NEBR

Received:

Oct 15, 2020

9:50 PM

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

IN RE: SOLICITUD DE PROPUESTAS PARA GENERACION TEMPORERA DE EMERGENCIA CASO NÚM.: NEPR-AP-2020-0001

ASUNTO:

Reporte de Estatus y Progreso

MOCIÓN PARA PRESENTAR REPORTE DE ESTATUS Y PROGRESO EN CUMPLIMIENTO DE ORDEN

AL HONORABLE NEGOCIADO DE ENERGÍA:

COMPARECE la Autoridad de Energía Eléctrica de Puerto Rico a través de su representación legal y, en cumplimiento con la Orden del 22 de mayo del 2020,¹ presenta a el Negociado de Energía de la Junta Reglamentadora del Servicio Público (el "Negociado de Energía" o "Negociado") el reporte titulado *Costa Sur Damage Assessment and Repairs Progress Status Report* fechado 30 de septiembre 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 octubre de 2020.

/s Katiuska Bolaños Lugo Katiuska Bolaños Lugo kbolanos@diazvaz.law TSPR 18,888

¹ Resolución y Orden del Negociado de Energía del 22 de mayo del 2020 (la "Orden del 22 de mayo").

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: http://radicacion.energia.pr.gov 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 octubre de 2020.

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

Exhibit A

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



Puerto Rico Electric Power Authority (PREPA)

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

Introduction and Outline

Introduction

 This report outlines PREPA's progress in its assessment, repairs, and procurement activities related to the start-up of Costa Sur Unit 5 and Unit 6

Report Outline	Page #
Program Overview	3
Unit 5 Start-Up Status Overview	5
Unit 5 Start-Up Project Summary by Initiatives	6
Unit 5 Start-Up Procurements Awarded	7
Unit 6 Start-Up Status Overview	14
Unit 6 Start-Up Project Summary by Workstream	15
Unit 6 Start-Up Procurement Pipeline	18
Unit 6 Start-Up Procurements Awarded	19
■ Appendix	22



Program Overview – Unit 5 & 6 Start-Up Activities

Budget								
Approved Budget for Program \$40,200,000								
Forecast Cost f	or Program <i>(subj</i> e	ect to change)	\$42,059,191					
Unit 5 Start-Up								
A. Budget Base	line		\$25,200,000					
B. Total Foreca	st Cost		\$19,007,131					
C. Total Amoun	t Invoiced (Contracto	rs)	\$12,533,856					
D. PREPA Expe	enses (Time & Materi	als)	\$4,044,645					
E. Total Expen	ses (C+D)		\$16,578,501					
F. Total Disburs	ements		\$12,373,154					
Unit 6 Start-Up								
G. Budget Base	eline		\$19,078,286					
H. Total Foreca	st Cost		\$23,052,060					
I. Total Amount	Invoiced (Contractors	s)	\$4,683,237					
J. PREPA Expe	nses (Time & Materia	als)	\$0					
K. Total Expen	ses (I+J)		\$4,683,237					
L. Total Disburs	ements		\$328,016					
	Procui	rement						
104	20	\$29.6M	95.1%					
Total Procurements	Total Emergency Procurements	Total Amount Contracts Awarded	% Total Procurements Completed					
Unit 5 S	Start-Up	Unit 6 S	Start-Up					
68	14	35	6					
U5 Total Procurements	U6 Emergency Procurements							
\$14.8M	100.0%	\$14.8M	89.0%					
U5 Amount Contracts Awarded	U5 % Procurements Completed	U6 Amount Contracts Awarded	U6 % Procurements Completed					

Schedule									
Unit 5 S	Start-Up	Unit 6 S	Start-Up						
3/23/2020 Repairs Start Date	8/1/2020 U5 Start-Up Date	6/1/2020 Repairs Start Date	12/23/2020 U6 Start-Up Date						
100.0% 100.0%		63.9% Time Elapsed	62.0% % Completion						
401 Total Completed Tasks	O Pending Tasks On-Track	188 Total Completed Tasks	37 Pending Tasks On-Track						
0 0 Pending Pending Tasks Delayed Tasks Overdue		73 Pending Tasks Delayed	9 Pending Tasks Overdue						





