#### NEPR

#### GOBIERNO DE PUERTO RICO JUNTA REGLAMENTADORA DE SERVICIO PÚBLICO NEGOCIADO DE ENERGÍA DE PUERTO RICO

Received:

Jun 15, 2020

5:24 PM

IN RE:

#### SOLICITUD DE PROPUESTAS PARA GENERACION TEMPORERA DE EMERGENCIA

CASE NUM.: NEPR-AP-2020-0001

SUBJECT: Reporte de Estatus y Progreso

#### MOCIÓN PARA INFORMAR PROGRESO DE REPARACIONES

AL HONORABLE NEGOCIADO DE ENERGÍA:

COMPARECE la Autoridad de Energía Eléctrica de Puerto Rico a través de su representación legal y muy respetuosamente presenta al Negociado de Energía de la Junta Reglamentadora del Servicio Público (el "Negociado de Energía") el reporte titulado *Costa Sur Damage Assessment and Repairs Progress Status Report* fechado de 15 de junio de 2020 (el "Reporte de Progreso"). Exhibit A. El Reporte de Progreso detalla las evaluaciones, reparaciones, compras y contrataciones relacionadas con la reparación de las unidades 5 y 6 de la Central Costa Sur.

RESPETUOSAMENTE SOMETIDO.

En San Juan, Puerto Rico, este 15 de junio de 2020.

<u>/s Katiuska Bolaños</u> Katiuska Bolaños <u>kbolanos@diazvaz.law</u> TSPR 18888

DÍAZ & VÁZQUEZ LAW FIRM, P.S.C. 290 Jesús T. Piñero Ave. Oriental Tower, Suite 1105 San Juan, PR 00918 Tel. (787) 395-7133 Fax. (787) 497-9664

#### **CERTIFICADO DE NOTIFICACIÓN**

Certifico que en el día de hoy he radicado esta moción utilizando el sistema electrónico de radicación del Negociado de Energía en la siguiente dirección: <u>http://radicacion.energia.pr.gov</u> y, además, que he enviado copia de cortesía vía correo electrónico a rstgo2@gmail.com; rolando@bufeteemmanuelli.com; jessica@bufete-emmanuelli.com; notificaciones@bufete-emmanuelli.com; pedrosaade5@gmail.com; larroyo@earthjustice.org.

En San Juan, Puerto Rico, a 15 de junio de 2020.

<u>s/ Katiuska Bolaños</u> Katiuska Bolaños

#### Exhibit A

Costa Sur Damage Assessment and Repairs Progress Status Report June 15, 2020



#### **Puerto Rico Electric Power Authority (PREPA)**

Costa Sur Damage Assessment and Repairs Progress Status Report June 15, 2020

## **Introduction and Outline**

#### Introduction

- **§** PREPA is currently assessing the extent of the damages suffered in the Costa Sur power plant facility
- **§** The goal, if achievable, is to repair the most critical elements of the plant and place Unit 5 in commercial operations as soon as possible
- In addition, the Puerto Rico Energy Bureau (PREB) approved the commencement of assessment and repair activities for Unit 6
- S This report outlines PREPA's progress in its assessment, repairs, and procurement activities related to Costa Sur Unit 5 and Unit 6

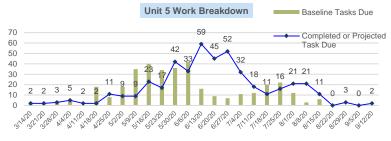
Re	eport Outline	Page #
§	Program Overview	3
§	Unit 5 Executive Summary	4
§	Unit 5 Project Summary by Workstream	5
§	Unit 5 Procurement Pipeline	11
§	Unit 5 Procurements Awarded	12
§	Unit 6 Executive Summary	16
§	Unit 6 Schedule Update	17
§	Emergency Management KPI Dashboard	18
§	Project Team and Roles and Responsibilities	19

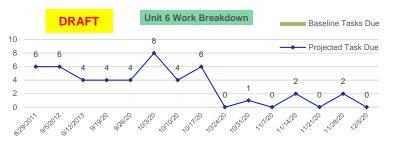


### **Program Overview**

Budget			Schedule					Scope				
Approved Budget for Program	\$40,200,000	Un	it 5	Un	it 6		Uni	it 5	Un	nit 6		
Est. Balance Available for Program (Based on Invoices)	\$35,191,837		][									
Unit 5	<b>#</b> 05 000 000	1/8/2020 Start Date	8/14/2020 U5 Start-Up Date	5/22/2020 Start Date	TBD U6 Start-Up Date		2 treams tified	20 Workstreams at	TBD Workstreams	TBD Workstreams		
Budget Baseline Amount Invoiced	\$25,200,000 \$5,008,163		)					100% Completion	Identified	100% Comple		
Disbursements	\$421,694	43.17% Time Elapsed	<b>49.00%</b> % Completion	<b>TBD</b> Time Elapsed	TBD % Completion		We	ekly Headcou	unt (Maximui	m)*		
Balance Available (Based on Invoices)	\$20,191,837							181				
Unit 6		156 Total	55 Pending	TBD Total	TBD Pending		PRE	PA's Max Weekly		333		
Budget Baseline (subject to baseline review)	\$15,000,000	Completed Tasks	Tasks On-Track	Completed Tasks	Tasks On-Track			Headcount	<u> </u>			
Amount Invoiced	TBD	74	176	TBD	TBD			152		ax Total y Headcount		
Disbursements	TBD	Pending	Pending	Pending	Pending		Contra	actor's Max Weekly Headcount		,		
Balance Available (Based on Invoices)	\$15,000,000	Tasks Delayed	Tasks Overdue	Tasks Delayed	Tasks Overdue	]	L	neadoount				

