an aggressive repairs schedule to keep the

generation fleet working as dependable capacity, increase the generating units' availability, and maintain a minimum operational reserve ("Repairs Schedule").<sup>1</sup> Some of the projects included in this Repairs Schedule must commence right away.

3. As the Executive Director explained during the Virtual Public Hearing, PREPA has been informed that most of the projects' cost of repairs works are eligible for reimbursement under different Federal Emergency Management Administration (FEMA) programs. Therefore, PREPA hereby requests leave of the Energy Bureau to submit the repairs works projects reimbursement with FEMA funds.

4. On March 26, 2021, the Puerto Rico Energy Bureau of the Public Service Regulatory Board (the "Energy Bureau" or "Bureau") entered a Resolution and Order (the "March 26 Order") by which it ordered PREPA, among other things, to:

submit to the Energy Bureau each **new capital investment project**. For projects to be funded with the [Federal Emergency Management Administration "FEMA"] fund and/or any other federal funds, PREPA shall submit the specific projects to the Energy Bureau at least thirty (30) calendar days prior to its submittal to the [Central Office for Recovery, Reconstruction and Resiliency "COR3"], FEMA and/or any other federal agency.

March 26 Order at pp. 18-19, ¶ 10 (Emphasis added).

5. Since the Energy Bureau set the requirement to submit to the Energy Bureau each new capital investment project, the Central Office for Recovery, Resiliency and Reconstruction of Puerto Rico (COR3) and FEMA require PREPA to submit to the Energy Bureau the projects for which PREPA is going to submit a request for funding under any of the available funding

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<sup>1</sup> Most of the Repairs Schedule projects are included in the document "Current Status of PREPA Generation Fleet" presented to the Energy Bureau on October 23, 2021 under case no. NEPR-MI-2020-0001, *In Re: The Puerto Rico Electric Power Permanent Rate*. The Executive Director discussed this document during the Public Virtual Hearing celebrated on October 25, in case no. NEPR-MI-2020-0001 (the "Public Virtual Hearing"). Video recording of the Public Virtual Hearing is available at <https://www.youtube.com/watch?v=Xfdw2s4T874> (last visited November 15, 2021). Further, the mentioned document is a working document that may be amended from time to time to address to determinations regarding priority and new findings.

programs. Also, both COR3 and FEMA require that the Energy Bureau approve the projects before proceeding with the process to submit the projects for COR3's consideration and approval.

6. Even though the March 26 Order directs PREPA to present to the Energy Bureau **new** capital investment projects, PREPA is committed in keeping its regulator informed of all the projects that will be submitted to COR3 and FEMA for reimbursement and have its leave to move forward with the corresponding requests for reimbursement under the applicable programs.

7. PREPA has 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 428 Public Assistance) (the "Generation Projects"). *See* Attachment A. The list includes the generation facility name, location of the facility, name and description of the work, and an estimate of costs. It is of the utmost importance that the Energy Bureau approve that PREPA moves forward with the relevant request for reimbursement of the Generation Projects. The People of Puerto Rico should not pay the costs for the Generation Projects if there are funds available to cover those expenses. The execution of the Generation Projects will serve the People of Puerto Rico and will allow PREPA to follow its responsibility and duty to provide reliable and continuous electric service.

8. Should the scope of the Generation Projects included in Attachment A of this motion change, PREPA will immediately inform the Energy Bureau's of such changes. Further, following the directives of the Energy Bureau for other project submissions and approvals, PREPA will submit to the Energy Bureau a copy of the approval by COR3 and/or FEMA of the approved projects, which shall contain the costs obligated for each project, within ten (10) days of receipt of such approval.

**WHEREFORE**, PREPA respectfully requests the Energy Bureau to approve the

Generation Projects included in Attachment A.

**RESPECTFULLY SUBMITTED.**

In San Juan Puerto Rico, 15<sup>th</sup> day of November 2021.

*s/ Katuska Bolaños-Lugo*

Katuska Bolaños-Lugo

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## CERTIFICATE OF SERVICE

It is hereby certified that I have filed the foregoing with the Clerk of the Energy Bureau using the electronic filing system using <https://radicacion.energia.pr.gov/login> and also, that I have served a copy on LUMA Energy, LLC and LUMA Energy ServCo, LLC through their counsel of record at [laura.rozas@us.dlapiper.com](mailto:laura.rozas@us.dlapiper.com) and [margarita.mercado@us.dlapiper.com](mailto:margarita.mercado@us.dlapiper.com).