Scope								
Unit 5 S	Start-Up	Unit 6 S	Start-Up					
55** Workstreams	55 Workstreams at	27 Workstreams	9 Workstreams at					
Identified	100% Completion	Identified	100% Completion					

Weekly Headcount (Maximum)*



133*

PREPA's Max Weekly Headcount



122*

Contractor's Max Weekly
Headcount

255*

Max Total
Weekly Headcount

Resource Breakdown	Headcount*
PREPA PMO	7
PREPA Costa Sur	68
PREPA Loan Employees	58
5 Senses	3
AIT	3
Alonso & Caurus	10
Brand	3
Enersys	11
Ensysa	3
ESI	6
General Electric (GE) Field Core	22
JR Insulation	23
LT Automation	4
Malnat	8
MD&A	26
Total	255

- * Maximum weekly headcount based on week starting on 10/5/2020
- ** Workstreams not associated with Unit 5 start-up activities were moved to either Unit 6 start-up schedule or under long-term repairs



Unit 5 Status Overview



Unit 5 Status Overview

100.0%

% Completion

100.0%

Time Elapsed

Management Notes:

- Unit successfully delivered for commercial operations on 8/1/2020 (14 days ahead of schedule baseline date of 8/14)
- Total cost associated with Unit 5 repairs is approximately \$19.0M (\$6.2M below the budget baseline submitted)

	Schedule	Metrics			Financial Metrics			
Metric		#		%	A. Budget Baseline	\$25,200,000		
Scheduled Tasks		401		-	Expenses			
Completed Tasks		401		100.0%	B. Total Forecast Expenses*	\$19,007,131		
Pending Task (On	-Track)	0		0.0%	C. Total Amount Invoiced	\$12,533,856		
Pending Task (De	layed)	0		0.0%	D. PREPA Related Expenses**	\$4,044,645		
Pending Task (Ove	erdue)	0	0		F. Total Expenses (C+D) \$16,578			
0	0			0	Balances			
Pending Tasks	Pending			Pending Tasks	G. Balance Available (A-F)	\$8,621,499		
Due in July	Due in A		Dı	ue in September	H. Forecast Balance (A-B)*	\$6,192,869		
Scope Meti		Metrics	ics		Disbursements			
55	55	5		100.0%	I. Total Disbursements	\$12,373,154		
Identified Workstreams***	Workstre		%	of Workstreams Completed	J. % of YTD Expenses Paid (I/F)	74.6%		

Key Project Metrics

1/7/2020

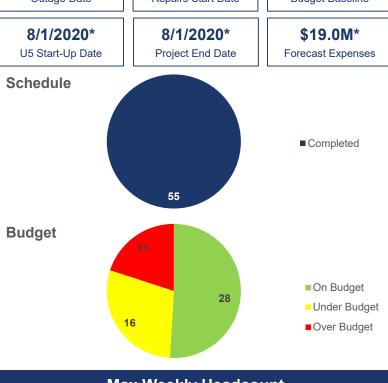
Outage Date

3/23/2020

Repairs Start Date

\$25.2M

Budget Baseline



Max Weekly Headcount



Contractor's Max Weekly
Headcount

Total Weekly Max Headcount



^{*} Excludes repairs not needed for start-up such as new Administrative and Laboratory buildings and concrete repairs discharge channel

^{**} Includes expenses related to PREPA's labor and warehouse materials

^{*** 7} Workstreams not associated with Unit 5 start-up activities were moved to either Unit 6 start-up schedule or under long-term repairs