	Procur	rement				
49	15	\$17.2M	TBD			
Total	Total Emergency	Total Amount	% Total Procurements			
Procurements	Procurements	Contracts Awarded	Completed			
Un	it 5	Unit 6				
<b>49</b>	15	TBD	TBD			
U5 Total	U5 Emergency	U6 Total	U6 Emergency			
Procurements	Procurements	Procurements	Procurements			
\$17.2M	91.8%	TBD	TBD			
U5 Amount	U5 % Procurements	U6 Amount	U6 % Procurements			
Contracts Awarded	Completed	Contracts Awarded	Completed			





Unit 5	Unit 6
181 PREPA's Max Weekly Headcount (Assigned to Unit 5)	TBD PREPA's Max Weekly Headcount (Assigned to Unit 6)
152	TBD
Contractor's Max Weekly Headcount (Assigned to Unit 5)	Contractor's Max Weekly Headcount (Assigned to Unit 6)
333	TBD
Total Max Headcount	Total Max Headcount
(Assigned to Unit 5)	(Assigned to Unit 6)

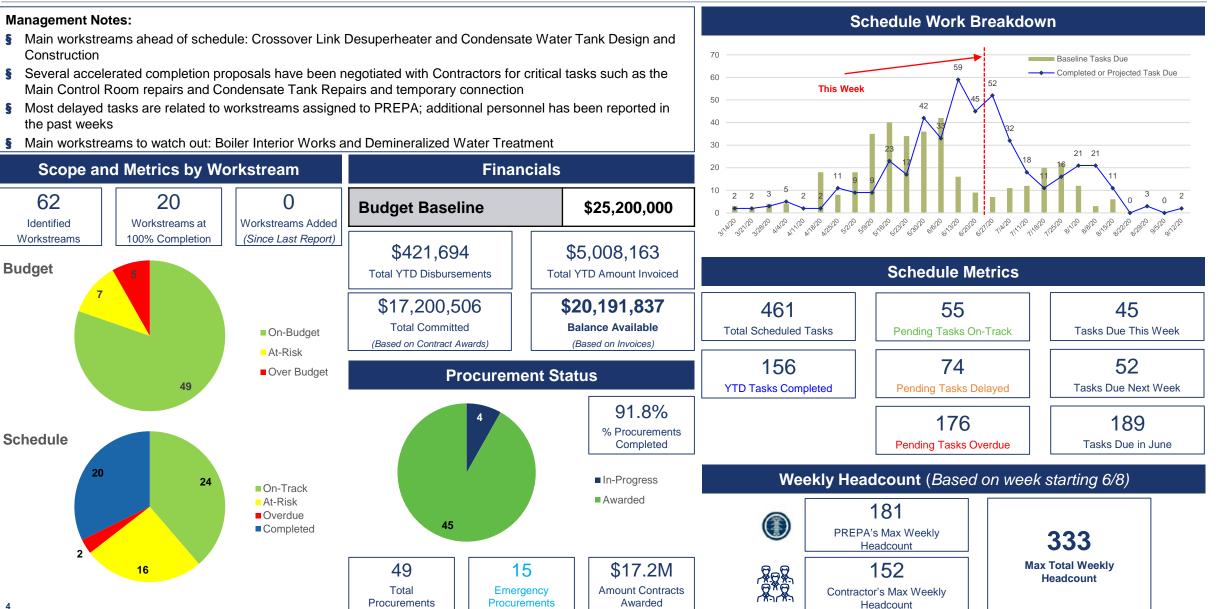
\* Note: Maximum weekly headcount based week starting on 6/8/2020



TBD Workstreams at 100% Completion

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## **Unit 5 Executive Summary**



49.00%

% Completion

43.17%

**Time Elapsed** 

## **Unit 5 Project Summary by Workstream**

ID	Workstream Description	Est. Cost	Resources Assigned	% Complete	Scheduled Start	Scheduled Finish	Status	Tasks Completed	Tasks Pending
1	Exterior Inspection Boiler Units 5 &6	\$83,170	Caribe GE International Energy	100%	1/8/2020	3/30/2020	Completed	3	0
2	Preliminary Structural Inspection Works Units 3,4, 5 and 6	\$337,735	7,735 Caribe GE International Energy		1/27/2020	1/31/2020	Completed	1	0
3	Initial Assessment High Energy Piping Post Seismic Event Units 5 and 6	\$22,540	Caribe GE International Energy	100%	1/27/2020	2/5/2020	Completed	1	0
4	Initial Lead Removal for Immediate Repair Works Units 3,4 and 5	\$86,941	Enersys Engineering Corp.	100%	2/3/2020	3/25/2020	Completed	1	0
5	Immediate Repair Works for Safety and Continuing Inspection Works Units 3, 4 , and 5 $% \left( 1,2,2,3,3,3,3,3,3,3,3,3,3,3,3,3,3,3,3,3,$	\$0	Enersys Engineering Corp.	100%	2/7/2020	3/3/2020	Completed	1	0
6	Water and Fuel Tanks Condition Survey (20 tanks)	\$134,448	Heinsen Global	100%	2/11/2020	3/16/2020	Completed	1	0
7	Interior Inspection Work Boilers Units 5 and 6	\$66,030	Caribe GE International Energy	100%	2/17/2020	4/7/2020	Completed	1	0
8	Condition Survey and Testing for Concrete Pedestals for Power Turbine and Generator Units 5 and 6	\$55,160	Heinsen Global	100%	3/6/2020	6/2/2020	Completed	1	0
9	Inspection and Condition Survey Water Tunnel Condensers 5 and 6	\$83,100	Marine Diving	100%	3/9/2020	5/27/2020	Completed	4	0
10	Geotechnical Post Seismic Event Condition Survey	\$349,047	Earth Engineers, PSC	70%	3/12/2020	7/10/2020	At Risk	4	1
11	Project Management and Inspection Team for Rehabilitation Unit 5	\$1,020,000	PREPA. Contractors (Various)	89%	1/7/2020	7/3/2020	On Track	0	1

#### **Overarching Workstream Initiatives**

Eng. & Technical Studies

Eng. & rechnical Studies

U5 Structural Repairs

Condensate Water Tank Repairs Emergency Declaration

Aux. Equipment Repairs Civil & Other Reconstruction Asbestos Removal & Disposing Lead Removal Works Boiler Unit 5 Works