In San Juan Puerto Rico on this 15<sup>th</sup> day of November 2021.

*s/ Katuska Bolaños-Lugo*  
Katuska Bolaños-Lugo

Attachment A

No.	Facility Name	Location	Work Name	Work Description	Estimated cost
1	San Juan Power Plant	San Juan , Puerto Rico	Units 5 and 6 Cooling Tower Replacement	Removal of existing cooling towers; design, build, installation, start up and commissioning of two new three cells cooling towers, model S3E-1222-07Q-3/SY, manufactured by Baltimore Aircoil Company (BAC), with its Lakos Tower Clean Filtration System.	\$ 850,000.00
2	San Juan Power Plant	San Juan , Puerto Rico	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
3	San Juan Power Plant	San Juan , Puerto Rico	Units 5 and 6 Condenser Repair and Coating Application	Rehabilitation and application of anti-corrosive coating for the water boxes and intake pipin of the east side of the Unit 5 condenser.	\$ 615,000.00

4	San Juan Power Plant	San Juan , Puerto Rico	Units 5 and 6 High Pressure Bleed Valve, Low Pressure Bleed Valve and Heat Injection Steam Valve	<p>Purchase of equipement and parts for the replacement and installation of Vanessa 30,000 Triple Offset Automated Valves - Steam Injection Block Valves &amp; Bleed Valves</p> <p>* STEAM INJECTION BLOCK VALVES VANESSA 10" 600# LUG CARBON STEEL BODY, WITH BETTIS G3014-SR3/CW/STOPS, FAIL CLOSE, TOPWORX DXPM41GNEB (4) SPDT LIMIT SWITCHES, ASCO EV8316G082-120 VAC, MISC. ACCESORIES</p> <p>* BLEED VALVE VANESSA 18" 150# WAFER STAINLESS STEEL BODY, WITH BETTIS G3014-SR4/HT/CW/STOPS, FAIL CLOSE, TOPWORX DXPM41GNEB (4) SPDT LIMIT SWITCHES, 67DFR AIR SET, ASCO EVHT8316G082-120 VAC, EXTENDED MOUNTING BRACKET, MISC. ACCESSORIES</p> <p>*BLEED VALVE VANESSA 18" 300# WAFER STAINLESS STEEL BODY, WITH BETTIS G3016-SR1/HT/CW/STOPS, FAIL CLOSE, TOPWORX DXPM41GNEB (4) SPDT LIMIT SWITCHES, 67DFR AIR SET, ASCO EVHT8316G082-120 VAC, EXTENDED MOUNTING BRACKET, MISC. ACCESSORIES</p> <p>*BLEED VALVE VANESSA 16" 150# WAFER STAINLESS STEEL BODY, WITH BETTIS G2012-SR3/HT/CW/STOPS, FAIL CLOSE, TOPWORX DXPM41GNEB (4) SPDT LIMIT SWITCHES, 67DFR AIR SET, ASCO EVHT8316G082-120 VAC, EXTENDED MOUNTING BRACKET, MISC. ACCESORIES</p> <p>*BLEED VALVE VANESSA 16" 300# WAFER STAINLESS STEEL BODY, WITH BETTIS G3014-SR4/HT/CW/STOPS, FAIL CLOSE, TOPWORX DXPM41GNEB (4) SPDT LIMIT SWITCHES, 67DFR AIR SET, ASCO EVHT8316G082-120 VAC, EXTENDED MOUNTING BRACKET, MISC. ACCESORIES</p>	\$ 350,000.00
5	San Juan Power Plant	San Juan , Puerto Rico	Units 5 and 6 Black Start Emergency Generator Upgrade	<p>Upgrade the controls system for the black start diesel generator system San Juan CTG 5 &amp;6.</p> <ul style="list-style-type: none"> <li>- Initial verifacation and assessment of current system configuration and setup versus electrical drawings and original designed configuration</li> <li>- Engineered / retrofitted control system integration and installation (plc and hmi)</li> <li>- Assure communication between plc and ovation distributed control system at operator control room for remote and fully automated operation</li> <li>- Commissioning and startup support</li> <li>- Control system drawings and manuals</li> <li>- Final Testing and inspection</li> </ul>	\$ 350,000.00
6	San Juan Power Plant	San Juan , Puerto Rico	Units 5 and 6 Replacement of Outlet Valves and Elbow Condenser	<p>Remove and replacement of the existing outlet valve and 42 inch diameter steel elbows, which are part of the outfall of the seawater use to cooldown the condensers of both Units 5 and 6.</p>	\$ 350,000.00