Summary by Initiative

Initiative Description	# Workstreams	% Completion	Pending Tasks	Finish Date	Budget Baseline	Total Forecast Amount	Total Committed	Total Invoices	Total Disbursements
01. Emergency Declaration	1	100%	0	3/23/2020	\$0	\$0	\$0	\$0	\$0
02. Engineering, Technical Studies & Inspection*	11	100%	0	7/29/2020	\$2,238,171	\$2,075,820	\$2,210,114	\$1,371,982	\$944,555
03. Asbestos Removal and Disposal Unit 5	1	100%	0	7/20/2020	\$199,000	\$0	\$199,000	\$0	\$0
04. Lead Removal Works Unit 5	1	100%	0	7/4/2020	\$1,111,843	\$156,425	\$1,018,268	\$146,157	\$18,225
05. Structural Repair Works Unit 5	3	100%	0	7/20/2020	\$3,431,193	\$2,083,193	\$2,083,193	\$2,141,808	\$1,619,374
06. Condensate Water Tank 5 Repairs	2	100%	0	7/23/2020	\$970,800	\$712,930	\$712,930	\$709,518	\$439,918
07. Boiler Unit 5 Repair Works	9	100%	0	7/24/2020	\$4,555,230	\$2,898,663	\$3,124,552	\$2,261,943	\$2,019,918
08. Auxiliary Equipment Inspection and Repair	9	100%	0	8/1/2020	\$4,659,436	\$3,516,023	\$3,516,023	\$3,210,384	\$2,653,527
09. Turbine Inspection and Repairs	1	100%	0	7/23/2020	\$0	\$193,110	\$193,110	\$193,110	\$183,116
10. Generator Inspection and Repairs	1	100%	0	7/28/2020	\$0	\$54,000	\$379,500	\$54,000	\$54,000
11. Operational Test and Control Tasks	5	100%	0	7/28/2020	\$144,000	\$0	\$0	\$0	\$0
12. Unit 5 Startup and Commissioning	1	100%	0	8/1/2020	\$72,000	\$0	\$0	\$0	\$0
13. Civil Repair and Other Areas Reconstruction	7	100%	0	7/27/2020	\$495,865	\$694,555	\$694,555	\$459,230	\$433,755
14. Inspections and Tests MPT	3	100%	0	8/1/2020	\$0	\$0	\$0	\$0	\$0
15. Supplementary Tasks, Future Works & Misc.	7	57%	6	3/9/2021	\$7,306,755	\$2,927,768	\$3,299,338	\$1,985,725	\$312,122
16. Operation Expenses (Payroll, Materials, etc.)**	-	-	0	8/1/2020	\$0	\$3,694,645	\$3,694,645	\$0	\$3,694,645
				•	\$25,184,292	\$19,007,131	\$21,125,228	\$12,533,856	\$12,373,154

^{*} Includes PREPA expenses related to Program Management Office (PMO)



^{**} Includes expenses related to PREPA's craft labor and warehouse materials

Unit 5 Procurement Plan - Awarded

#	Procurement Description	Procurement Type*	Cost	Associated Workstream #	Contract #	Contractor Name
1	MPT 4 Secondary Contaiment Repair Works	Emergency Procurement	\$38,783	48	86581	5 SENSES SOLUTIONS LLC.
2	MPT 5 Secondary Contaiment Repair Works	Emergency Procurement	\$17,480	57	86581	5 SENSES SOLUTIONS LLC.
3	Removal and Mitigation of Contaminated Soil Switchyard 115 kV	Emergency Procurement	\$19,928	59	86716	5 SENSES SOLUTIONS LLC.
4	Cleaning Main Turbine Oil Cooler (MOT)		\$9,994	62	87392	5 SENSES SOLUTIONS LLC.
5	January 8,2020 - Safety Inspection		\$3,031	65	85336	ABACUS ARCHITECTURE PSC
6	Project Management and Data Analytics Support	Other	\$228,414	11	87670	ACUMENIAN LLC
7	Relocation of A/C units		\$5,040	MISC	87148	AIT TECHNOLOGIES INC
8	A/C units duct fabrication		\$5,380	MISC	87147	AIT TECHNOLOGIES INC
9	A/C equipment and duct cleaning		\$86,595	19	86734	AIT TECHNOLOGIES INC
10	Natural Gas Line Pipe Structural Repair Works	Emergency Procurement	\$908,000	47	86823	ALL CONTRACTORS SERVICES CORP
11	Trailer for Costa Sur Repairs		\$78,325	54	86814	ALL CONTRACTORS SERVICES CORP