Crossover Link Desuperheater Operational Test & Control Tasks MPT Test and Repair Dikes Turbine Inspection & Repairs Generator Inspection & Repairs Other Works



Puerto Rico Electric Power Authority

ID	Workstream Description	Est. Cost	Resources Assigned	% Complete	Scheduled Start	Scheduled Finish	Status	Tasks Completed	Tasks Pending
12	Lead Removal Works for Units 1-6 (Phase 2, 3 and 4)	\$1,111,843	JR Industrial Contractors, PREPA	33%	3/30/2020	8/25/2020	At Risk	3	1
12A	Asbestos Removal and Disposal Unit 5	\$199,000	Caribe Hydroblasting	52%	3/23/2020	7/25/2020	At Risk	3	1
13	Structure Steel Repair Works Units 5 - phase 2	\$1,367,075	General Electric Fieldcore (GEF)	100%	3/23/2020	4/14/2020	Completed	3	1
14	Structure Steel Repair Works Units 5 - phase 3 & 4	\$657,503	General Electric Fieldcore (GEF)	20%	5/11/2020	7/7/2020	On Track	0	2
15	Structure Steel Repair Works Units 1 and 2 phase 2	\$286,669	General Electric Fieldcore (GEF)	0%	7/13/2020	8/28/2020	At Risk	0	1
16	Structure Steel Repair Works Units 3 and 4 - phase 2 and 3	\$282,138	General Electric Fieldcore (GEF)	0%	7/13/2020	9/12/2020	At Risk	0	1
17	Structural Steel Repair Works Unit 6 - phase 2, 3 and 4	\$1,406,615	General Electric Fieldcore (GEF)	0%	7/20/2020	9/12/2020	On Track	0	2
18	Boiler Unit 5 Interior Works	\$500,000	PREPA	53%	5/11/2020	6/29/2020	At Risk	21	57
19	Boiler Unit 5 Preparation (Boiler Wash & Others)	\$1,000,000	Induchem	100%	4/13/2020	4/29/2020	Completed	13	0
20	Temporary Connection Condensate Water Tanks 3 and 4	\$220,800	Enersys Engineering Corp.	100%	4/15/2020	6/3/2020	Completed	1	0
22	Condensate Water Tank Design and Construction	\$750,000	Heinsen Global, RG Engineerinng, PREPA	85%	4/15/2020	7/27/2020	On Track	5	8
24	Demineralized Water Treatment Demi RO and Demi Resina	\$840,000	Enersys Engineering Corp., PREPA	10%	6/4/2020	6/27/2020	On Track	0	2

Overarching Workstream Initiatives

Eng. & Technical Studies

U5 Structural Repairs

Condensate Water Tank Repairs

Aux. Equipment Repairs Civil & Other Reconstruction Emergency Declaration Asbestos Removal & Disposing Lead Removal Works Boiler Unit 5 Works Crossover Link Desuperheater Operational Test & Control Tasks

MPT Test and Repair Dikes

Turbine Inspection & Repairs Generator Inspection & Repairs Other Works



Puerto Rico Electric Power Authority

Condensate Water Tank Repairs Emergency Declaration

# Unit 5 Project Summary by Workstream (Cont'd)

ID	Workstream Description	Est. Cost	Resources Assigned	% Complete	Scheduled Start	Scheduled Finish	Status	Tasks Completed	Tasks Pending
25	Existing 50 Ton Crane	\$78,492	Enersys Engineering Corp., Vital Energy	99%	4/22/2020	6/2/2020	Overdue	1	1
26	Civil and Interior Works at Unit 5 Control Room	\$180,000	ALL Contractors & Services Corp, PREPA	60%	4/6/2020	6/12/2020	On Track	1	1
27	Compressor Room Demolition and Reconstruction	\$58,515	ALL Contractors & Services Corp	19%	5/29/2020	7/17/2020	At Risk	0	1
28	Engineering Room Demolition and Reconstruction	\$0	ALL Contractors & Services Corp	0%	5/25/2020	7/2/2020	On Track	0	1
29	Civil Repair Work Shift Engineer Room	\$89,700	ALL Contractors & Services Corp	5%	5/11/2020	7/18/2020	On Track	0	1
30	Boilers Crossover links - Desuperheater Replacement	\$1,800,000	General Electric Fieldcore (GEF)	79%	4/20/2020	6/26/2020	On Track	41	16
31	Mechanical Inspection, Repair & Alignment (Fans and Pumps)	\$120,000	PREPA	30%	5/5/2020	8/10/2020	At Risk	24	114
32	Non Destructive Test on Steam piping Unit 5	\$250,000	Alonso & Carus Iron Works	100%	5/18/2020	6/6/2020	Completed	1	0
33	Line Valves Overhaul	\$49,230	Ensysa	98%	4/27/2020	7/3/2020	On Track	7	2
34	Safety Valves Repair	\$0	PREPA	100%	1/7/2020	1/7/2020	Completed	1	0
36	New Overhead Crane	\$1,556,943	Master Link	100%	3/9/2020	5/30/2020	Completed	2	0
37	Boiler Insulation Activities	\$700,000	JR Industrial Contractors, PREPA	18%	6/1/2020	8/7/2020	On Track	0	2
7	Overarching Workstream Initiatives         Eng. & Technical Studies         U5 Structural Repairs         Civil & Other Reconstruction		Removal & Disposing Crossov moval Works Operatio	ver Link Desuperh onal Test & Contr		bine Inspection & nerator Inspection			Rico Elect