7	San Juan Power Plant	San Juan , Puerto Rico	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
8	San Juan Power Plant	San Juan , Puerto Rico	Repairs to Nautilus Water Treatment System	Structural repair of steel floor, walls, application of interior and exterior anti-corrosive coating.	\$ 250,000.00
9	San Juan Power Plant	San Juan , Puerto Rico	Cooling Tower Unit 10 Repair Works	These technical specifications cover the work required under this Contract for the design, manufacture, delivery and erection for one (1) new cell of 3,000 GPM, and the dismantling of the one (1) existing cell of the cooling towers of the units 10 PREPA's San Juan Plant.	\$ 385,000.00
10	San Juan Power Plant	San Juan , Puerto Rico	Replacement of Two Uninterruptible Power Supply Systems for Units 7 and 8	Replacement of Two Uninterruptible Power Supply Systems for Units 7 and 8 <ul style="list-style-type: none"> <li>- Replacement of 480 Vac Cables from emergency UPS</li> <li>- Replacement of 130 Vac Cables from emergency UPS</li> <li>- Installation of external electrical piping for UPS Cables</li> <li>- Training on UPS operation</li> <li>- Parts: UPS Cyberex PowerBuilt (ABB) Model: CW2U015-4833-121-1-6-21TOD &amp; CW2U020-4833-121-1-6-TOD</li> </ul>	\$ 450,000.00
11	San Juan Power Plant	San Juan , Puerto Rico	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
12	San Juan Power Plant	San Juan , Puerto Rico	Structural Repairs Fuel Service Tank 10	Structural steel repairs of floor, roof, shell, columns and beams elements of a existing fuel service tank and application of new anti-corrosive coating on the interior and exterior of the tank.	\$ 750,000.00

13	San Juan Power Plant	San Juan , Puerto Rico	Unit 5 SCR - Amonium Procurement	Procurement and delivery of Amonium Substance to be used for the Selective Catalytic Reduction system to control emissions of Unit 5 for compliance of Federal Law.	\$ 500,000.00
14	San Juan Power Plant	San Juan , Puerto Rico	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
15	San Juan Power Plant	San Juan , Puerto Rico	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 equipments. The treatment will protect the infrastructure of the cooling towers.	\$ 250,000.00
16	San Juan Power Plant	San Juan , Puerto Rico	Unit 10 Rehabilitation	Provide parts and service for the open-inspection and close of the steam turbine and generator. Also, in shop repairs for the steam turbine and the generator rotor and oil flush of the turbine.	\$ 16,000,000.00
17	San Juan Power Plant	San Juan , Puerto Rico	Steam Rotor Replacement Unit 5 & CT Repairs	Replacement of all the main components of the steam rotor of Unit 5 and perform all the repairs of the combustion turbine, including its auxiliary equipments.	\$ 12,000,000.00
18	San Juan Power Plant	San Juan , Puerto Rico	LTSA SJ5	Inspection, repairs and replacements of critical parts of the combustors, hot gas path, fuel systems and applicable deteriorated parts in the unit.	\$ 8,000,000.00