#	Procurement Description	Procurement Type*	Cost	Associated Workstream #	Contract #	Contractor Name
12	Temporary Laboratory Offices (Rental - 12 Months)	Emergency Procurement	\$76,275	53	87245	ALL CONTRACTORS SERVICES CORP
13	Temporary Administrative Offices (Rental - 12 Months)	Emergency Procurement	\$182,475	54	86552	ALL CONTRACTORS SERVICES CORP
14	Civil Works Control Room 5-6, Compressor Room, Shift Engineer Room	Emergency Procurement	\$413,827	26-29	86653	ALL CONTRACTORS SERVICES CORP
15	Crane Rental of 150 tons and 230 feet		\$148,000	MISC	82754	ALL CONTRACTORS SERVICES CORP
16	Turbine Oil Flush		\$183,116	62	80175	ALLIED POWER TECHNOLOGIES
17	NDT Services Unit 5	Emergency Procurement	\$24,113	32	86678	ALONSO CARUS IRON WORKS INC
18	Opacity Meter Purchase		\$66,971	43	84994	AP EQUIPMENT INC / LT AUTOMATION
19	Scaffolding Services	Service Upon Request Agreement	\$381,416	65	84611	BRAND ENERGY INFRASTRUCTURE
20	Superheater-Desuperheat Link Piping Installation U. 5		\$1,766,429	30	86214	CARIBE GE INTERNATIONAL ENERGY
21	Structural Repairs Unit 1-6	Request for Quotes (RFQs)	\$2,652,000	13-17	86331	CARIBE GE INTERNATIONAL ENERGY
22	Exterior mechanical inspection of the condition of the boilers	Service Upon Request Agreement	\$83,170	1	83998	CARIBE GE INTERNATIONAL ENERGY
23	Preliminary Inspection and Steel Structural Elements for Boilers and Auxiliary Equipment (units 3-6) and Preliminary Visual Inspection of Steam Piping and Equipment and Structural Supports.	Service Upon Request Agreement	\$360,275	2	84002	CARIBE GE INTERNATIONAL ENERGY

^{*} Note: Service Upon Request Agreements refers to agreements that PREPA has in place to be used in the event that a need arises from one of the plants within the specified scope. Cost associated with these contracts are only a fraction of the total contract amount.



#	Procurement Description	Procurement Type*	Cost	Associated Workstream #	Contract #	Contractor Name
24	Interior mechanical inspection of the condition of the boilers Units 5 and 6	Service Upon Request Agreement	\$100,630	7	83998	CARIBE GE INTERNATIONAL ENERGY
25	Asbestos Removal & Disposal Works Unit 5	Emergency Procurement	\$0	12A	86559	Caribe Hydroblasting
26	Vacumm Pump Motor Repairs		\$7,577	31	87167	CORTES INDUSTRIAL ORGANIZATION
27	Project Management Services	Other	\$53,500	11	84270	CPM PR LLC
28	Geotechnical studies for Costa Sur		\$107,500	10	86920	EARTH ENGINEERS INC
29	Provide post-earthquake geotechnical evaluation of the foundation support of the different structures in the facility	Request for Quotes (RFQs)	\$349,066	10	86125	EARTH ENGINEERS INC
30	Structural Elements Inmediate Repair Work to Allow Additional Interior Inspection of the Boilers and Other Equipment of the CSPP	Service Upon Request Agreement	\$68,441	5	82470	ENERSYS ENGINEERING CORP
31	Lead Removal Services	Service Upon Request Agreement	\$18,500	4	82470	ENERSYS ENGINEERING CORP
32	Structural Repair Works Old Condensate Water Tanks A-1-4, B-1-4 (Temporary Connection)	Service Upon Request Agreement	\$220,800	20	82470	ENERSYS ENGINEERING CORP
33	Old Water Condensate Tanks Interconection Works to Unit 5 Demin Water Cycle System	Service Upon Request Agreement	\$153,000	24	82470	ENERSYS ENGINEERING CORP
34	Structural Repairs Cross Bracings Structure - Overhead Crane 1-6	Service Upon Request Agreement	\$78,492	25	82470	ENERSYS ENGINEERING CORP
35	Cable tray installation for switchgear equipment		\$32,258	MISC	86961	ENGINEERING SERVICES

^{*} Note: Service Upon Request Agreements refers to agreements that PREPA has in place to be used in the event that a need arises from one of the plants within the specified scope. Cost associated with these contracts are only a fraction of the total contract amount.