MPT Test and Repair Dikes

Other Works

Boiler Unit 5 Works

ID	Workstream Description	Est. Cost	Resources Assigned	% Complete	Scheduled Start	Scheduled Finish	Status	Tasks Completed	Tasks Pending
38	Condenser Unit 5 Activities	\$180,000	PREPA	0%	7/2/2020	8/12/2020	At Risk	0	14
39	Condensate Recirculation Discharge Pipe (12 ft diameter)	\$900,000	Malnat	40%	5/11/2020	7/11/2020	On Track	0	1
41	Cargo Elevators	\$60,000	Vertech, Inc.	100%	4/8/2020	4/8/2020	Completed	1	0
42	Inspection on High Energy Supports (Pipe Hangers)	\$250,000	5 Senses Solutions	0%	6/4/2020	7/17/2020	At Risk	0	1
43	Metering Station, Automation, TWI, Opacimeters 5-6, and Oil Flush Turbine U. 5	\$1,812,000	LT Automation, PREPA	17%	5/16/2020	8/10/2020	At Risk	1	7
44	DCS Foxboro Inspection - Boilers	\$60,000	PREPA	0%	7/1/2020	7/22/2020	On Track	0	1
45	Mark VI Turbines Inspection	\$60,000	PREPA	0%	7/1/2020	7/22/2020	On Track	0	1
46	Trip Test Boilers and Turbine	\$6,000	PREPA	0%	7/22/2020	8/3/2020	On Track	0	1
47	Natural Gas System Activities	\$1,000,000	ALL Contractors & Services Corp, PREPA	16%	4/30/2020	9/30/2020	At Risk	1	4
49	Reestablish Potable Water System	\$12,000	PREPA	100%	4/25/2020	5/8/2020	Completed	1	0
50	Reestablish of Compressed Gases, Sulfuric Acid, CO2 and Caustic Soda System	\$12,000	Contractor TBD	0%	6/29/2020	6/30/2020	On Track	0	1
51	Blow off Pumps Test	\$6,000	PREPA	0%	6/29/2020	7/4/2020	On Track	0	1

#### **Overarching Workstream Initiatives**

- Eng. & Technical Studies
- U5 Structural Repairs
- Aux. Equipment Repairs **Civil & Other Reconstruction** Condensate Water Tank Repairs Emergency Declaration
- Asbestos Removal & Disposing Lead Removal Works Boiler Unit 5 Works
- Crossover Link Desuperheater Operational Test & Control Tasks MPT Test and Repair Dikes
- Turbine Inspection & Repairs Generator Inspection & Repairs Other Works



ID	Workstream Description	Est. Cost	Resources Assigned	% Complete	Scheduled Start	Scheduled Finish	Status	Tasks Completed	Tasks Pending
52	Boiler Prestart-Up Jobs / Hyodrostatic Test	\$6,000	PREPA	0%	8/7/2020	8/12/2020	On Track	0	3
53	Temporary Laboratory Preparation and Commissioning Trailer	\$70,000	ALL Contractors & Services Corp	5%	6/8/2020	6/16/2020	Overdue	0	1
54	Temporary Office for Shift Engineer Trailer	\$147,650	ALL Contractors & Services Corp	100%	6/11/2020	6/20/2020	Completed	1	0
55	New Laboratory and Administration Building	\$2,400,000	Contractor TBD	0%	6/8/2020	8/29/2020	At Risk	0	1
56	Unit 5 Star Up and Commissioning Test	\$72,000	PREPA	0%	8/4/2020	8/14/2020	On Track	0	1
48	MPT 5 Secondary Containment repairs	\$38,783	5 Senses Solutions	75%	5/4/2020	6/17/2020	On Track	0	1
57	MPT 4 Secondary Containment repairs	\$17,480	5 Senses Solutions	30%	5/4/2020	6/19/2020	On Track	0	1
58	MPT 6 Secondary Contaiment repairs	\$29,550	5 Senses Solutions	75%	5/6/2020	6/13/2020	On Track	0	1
59	Mitigation of contaminated terrain switchyard 115kV, Autotransformer	\$20,000	5 Senses Solutions	100%	4/8/2020	6/5/2020	Completed	2	0
60	Structural Concrete Repairs Discharge Channel	\$1,750,950	Contractor TBD	0%	7/6/2020	11/27/2020	On Track	0	1
61	Generator Inspection and Repairs	-	PREPA	3%	5/16/2020	8/12/2020	At Risk	1	14
62	Turbine Inspection and Repairs	-	PREPA	16%	5/4/2020	8/11/2020	At Risk	1	27

#### **Overarching Workstream Initiatives**

- Eng. & Technical Studies
- Ling. & reclinical Studies
- U5 Structural Repairs
- Condensate Water Tank Repairs Emergency Declaration
- Aux. Equipment Repairs Civil & Other Reconstruction
- Asbestos Removal & Disposing Lead Removal Works Boiler Unit 5 Works

Unit 5 Startup and Commissioning Operational Test & Control Tasks MPT Test and Repair Dikes Turbine Inspection & Repairs Generator Inspection & Repairs Other Works



9

ID	Workstream Description	Est. Cost	Resources Assigned	% Complete	Scheduled Start	Scheduled Finish	Status	Tasks Completed	Tasks Pending
63	Electrical Conservation Works	-	PREPA	57%	5/12/2020	7/23/2020	At Risk	2	3
64	Emergency Declaration	\$0	PREPA	100%	3/23/2020	3/23/2020	Completed	0	0
65	Scaffolding & Others	\$531,186	Brand, Contractor (Various)	75%	2/3/2020	8/31/2020	On Track	1	1
	Total	\$25,184,292							

#### **Overarching Workstream Initiatives**

Eng. & Technical Studies

U5 Structural Repairs

Condensate Water Tank Repairs Emergency Declaration

Aux. Equipment Repairs Civil & Other Reconstruction Asbestos Removal & Disposing Lead Removal Works Boiler Unit 5 Works Crossover Link Desuperheater Operational Test & Control Tasks MPT Test and Repair Dikes Turbine Inspection & Repairs Generator Inspection & Repairs Other Works



Puerto Rico Electric Power Authority

### **Unit 5 Procurement Plan - Pipeline**

The following table outlines the procurements currently in the pipeline to support the Costa Sur U5 Assessment and Repairs project:

Procurement Description	Procurement Type	Est. Amount	Status	Target Date	Update
Structural Concrete Repairs to Outfall channel structure, ending segment	Emergency Procurement	\$1,750,950	Planning Stage	TBD	Waiting for Geotechnical Results so PREPA may commenced with the design process
Temporary Laboratory Offices (Rental - 12 Months)	Emergency Procurement	\$70,000	Evaluating RFP Responses	TBD	<ul> <li>RFP has been published several times with limited responses from the marketplace</li> </ul>
Turbine-Generator Inspection Work	Emergency Procurement	\$1,200,000	Evaluating RFP Responses	TBD	<ul> <li>RFP will be executed to have a "plan B" in case there is an issue with this equipment during TA Inspection Phase</li> </ul>
Temporary Mobile Water Treatment Plant	Emergency Procurement	\$745,000	Evaluating RFP Responses	TBD	<ul> <li>RFP will be executed to have a "plan B" in case there is an issue with the delivery of the new Multimedia Filters to the Existing Water Treatment Plant</li> </ul>
	Estimated Total	\$3,835,950			



#### **Unit 5 Procurement Plan - Awarded**

#	Procurement Description	Procurement Type*	Cost	Associated Workstream #	Contract #	Contractor Name
1.	Exterior mechanical inspection of the condition of the boilers	Service Upon Request Agreement	\$83,170	1	83998	CARIBE GE INTERNATIONAL ENERGY
2.	Interior mechanical inspection of the condition of the boilers Units 5 and 6	Service Upon Request Agreement	\$66,030	7	83998	CARIBE GE INTERNATIONAL ENERGY
3.	Preliminary Visual Inspection of Steam Piping and Equipment and Structural Supports.	Service Upon Request Agreement	\$22,540	3	84002	CARIBE GE INTERNATIONAL ENERGY
4.	Preliminary Inspection and Steel Structural Elements for Boilers and Auxiliary Equipment (units 3-4)	d Auxiliary Service Upon Request Agreement		2	84002	CARIBE GE INTERNATIONAL ENERGY
5.	Preliminary Inspection and Steel Structural Elements for Boilers and Auxiliary Equipment (units 5-6)	Service Upon Request Agreement		2	84002	CARIBE GE INTERNATIONAL ENERGY
6.	Structural Elements Immediate Repair Work to Allow Additional Interior Inspection of the Boilers and Other Equipment	Service Upon Request Agreement	\$86,941	5	82470	ENERSYS ENGINEERING CORP
7.	More Detail Inspection, Structural Design Work for Repairs Units 5 and 6 (Before Put On Service). Also, Structural Assessment Structures Units 1 and 2	Service Upon Request Agreement	\$298,635	2	84002	CARIBE GE INTERNATIONAL ENERGY
8.	Structural Repairs Cross Bracings Structure - Overhead Crane 1-6	Service Upon Request Agreement	\$78,492	25	82470	ENERSYS ENGINEERING CORP
9.	Structural Repair Works (Temporary Connection) Condensate Water Tanks	Service Upon Request Agreement	\$220,800	20	82470	ENERSYS ENGINEERING CORP
10.	Insulation Repair Works in Boiler 5	Service Upon Request Agreement	\$700,000	37	86283	J R INDUSTRIAL CONTRACTORS INC
11.	Old Water Condensate Tanks Interconnection Works to Unit 5 Demin Water Cycle System	Service Upon Request Agreement	\$840,000	24	82470	ENERSYS ENGINEERING CORP



### **Unit 5 Procurement Plan – Awarded (Cont'd)**

#	Procurement Description	Procurement Type*	Cost	Associated Workstream #	Contract #	Contractor Name
12.	Scaffolding Services	Service Upon Request Agreement	\$300,000	-	84611	BRAND ENERGY INFRASTRUCTURE
13.	Repair Works on Line Valves Unit 5	Service Upon Request Agreement	\$49,230	33	83581	ENGINEERING SYSTEMS SALES
14.	Cargo Elevators Repairs	Service Upon Request Agreement	\$7,500	41	82412	VERTECH INC
15.	Integration of Raw Water Pumps Controls into DCS Foxboro	Service Upon Request Agreement	\$143,605	43	85590	LT AUTOMATION
16.	Integration of Metering Station into DCS	Service Upon Request Agreement	\$64,945	43	83009	LT AUTOMATION
17.	Opacity Meter Upgrade	Service Upon Request Agreement	\$66,971	43	83994	LT AUTOMATION / J.A. MERA INC.
18.	Foxboro Controls Advantage Upgrade	Service Upon Request Agreement	\$106,511	43	82159	LT AUTOMATION
19.	Integration of Demineralizer Controls into DCS	Service Upon Request Agreement	TBD	43	84651	LT AUTOMATION
20.	Costa Sur Tanks Structural Analysis	Request for Quotes (RFQs)	\$134,448	6	85840	Heinsen Global Engineering (HGE)
21.	Geotechnical Studies	Request for Quotes (RFQs)	\$349,046	10	86125	Earth Engineers, Inc.
22.	Reconstruction Structural Steel Repairs	Request for Quotes (RFQs)	\$4,000,000	13-17	86331	ALSTOM CARIBE INC
23.	Design Work – Structural Repair Condensate Tanks	Request for Quotes (RFQs)	\$146,662	22	86344	Heinsen Global Engineering (HGE)