19	San Juan Power Plant	San Juan , Puerto Rico	LTSA SJ6	Inspection, repairs and replacements of critical parts of the combustors, hot gas path, fuel systems and applicable deteriorated parts in the unit.	\$ 8,000,000.00
20	San Juan Power Plant	San Juan , Puerto Rico	Control System Upgrade units 5 & 6	Perform and upgrade to the Units 5 & 6 Control System, including all the necessary cyber security programming	\$ 3,203,000.00
21	San Juan Power Plant	San Juan , Puerto Rico	Unit 8 Rehabilitation ( Turbine)	Inspection and replacement of the High Pressure, Intermediate Pressure and Low Pressure Rotors of the Turbine and perform all the testing and commissioning of the equipment.	\$ 10,000,000.00
22	San Juan Power Plant	San Juan , Puerto Rico	Unit 7 Rehabilitation ( Turbine)	Inspection and replacement of the High Pressure, Intermediate Pressure and Low Pressure Rotors of the Turbine and perform all the testing and commissioning of the equipment.	\$ 10,000,000.00
23	San Juan Power Plant	San Juan , Puerto Rico	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
24	San Juan Power Plant	San Juan , Puerto Rico	Installation of Modules D&E HRSG Unit 5	Replace critical pressure parts components of San Juan Generation Complex Unit 5 Heat Recovery Steam Generator (HRSG), specifically: Module D High Pressure Economizer 3 Tubes Bundles, Module D Intermediate Pressure Evaporators Tubes Bundles, Module E Intermediate Pressure Economizer Tubes Bundles, Module E High Pressure Economizer 1 Tubes Bundles, Module E High Pressure Economizer 2 Tubes Bundles.	\$ 5,500,000.00

25	San Juan Power Plant	San Juan , Puerto Rico	Replacement of the Online Condenser Cleaner Unit 5	Supply, installation and commissioning of a online condenser cleaner system for Unit 5.	\$ 3,000,000.00
26	San Juan Power Plant	San Juan , Puerto Rico	Unit 6 - Major Overhaul	Inspection, repairs and replacements of essential parts of the steam turbine deteriorated over time.	\$ 10,000,000.00
27	San Juan Power Plant	San Juan , Puerto Rico	Unit 7 - Major Outage - Boiler Sections Replacement and Repairs & Auxiliary Equipment Inspection Work	Necessary Repairs of deteriorated Boiler Tubes and Assemblies, and Auxiliary Equipment.	\$ 8,000,000.00
28	San Juan Power Plant	San Juan , Puerto Rico	Unit 8 - Major Outage - Boiler Sections Replacement and Repairs & Auxiliary Equipment Repairs	Necessary Repairs of deteriorated Boiler Tubes and Assemblies, and Auxiliary Equipment.	\$ 8,000,000.00
29	Aguirre Power Plant	Salinas, Puerto Rico	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
30	Aguirre Power Plant	Salinas, Puerto Rico	Unit 1 Air and Gas Duct Pre-Heaters Repair Works	Inspections looking for leakages and repairs on ducts will be addressed including insulation repair.	\$ 1,000,000.00

31	Aguirre Power Plant	Salinas, Puerto Rico	Replacement of Load Center 1-4 Condenser Circulating Water Pump	Removal and removal of existing breakers for the Load Center 1-4 of the Condenser Circulating Water Pumps for the cooling system of the condensers of Units 1 and 2.	\$ 600,000.00
32	Aguirre Power Plant	Salinas, Puerto Rico	Sea Water Intake Structural Repairs Work	Structural repairs of concrete beams, slabs and walls components of the sea water intake of the	\$ 5,000,000.00
33	Aguirre Power Plant	Salinas, Puerto Rico	Rehabilitation Fuel Tank Farm Liners	Rehabilitation, repair and installation a of approximately 46,000 square feet of Flexible Membrane Liner System of the Aguirre Fuel Farm area.	\$ 1,200,000.00
34	Aguirre Power Plant	Salinas, Puerto Rico	Two New Condenser Discharge Water Pumps Motors	Procurement and delivery of two 400 Hp-395 RPM, 4,000 Volts-3 Phase, 60 Cycle Re-build Motors for the water discharge condenser pumps for the sea water canal discharge system.	\$ 750,000.00
35	Aguirre Power Plant	Salinas, Puerto Rico	Two New BCWP Motors	Procurement and delivery of two ___ Hp-___RPM New Motors for the water discharge condenser pumps for the sea water canal discharge system.	\$ 750,000.00
36	Aguirre Combined Cycle	Salinas, Puerto Rico	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