#	Procurement Description	Procurement Type*	Cost	Associated Workstream #	Contract #	Contractor Name
36	Wall Panel Installation		\$33,694	MISC	87181	ENGINEERING SERVICES
37	Repair Works on Valves (de Línea) Unit 5	Service Upon Request Agreement	\$178,818	33	83581	ENGINEERING SYSTEMS SALES
38	High Energy and Auxiliary steam and water pipes assessment for units 5 & 6		\$152,710	42	83534	ENVIRONICS ENGINEERING
39	Condenser Tube Cleaning		\$193,325	38	84907	ENVIRONICS ENGINEERING
40	Lead Paint and Asbestos Sampling Analysis		\$6,425	12, 12A	79564	Environmental Health & Safety Services
41	Project Financial Controls Support		\$26,775	11	2020-P00087	FUSIONWORKS
42	Visual Inspection and Ultrasonic Inspect API 653	Request for Quotes (RFQs)	\$134,448	6	85840	Heisen Global Engineering (HGE)
43	Condition Survey and Testing for Concrete Pedestals for Power Turbine and Generator Units , 5 and 6		\$55,160	8	85980	Heisen Global Engineering (HGE)
44	Design Work - Structural Repairs Condensa Tank 5 & Old Water Condensate tanks	Request for Quotes (RFQs)	\$146,662	22	86344	Heisen Global Engineering (HGE)
45	Structural engineering consulting		\$163,650	MISC	86919	Heisen Global Engineering (HGE)
46	Water Treatment Tank 2 Cleaning		\$120,000	19	85153	INDUCHEM SERVICES
47	Boiler Hydroblasting	Service Upon Request Agreement	\$120,000	19	80903	INDUCHEM SERVICES

^{*} Note: Service Upon Request Agreements refers to agreements that PREPA has in place to be used in the event that a need arises from one of the plants within the specified scope. Cost associated with these contracts are only a fraction of the total contract amount.



#	Procurement Description	Procurement Type*	Cost	Associated Workstream #	Contract #	Contractor Name
48	Condenser Discharge Tube and Tunnel Cleaning		\$155,691	38	81017	INDUCHEM SERVICES
49	Lead Removal and Disposal Works - Structural Repairs Units 1-6	Emergency Procurement	\$150,000	12	86566	J R INDUSTRIAL CONTRACTORS INC
50	Insulation Repair Works in Boiler 5	Service Upon Request Agreement	\$450,000	37	86283	J R INDUSTRIAL CONTRACTORS INC
51	Integration of Raw Water Pumps Controls into DCS Foxboro	Service Upon Request Agreement	\$145,606	43	85590	LT AUTOMATION
52	Integration of Metering Station into DCS	Service Upon Request Agreement	\$92,110	43	83009	LT AUTOMATION
53	Multimedia filter replacement for new water treatment plant	Service Upon Request Agreement	\$247,755	MISC	81974	LT AUTOMATION
54	Controls from interconection work, all water condensate tank	Service Upon Request Agreement	\$46,232	24	65206	LT AUTOMATION
55	Relocation of Foxboro monitors and power circuits for opacity meters		\$66,500	43	87275	LT AUTOMATION
56	Integration of Demineralizer Controls into DCS	Service Upon Request Agreement	\$53,100	43	84651	LT AUTOMATION / Scheinder
57	Condensate Recircualting Discharge Pipe (12 ft diameter)	Emergency Procurement	\$975,000	39	86664	MALNAT ASOCIADOS
58	Underwater Visual Inspection of the Tunnels Condenser 5 and 6	Emergency Procurement	\$83,100	9	86495	MARINE DIVING CONTRACTORS
59	Overhead Crane Installation and Commissioning		\$1,553,502	36	82717	MASTER LINK CORPORATION

^{*} Note: Service Upon Request Agreements refers to agreements that PREPA has in place to be used in the event that a need arises from one of the plants within the specified scope. Cost associated with these contracts are only a fraction of the total contract amount.