## Unit 5 Procurement Plan – Awarded (Cont'd)

#	Procurement Description	Procurement Type*	Cost	Associated Workstream #	Contract #	Contractor Name
24.	Underwater Visual Inspection of the Tunnels Condenser 5 and 6	Emergency Procurement	\$83,100	9	86495	MARINE DIVING CONTRACTORS
25.	Structural Repairs Condensate Tank 5	Emergency Procurement	\$309,468	22	86704	R G ENGINEERING INC
26.	Lead Removal and Disposal Works - Structural Repairs Units 1-6	Emergency Procurement	\$1,111,843	12	86566	J R INDUSTRIAL CONTRACTORS INC
27.	Asbestos Removal & Disposal Works Unit 5	Emergency Procurement	\$199,000	-	86559	Caribe Hydroblasting
28.	Natural Gas Line Pipe Structural Repair Works	Emergency Procurement	\$908,000	47	86823	ALL CONTRACTORS SERVICES CORP
29.	NDT Services Unit 5	Emergency Procurement	\$250,000	32	86678	ALONSO CARUS IRON WORKS INC
30.	Civil Works Control Room 5-6, Compressor Room, Shift Engineer Room	Emergency Procurement	\$328,215	26-29	86653	ALL CONTRACTORS SERVICES CORP
31.	Condensate Recirculating Discharge Pipe (12 ft diameter)	Emergency Procurement	\$900,000	39	86664	MALNAT ASOCIADOS
32.	MPT 4, 5 and 6 Secondary Contaiment Repair Works	Emergency Procurement	\$85,812	48,57-58	86581	5 SENSES SOLUTIONS LLC.
33.	Removal and Mitigation of Contaminated Soil Switchyard 115 kV	Emergency Procurement	\$20,000	59	86716	5 SENSES SOLUTIONS LLC.
34.	Temporary Administrative Offices (Rental - 12 Months)	Emergency Procurement	\$182,475	54	86552	ALL CONTRACTORS SERVICES CORP
35.	Boiler Wash	-	\$1,000,000	19	85153	INDUCHEM SERVICES



### **Unit 5 Procurement Plan – Awarded (Cont'd)**

#	Procurement Description	Procurement Type*	Cost	Associated Workstream #	Contract #	Contractor Name
36.	Superheater-Desuperheat Crossover Link Piping Installation U. 5	-	\$1,766,429	30	86214	ALSTOM CARIBE INC
37.	Condition Survey and Testing for Concrete Pedestals for Power Turbine and Generator Units , 5 and 6	-	\$55,160	8	85980	Heinsen Global Engineering (HGE)
38.	January 8,2020 - Safety Inspection	-	\$3,031	-	85336	ABACUS ARCHITECTURE PSC
39.	Overhead Crane Installation and Commissioning	-	\$1,556,943	36	82717	MASTER LINK CORPORATION
40.	Costa Sur Water Tunnels for Condensers Units 5 and 6 Inspection	-	TBD	-	86114	ALSTOM CARIBE INC
41.	Existing Overhead Crane Units 3 and 6, Certification	-	\$34,412	25	84013	Vital Energy
42.	Natural Gas System Activities	-	\$78,325	47	86814	ALL CONTRACTORS SERVICES CORP
43.	Lead Paint and Asbestos Sampling Analysis	-	\$6,425	12,12A	79564	Environmental Health & Safety Services
44.	Boiler Hydroblasting	-	\$361,548	-	80903	INDUCHEM SERVICES
45.	Condenser Tube Cleaning and Outlet Boxes Cleaning	-	\$155,691	-	81017	INDUCHEM SERVICES



Report Submitted as of June 15, 2020

## **Unit 6 Executive Summary**

Management Notes:

- § Preliminary schedule projects Unit 6 repairs to be completed by third week of November
- Execution dates for identified milestones have been established; currently working with project management team to include detailed activities for each milestone
- S Budget baseline to be finalized once detailed schedule is completed and scope has been fully identified

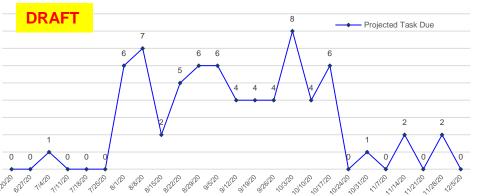
#### **Schedule Work Breakdown**

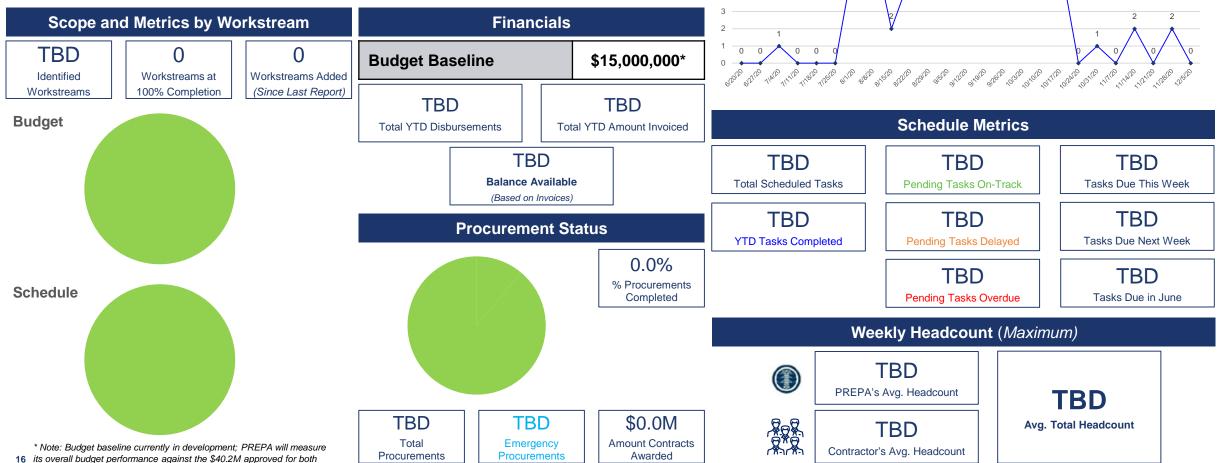
TBD

% Completion

TBD

**Time Elapsed** 





units

## Unit 6 Schedule Update

Detailed schedule for Costa Sur Unit 6 is in development. Executive summary dashboard and budget baseline will be populated once scheduled is finalized and baseline is established.

The milestone schedule serves for informational purpose and is subject to changes and revisions.

For the June 30, 2020 submittal, PREPA will be reporting the full schedule detail that will serve as baseline for project execution and performance metrics.