37	Aguirre Combined Cycle	Salinas, Puerto Rico	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
38	Aguirre Combined Cycle	Salinas, Puerto Rico	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
39	Aguirre Combined Cycle	Salinas, Puerto Rico	Hot Gas Path Inspection Work Units 2-4 and stand by transformer	Inspect turbine section major components (rotor, buckets, nozzles & shrouds). Replace Stage 1 Buckets (if necessary), Stage 1 Nozzle, transition Pieces and combustion liners with refurbished components. Repair all removed components for futures HGPI. Buy new MCC Transformer 4.16kV / 480V	\$ 1,700,000.00
40	Aguirre Combined Cycle	Salinas, Puerto Rico	Hot Gas Path Inspection Work Units 1-1 and 1-2	Inspect turbine section major components (rotor, buckets, nozzles & shrouds). Replace Stage 1 Buckets (if necessary), Stage 1 Nozzle, transition Pieces and combustion liners with refurbished components. Repair all removed components for futures HGPI.	\$ 2,000,000.00
41	Aguirre Power Plant	Salinas, Puerto Rico	Inner Barrel Bundle	Engineering and manufacture of an inner barrel bundle of the boiler feed water pump to be used in Units 1 or 2.	\$ 1,700,000.00
42	Aguirre Power Plant	Salinas, Puerto Rico	Unit 1 - Major Inspection (Replacement Turbo-Generator)	Major Overhaul to Gas Turbine Num. 1 including the replacement of all the hot gas path components and the turbo-compressor blades. Also, repair the exhaust gas housing and perform the inspection of the turbo-rotor, the generator and repair the Gas Turbine enclosure and filter house.	\$ 11,665,000.00

43	Aguirre Power Plant	Salinas, Puerto Rico	Unit 2 Excitation System	Replacement of an obsolete Excitation System that has no replacement parts. The new system must increase the reliability and extend service life with replacement parts and service availability.	\$ 1,516,675.00
44	Aguirre Power Plant	Salinas, Puerto Rico	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
45	Aguirre Power Plant	Salinas, Puerto Rico	Design Fire Pump for Aguirre Power Complex	Design for an above ground piping lines to replace the obsolete underground piping system. The existing system has undetectable leakages.	\$ 800,000.00
46	Costa Sur Power Plant	Peñuelas, PR.	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 condenser's 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
47	Costa Sur Power Plant	Peñuelas, PR.	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
48	Costa Sur Power Plant	Peñuelas, PR.	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

49	Costa Sur Power Plant	Peñuelas, PR.	Procurement of Water Heater 5 (Deaerator) Spare Pump	Procurement and delivery of a new spare pump for the water heater (deaerator) of unit 5.	\$ 400,000.00
50	Costa Sur Power Plant	Peñuelas, PR.	Procurement of Air-Preheaters Baskets, Unit 5	Procurement and delivery of hot and cold sections baskets and other components of the pre-heaters of Unit 5.	\$ 1,000,000.00
51	Costa Sur Power Plant	Peñuelas, PR.	Replacement of Air-Preheaters Baskets, Unit 5	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.	\$ 700,000.00
52	Costa Sur Power Plant	Peñuelas, PR.	Procurement of Condenser Circulating Water Pump (CCWP) and Boiler Circulating Water Pump (BCWP) Spare Motors for Units 5 and 6	Procurement and delivery of motors to be storage as spare parts to avoid units forced outages and/or load limitations.	\$ 620,000.00
53	Costa Sur Power Plant	Peñuelas, PR.	Procurement of Induced Draft Fan (IDF) and Forced Draft Fan (FDF) Spare Motors for Units 5 and 6	Procurement and delivery of motors to be storage as spare parts to avoid units forced outages and/or load limitations.	\$ 870,000.00
54	Costa Sur Power Plant	Peñuelas, PR.	Procurement of Condensate Pump (CP) Motor for Units 5 and 6	Procurement and delivery of motors to be storage as spare parts to avoid units forced outages and/or load limitations.	\$ 870,000.00



55	Costa Sur Power Plant	Peñuelas, PR.	Replacement of Unit 5 Electric Load Center	Replacement of Auxiliary equipment load centers and breakers for turbines 5 and 6 due to obsolescence.	\$ 1,000,000.00
56	Costa Sur Power Plant	Peñuelas, PR.	Replacement of Excitation System Units 5 and 6	Procurement and installation of an upgrade for the excitation system. The manufacturer cease the production of spare parts.	\$ 1,500,000.00
57	Costa Sur Power Plant	Peñuelas, PR.	Replacement of 4160 V Electric Cable Normal Transformer 5A, 5B	Procurement and delivery of 6000 ft of special construction electrical cable (1500 Kcmil Insulation XLPE 5kv) to replace the cables of the Normal service transformers 5A & 5B.	\$ 250,000.00
58	Costa Sur Power Plant	Peñuelas, PR.	CS 5 Major Inspection Unit 5 - HP/IP/LP Turbine Rotor Replacement	Procurement for the inspection and refurbishment of the spare turbine rotors (HP/IP, LPA & LPB) for the October 2022 programmed outage	\$ 6,000,000.00
59	Costa Sur Power Plant	Peñuelas, PR.	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
60	Costa Sur Power Plant	Peñuelas, PR.	Water Heater 6 Replacement Work	Procurement and installation of the High pressure Heater 6 for unit 5.	\$ 2,000,000.00

61	Costa Sur Power Plant	Peñuelas, PR.	Caustic Soda and Acid Tanks Replacement Works	Procurement and delivery of 4 stainless steel tanks (2 storage & 2 service) for the Demi water plant. One pair for soda ash and one pair for sulfuric acid. Installation by plant crew.	\$ 750,000.00
62	Costa Sur Power Plant	Peñuelas, PR.	Unit 6 - HP/IP/LP Inspection (Failure)	Perform the inspection and non-destructive testing on the Lower Pressure Turbine Rotor Segment B (LP-B) due to an event that caused a major failure on this component.	\$ 945,000.00
63	Costa Sur Power Plant	Peñuelas, PR.	BFWP Inner Barrel Bundle	Engineering and manufacture of an inner barrel bundle of the boiler feed water pump to be used in Unit 5 or 6.	\$ 1,700,000.00
64	Costa Sur Power Plant	Peñuelas, PR.	Unit 6 LP-B Repair Work (Failure)	Perform repairs of the L-2 covers and buckets and replace covers and buckets fractured during the event. Also, repair or replaced diaphragm's partitions, the spill strips and appendage.	\$ 1,917,000.00
65	Costa Sur Power Plant	Peñuelas, PR.	Unit 6 LP-B Instalation Work (Failure)	Installation and commissioning of the repaired Low Pressure Rotor-B of the Power Turbine of Unit 6	\$ 2,000,000.00
66	Costa Sur Power Plant	Peñuelas, PR.	AGC - Replacement Project	Procurement and Delivery of New system for frequency/load control to replace the original one due to obsolescence (installed since 1973). There are not spare parts	\$ 400,000.00

67	Costa Sur Power Plant	Peñuelas, PR.	Fuel Igniters Replacement Work	Procurement and Delivery of New Natural Gas Igniters and Control System for Unit 6	\$ 2,000,000.00
68	Costa Sur Power Plant	Peñuelas, PR.	Upgrade to Foxboro Simulation System	Services of software and hard ware installation and programming to update the simulation station of the foxboro control system.	\$ 500,000.00
69	Palo Seco Steam Plant	Toa Baja, PR	PS 3 Procurement and Delivery of Water Wall Boiler Tubes and Economizer Unit PS3	Manufacture, testing and delivery of a the following components of the Unit 3 boiler; the economizer and water wall boiler tubes.	\$ 5,000,000.00
70	Palo Seco Steam Plant	Toa Baja, PR	PS 3 Low Pressure Turbine Rotor Refurbished, Unit 3	Inspection, transportation, maintenance and repair of the power turbine spare low pressure rotor.	\$ 2,000,000.00
71	Palo Seco Steam Plant	Toa Baja, PR	Fuel Tanks Level Measurement System	Procurement and delivery of an integrated measurement, accounting, control, monitoring and temperature system for the power plant's fuel tanks.	\$ 550,000.00
72	Palo Seco Steam Plant	Toa Baja, PR	Water Retention Tank Num. 3	Removal of existing steel water condensate storage tank. Design and Build of a new 150,000 gallons steel water retention tank,including interior and exterior coating application, instrumentation system for reading water levels and improvements to the existing tank's concrete base.	\$ 800,000.00