	Task Yeame	Start	Finish	Duration	May 2020 April 2020 May 2020 June 2020 Aug 2020	August 2020 Sastember 2020 October 2020 November 202	0 December 20
0 0	Unit 6 Repair - Costa Sur Power Plant - DRAFT 3	1/7/2020	11/24/2020	277.5 days?	Maren 2000 April 2000	5 331 4 19 14 19 24 29 3 3 1 3 13 18 23 28 3 1 8 13 36 28 28 2 7 12 17	4 11/24
1 1	Incoming from Unit 5 Repairs Program	3/23/2020	9/12/2020	150.88 days?			
5 2	Funding Approval (PREB)	5/22/2020	5/29/2020	6 days	Funding Approval (PREB) 10/29		
9 3	Procurement	7/1/2020	7/31/2020	30 days	Procurement	- 7/31	-
12 4	Unit 6 Repairs Start	8/1/2020	8/1/2020	0 days		♣ 8/1	
13 5	Structural Steel Repair Works Units 6 - by GE	8/1/2020	10/28/2020				
14 6	Boilers, Turbines and Generators - by MD&A	8/1/2020	10/16/2020	1	Boilers, Turbines and Generators - by MD&	10/16	
15 6.1	Mobilization	8/1/2020	8/6/2020	5 days	Mobilization	Contraction of the second s	
23 6.2	Steam Valvels	8/4/2020	9/11/2020	37 days	Steam Valv		
27 6.3	Crossover	8/6/2020	10/3/2020	56 days	Crosse		
14 6.4	HP IP Turbine	8/6/2020	9/25/2020	48 days	HP IP Turt		
38 6.5	LPA	8/6/2020	9/30/2020	53 days		PA 9/30	-
42 6.6	LPB	8/6/2020	10/3/2020	36 days		IPE 10/3	
41 6.7	Generator	8/6/2020	9/8/2020	32 days	Gener		
51 6.8	A Coupling	8/6/2020	9/23/2020	46 days			
52 6.9	8 Coupling	8/7/2020	9/25/2020	48 days			
\$3 6.10	C Coupling	8/7/2020	9/25/2020	48 days		-	-
34 6.11	Exciter	9/8/2020	and the second se	32 days		Provide and Provid	
55 6.12	Demobilization	10/10/2020	- 10 M & 10 M & 10 M	6 days		Demobilization 10/16	
62 7	Condensate Storage Tank 6 Section	7/6/2020	11/24/2020	Part of the second second	Condensate Storage Tank & Section		11/24
63 7.1	Demolition	7/6/2020	7/27/2020	21 days	Contraction in the second s		1
64 7.2	Design	7/6/2020	7/27/2020	21 days			
65 7.3	Fabrication & Construction	8/1/2020	11/24/2020	al these warmones			
86 7.4	Condensate Storage Tank 6 Complete	11/24/2020	11/24/2020			-	11/24
67 8	Demineralized Water Tank 6 Section	7/22/2020	11/13/2020		Demineralized Water Tank 6 Section	1 10	1
68 81	Repairs of Tank 6	7/22/2020	11/15/2020				11
69 82	Demineralized Water Tank 6 Complete	11/15/2020	11/15/2020			511	13
70 9	Circulating Water System Section	8/1/2020	10/3/2020	61 days	Circulating Water System Section		11
71 91	Condenser Cleaning	8/1/2020	8/22/2020	21 days			
72 9.3	Circulating Water Piping Rehabilitation	8/22/2020	10/3/2020	40 days			
73 9.3	Water Intake Channel Cleaning	8/22/2020	9/14/2020	21 days			
74 04	Circulating Water Pump Replacement/Repair	8/1/2020	9/1/2020	30 days			
75 9.5	Circulating Water System Complete	9/1/2020	9/1/2020	0 days		a 9/1	
76 10	Other Works	7/1/2020	10/13/2020	State of the second second	Other Works	10/13	
77 10.1	Boiler additional repairs	8/1/2020	10/13/2020	and the second se		/	
70 10.2	Liner Superheater Replacement	7/1/2020	9/1/2020	60 days			
79 10.3	Crane Works	7/31/2020	10/1/2020	50 days			
80 10.4	Casing Water Heaters Major Repairs	7/31/2020	9/30/2020	58 days		e	
#1 11	Balance of Plant Section	8/1/2020	10/10/2020	68 days	Balance of Plant Section	1 10/10	
42 11.1	Heat Exchanger Cleaning	8/1/2020	8/29/2020	28 days			
83 11.2	Soiler Feed Pump Maintenance	8/1/2020	8/22/2020	21 days		*	
64 11.3	Force/Induce Draft Fans Maintenance	8/22/2020	9/12/2020	20 deys		*	
85 11.4	Miscellaneous Equipment Maintenance	8/1/2020	9/14/2020	42 days			
86 115	Replacement of Opacimeter	8/1/2020	8/22/2020	21 days			
87 11.5	High Pressure Water Heater #5 Valve Repair	8/29/2020	9/12/2020	13.25 days		the second s	
88 11.7	Low Presure Water Hetzer 3- Retubing	8/1/2020	10/10/2020				
89 118	Balance of Plant Complete	10/10/2020	10/10/2020			10/10	
90 12	Unit & Repairs Completed	11/24/2020	11/24/2020	all and the second		0.745.777.701	3 11/24
	NAME OF TAXABLE PARTY OF TAXABLE PARTY.			The second se			