73	Palo Seco Steam Plant	Toa Baja, PR	Unit PS 4 Refractory, Insulation, scaffolding and Painting Application Works	Service of scaffolding installation, removal and installation of boiler's refractory and painting of stacks and other components of the Unit 4	\$ 1,000,000.00
74	Palo Seco Steam Plant	Toa Baja, PR	Contract, on request, for Crane Services PS4	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 3 and 4.	\$ 700,000.00
75	Palo Seco Steam Plant	Toa Baja, PR	Procurement Turning Gear System, Units 3 and 4	Purshase of new turning gear system for Units 3 or 4 replacement.	\$ 300,000.00
76	Palo Seco Steam Plant	Toa Baja, PR	New Water Condensate 1-2 Tank	Removal of existing steel water condensate storage tank. Design and Build of a new 173,000 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
77	Palo Seco Steam Plant	Toa Baja, PR	Mega-Gens Environmental Comissioning	Perform all environmental and performance tests on three 27 Megawatts Combution Units to comply with EPA's Air Standards	\$ 970,000.00
78	Palo Seco Steam Plant	Toa Baja, PR	Upgrade OSI DCS	Supply and installation of new Human Machine Interphase for operation and GIS control for both units 3, 4, Mega Gens 1, 2, 3 and Gas Turbines 1-6.	\$ 1,500,000.00

79	Palo Seco Steam Plant	Toa Baja, PR	Upgrade to Mark Vie	Supply and installation of new Human Machine Interphase for operationI and turbine control for both units 3 and 4.	\$ 500,000.00
80	Palo Seco Steam Plant	Toa Baja, PR	Unit 4, Superheater Header Num. 5 Material and Installation	Purshase and installation of Superheater 5 component of the Unit's 4 boiler.	\$ 3,000,000.00
81	Palo Seco Steam Plant	Toa Baja, PR	Unit PS3 - Major Outage - Boiler Sections Replacement and Repairs; MPT, Generatior and turbine Repair & Auxiliary Equipment Inspection Work	Purchase and installation of Economizer elements and waterwalls upper sections replacement.. HP, IP and LP turbines inspection, maintenance and repair. MPT oil leakages repair and Auxiliary equipment	\$ 15,000,000.00
82	Hydrogas Gas Turbine Peakers	Island wide, P.R.	Procurement of Spare Generator Breakers for Frame 5000 Hitachi Gas Turbines	Procurement and delivery of seven (7) 2000amp, 15.0kV rms (operational voltage - 13.18kv) spare main breakers to be used for the Frame 5000 Hitachi Gas Turbines during emergency or maintenance repair works.	\$ 500,000.00
83	Hydrogas Gas Turbine Peakers	Island wide, P.R.	Procurement of Turbo-Compressors for Frame 5000 Gas Turbines	Procurement and delivery of two (2) Rating 23250KW, 17 stages, 2 stages, 5100 rpm re-build turbo-compressor for the Frame 5000-N Gas Turbines to be used during emergency or repair works.	\$ 4,000,000.00
84	Hydrogas Gas Turbine Peakers	Island wide, P.R.	Procurement of Spare Speed Reduction Gear for Frame 5000 Gas Turbines	Procurement and delivery of two (2) 5094/3600 RPM, Rating; 28,000KW spare speed reduction gears for Frame 5000 Gas Turbines to be used during emergnecy of repair works.	\$ 1,200,000.00

85	Hydrogas Gas Turbine Peakers	Island wide, P.R.	New Spare Three Exhaust Plenums for Frame 5000 Gas Turbines	Fabrication and Delivery of three (3) 117.5" x 75.26" x 106.5" spare steel exhaust plenums for the Frame 5000 Gas Turbines to be used during repair works.	\$ 600,000.00
86	Hydrogas Gas Turbine Peakers	Island wide, P.R.	Procurement of Three Exhaust Gas Diffusion Ducts for Frame 5000 Gas Turbines	Fabrication and Delivery of three (3) 41" Internal Diameter/ 46" External Diameter spare steel exhaust gas diffusion ducts the Frame 5000 Gas Turbines to be used during repair works.	\$ 300,000.00
87	Hydrogas Gas Turbine Peakers	Island wide, P.R.	Major Outage Turbo - compressor (CT) 15 units	Major outage for all Frame 5 units which shall include repairs and overhaul of a defined scope as per-unit needs, in order to assure availability and reliability at most.	\$ 30,000,000.00
88	Cambalache	Arecibo, P.R.	Unit 1 Rehabilitation	Perform the required inspections, repair the exhaust gas housing and GT enclosure and filter house and replacement of all of the hot gas path components, turbo-compressor and blades and its related accessories of Gas Turbine Num. 1. Also, conversion of control system to Blue-Line similar to gas turbines 2 and 3, upgrade the combustor pulsation monitoring system, upgrade the automatic voltage regulator and upgrade the opacity monitoring system.	\$ 18,000,000.00
89	Cambalache	Arecibo, P.R.	Control System Power Plant Maintenance -Generator and Technical Services	Provide technical support and parts replacement for the generating unit control systems with Original Equipment Manufacturer trained technical advisors. The provided services will be a complete maintenance program for the continuous operations of the included equipment and its systems, especially for the obsolete equipment's. It will include parts replacement, software updates, backups, servers & network devices health issues solution and unexpected issues solutions.	\$ 2,500,000.00
90	Cambalache	Arecibo, P.R.	Automatic Voltage Regulator & SFC Upgrade for 2 Units	Upgrade of the obsolete electronic parts for the Automatic Voltage Regulator with the Synchronism Devices and the Static Frequency Converter systems for GT2 and GT3. The actual systems are the original ones installed in 1997	\$ 1,043,000.00

91	Cambalache	Arecibo, P.R.	LTSA Units Camb 1-2-3	Long Term Service Agreement for the A, B & C (Major) inspections on the Cambalache Units. Provide the technical advisors and consumables for all the inspections and the replacement of the scheduled Hot Gas Path parts (capital parts) The A & B are the minor inspections.	\$ 12,000,000.00
92	Mayaguez Gas Turbines	Mayaguez, P.R.	Unit 1A, 1B and 4A Rehabilitation	Repairs of Gas Generator Components of Units 1A and 1B and Repairs of PT (Upgrade 2+) on Power Turbine on Unit 4A	\$ 18,800,000.00
93	All Power Plants	Island wide, P.R.	Stamp R - Mechanical Repair Works for Boilers and Turbo-Generators Contract	Boilers and Pressure vessels repairs as per the National Board Inspection Code (NBIC).	\$ 1,950,000.00
94	All Power Plants	Island wide, P.R.	Hydro-blasting Service for Condenser	Pressure washing and neutralization service of the internal and external components of the condensers of the PREPA's power plant's.	\$ 650,000.00
95	All Power Plants	Island wide, P.R.	Hydro-blasting Service for Boilers	Pressure washing and neutralization service of the internal and external components of the boiler and other areas of the PREPA's power plant's.	\$ 950,000.00
96	All Power Plants	Island wide, P.R.	Interior Dry-Cleaning Service for Boilers	Enviromental compliance cleaning of boiler interior	\$ 850,000.00

97	All Power Plants	Island wide, P.R.	Electrical and Instrumentation works in power plants	Services of inspection, maintenance and repair of electrical auxiliary components and control systems necessary for the operation of the PREPA's power plants.	\$ 850,000.00
98	All Power Plants	Island wide, P.R.	Procurement Acid for all power plants	Procurement and delivered of Acid substance used on the power plant for pH Control during water treatment of process water and demi-water treatment plant maintenance work.	\$ 1,000,000.00
99	All Power Plants	Island wide, P.R.	Refractory, Insulation, stack and Painting Application Works	Services of removal and replacement of refractory material for boilers and stacks, and the removal and application of painting of stacks.	\$ 1,950,000.00
100	All Power Plants	Island wide, P.R.	Scaffolding Inside and outside Boilers Works	Services of the rental, engineering, and fabrication of scaffolding systems to be used during maintenance and repair works of the PREPA's power plants.	\$ 1,990,000.00
101	All Power Plants	Island wide, P.R.	Waste Management Services Contract for Power Plants	Services of collection and deposit of non-hazardous waste materials and non-organic silt material collected from the sludge pools of the PREPA's power plants.	\$ 1,000,000.00
102	All Power Plants	Island wide, P.R.	Non-Destructive Examinations and Inspection Services	Services of inspection and testing of repair processes such as welding of boiler tubes, construction or repair of water and fuel tanks.	\$ 750,000.00



103	All Power Plants	Island wide, P.R.	Inspection and Maintenance Cargo Elevator	Inspection of and maintenance service of the cargo elevators used to transport personnel, materials and equipment necessary for the operation and maintenance of the PREPA's power plants.	\$ 900,000.00
104	All Power Plants	Island wide, P.R.	Coating Application Boiler Structures and Chimneys All Power Plants	Supply all materials, equipment and services for the surface preparation and application of paint coating of all structural elements that supports all the power plant's boiler components and also the exhaust stacks.	\$ 3,600,000.00