DRAFT



Unit

Power Plant

## Emergency Management KPI Dashboard 2170

Maximum Capacity

Actual Generation

Installed

Generation Units Out of Service								
Power Plant	Unit	Power Plant Type	Installed Generation (MW)	Maximum Capacity (MW)	Expected date to be online*			
Costa Sur	5	Base Load	410	410	August 14, 2020			
Costa Sur	6	Base Load	410	410	TBD			
Aguirre CC	Steam 2	Base Load	96	50	TBD			
San Juan	7	Base Load	100	71	June 15, 2020			
San Juan	8	Base Load	100	50	TBD			
San Juan	9	Base Load	100	90	June 12, 2020			
San Juan CC	STG 6	Base Load	60	60	July 31, 2020			
Aguirre CC	Stag 2 (2-2)	Peaker	50	50	July 25, 2020			
Costa Sur Hidrogas	1-1	Peaker	21	21	TBD			
Costa Sur Hidrogas	1-2	Peaker	21	21	TBD			
Jobos	1-1	Peaker	21	19	TBD			
Jobos	1-2	Peaker	21	18	TBD			
Aguirre Hidrogas	2-2	Peaker	21	21	TBD			
Aguirre Hidrogas	2-1	Peaker	21	21	TBD			
Palo Seco Hidrogas	1-2	Peaker	21	19	TBD			
Mayaguez	1	Peaker	55	22	TBD			
Yabucoa	1-2	Peaker	21	20	TBD			
Vega Baja	1-1	Peaker	21	18	June 15, 2020			
AES	1	Base Load	262	190	July 10, 2020			
Sub-Total			1832	1581				
Cambalache	1	Peaker	83		Long Term Outage			
Palo Seco Hidrogas	2-2	Peaker	21		Long Term Outage			
Palo Seco Hidrogas	3-1	Peaker	21		Long Term Outage			
Palo Seco Hidrogas	3-2	Peaker	21		Long Term Outage			
Palo Seco	2	Base Load	85		Long Term Outage			
San Juan Steam	10	Base Load	100		Long Term Outage			
Sub-Total			331	0				
Total			2163	1581				
*The dates are as of current information and system conditions, which may vary or change with unexpected events in the electrical system operation.								

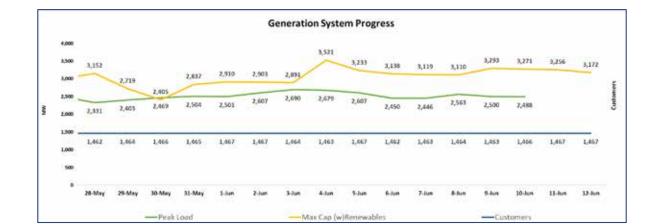
AS OF JUN 12, 2020

CUSTOMERS ENERGIZED

99.93%

1,467,184

DEMAND (MW)



**Power Plant Type** Generation (MW) (MW) (MW) Palo Seco 1 Base Load 85 70 64 140 140 Palo Seco 3 Base Load 216 Palo Seco 4 Base Load 216 60 117 Aguirre 1 Base Load 450 450 338 Aguirre 2 Base Load 450 450 280 Aguirre CC Stag 1 Base Load 296 145 57 Aguirre CC Steam 1 Base Load 96 18 17 Stag 2 296 140 0 Aguirre CC Base Load CT 5 160 160 120 San Juan CC Base Load San Juan CC STG 5 Base Load 60 60 40 CT 6 Base Load 160 160 120 San Juan CC 2 82.5 77 Cambalache Peaker 0 3 Peaker 82.5 77 Cambalache 0 Daguao 1-1 Peaker 18 18 0 Daguao 1-2 Peaker 21 16 0 Palo Seco Hidrogas 1-1 Peaker 21 19 19 Palo Seco Hidrogas 2-1 21 21 21 Peaker Palo Seco Megagens 1, 2, 3 Peaker 66 65 65 2 55 55 Mayaguez Peaker 0 55 51 3 Peaker 0 Mayaguez Mayaguez 4 Peaker 55 50 0 1-1 Peaker 21 20 0 Yabucoa Vega Baja 1-2 Peaker 21 19 0 Hidroeléctricas Peaker 23 21 10 AES 2 Base Load 262 257 254 177 176 EcoEléctrica 1 Base Load 161 EcoEléctrica 178 176 161 2 Base Load ECO Steam 176 175 160 Base Load 3820 3146 2144 Sub - Total Renewables Renewables 194 26 26 Total 4014 3172 2170

**Progress of Critical Generation System** 

# **Project Team and Roles and Responsibilities Matrix**

Project Team Members include a diverse representation from different areas of the organization such as Generation, PMO, DFMO, and key advisors .

Team Grouping	Key Roles and Responsibilities
Executive Team	<ul> <li>Establish governance, provide direction and oversight to broader project team</li> <li>Assign resources, resolve conflicts and risks, and approve execution plan</li> <li>Manage stakeholder communications and engagement</li> </ul>
Management Team	<ul> <li>Review project needs, issues, risks, and plans; resolve or escalate as needed</li> <li>Provide input, feedback, and direction to the Execution and Procurement Team</li> <li>Provide oversight of the contractors/vendors supporting the project</li> </ul>
Procurement Team	<ul> <li>Manage the procurement of goods and services needed to support the Execution Team</li> <li>Provide regular status updates on all procurements</li> <li>Escalate issues, risks, and/or concerns as needed</li> </ul>
Execution Team	<ul> <li>Manage the project scope, budget, and schedule</li> <li>Engage regularly with controls team to provide timely and accurate update on execution</li> <li>Manage contractors/vendors supporting the project</li> </ul>
Controls Team	<ul> <li>Collect data and information related to the project scope, budget, and schedule</li> <li>Develop and maintain master project schedule</li> <li>Provide project information and progress to the Reporting Team</li> </ul>
Reporting Team	<ul> <li>Develop standard project status progress reports</li> <li>Manage stakeholder needs and request for communications</li> </ul>
PREB/FOMB Interface Team	<ul> <li>Identify stakeholder engagement and communication needs</li> <li>Communicate with Management and Executive Team on stakeholder requests</li> <li>Review all communications issued to the stakeholder group</li> <li>Provide interface support with stakeholder groups</li> </ul>
FEMA Interface Team	<ul> <li>Identify stakeholder engagement and communication needs</li> <li>Communicate with Management and Executive Team on stakeholder requests</li> <li>Review all communications issued to the stakeholder group</li> <li>Provide support to secure funding and any associated documentation</li> <li>Provide interface support with FEMA</li> </ul>