#	Procurement Description	Procurement Type*	Cost	Associated Workstream #	Contract #	Contractor Name
60	Turbine-Generator Inspection Work	Emergency Procurement	\$54,000	61	87153	MECHANICAL DYNAMICS ANALYSIS.3
61	Necessary Office Supplies		\$2,513	MISC	87240	PR OFFICE SOLUTIONS
62	Structural Repairs Condensate Tank 5	Emergency Procurement	\$345,468	22	86704	R G ENGINEERING INC
63	Repairs on fire protection systems	Service Upon Request Agreement	\$115,000	MISC	84101	R G ENGINEERING INC
64	Project Management Support	Other	\$58,635	11	85215	SCOTTMADDEN, INC
65	Cargo Elevators Repairs	Service Upon Request Agreement	\$20,545	41	82412	VERTECH INC
66	Existing Overhead Crane Units 3 and 6, Certification		\$34,412	25	84013	VITAL ENERGY CORPORATION
67	Boiler super vacuum	Service Upon Request Agreement	TBD	TBD 18		INDUCHEM SERVICES
		Estimated Total	\$14,814,104			





Unit 6 Status Overview



Unit 6 Executive Summary

62.0%

% Completion

63.9%

Time Elapsed

Management Notes:

- PREPA PMO and Power Plant Manager met on 10/15/2020 with Union leadership to identify strategies for delay catch ups on PREPA work stream tasks
 - PREPA is identifying additional resources to expedite mechanical and electrical works. Some resources are being temporary relocated to other Power Plants to solve unexpected failures which are reducing unit's output capacity
- Stack and refractory works at 50% completion; expected end date 11/15 (workstream delayed due to weather conditions)
- Condensate tank works at 34% completed; welding of floor plates to start this week
- Commenced repairs on Air Heater ducts and works on hydrogen coolers expected to start on 10/19

27 10 Identified Workstreams at Workstreams Added Workstreams 100% Completion (Since Last Report) **Budget** On-Track Under-Budget Over-Budget **Schedule** On-Track Completed Delayed Overdue 10

Scope and Metrics by Workstream

Financials	
Budget Baseline	\$19,078,286
Forecast Cost	\$23,052,060
Total Invoiced Amount	\$4,683,237
PREPA Expenses	\$0
Total Expenses	\$4,683,237
Total Disbursements	\$328,016
Total Committed in Contracts	\$14,764,945

Procurement Status 89.0% % Procurements



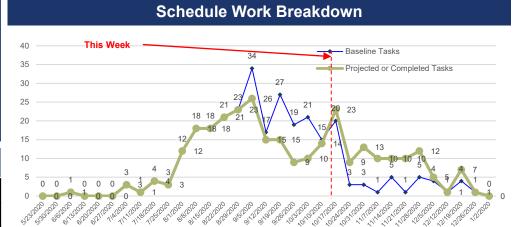
Emergency

Procurements

Total

Procurements

\$14.8M **Amount Contracts** Awarded



Schedule Metrics

307 **Total Scheduled Tasks**

188

YTD Tasks Completed

37 Pending Tasks On-Track

73

Pending Tasks Delayed

9 Pending Tasks Overdue

61 Tasks Due in October

45

Tasks Due in November

9 Tasks Due in December

Max. Weekly Headcount (based on week of 10/05)



133

PREPA's Avg. Headcount



122 Contractor's Avg. Headcount

255 Max. Total Headcount

Unit 6 Project Summary by Workstream

ID	Workstream Description	Forecast Cost	Resources Assigned	% Complete	Scheduled Start	Scheduled Finish	Status	Tasks Completed	Tasks Pending
1	Project Initiation, Procurement, and Other Work Activities	\$663,400	PREPA, Acumenian, Fusionworks, ScottMadden	42%	5/22/2020	11/24/2020	On Track	17	1
2	Emergency Declaration	\$0	PREPA	100%	6/18/2020	6/18/2020	Completed	1	0
3	Lead Removal Works	ead Removal Works \$154,733 JR Industrial Contractors 100% 7/21/2020		7/21/2020	9/4/2020	Completed	1	0	
4	Asbestos Removal Works \$100,000 Caribe Hydroblasting (CHED) 100% 7/20/2020		9/5/2020	Completed	1	0			
5	Structural Steel Repair Works Unit 6	\$1,348,000	General Electric Fieldcore (GEF)	98%	7/27/2020	10/16/2020	Delayed	65	2
6	Scaffolding Services	\$425,000	BRAND ENERGY INFRASTRUCTURE	100%	6/15/2020	6/29/2020	Completed	1	0
7	Boiler Wash	\$125,000	Induchem	100%	6/5/2020	7/13/2020	Completed	1	0
8	Cargo Elevator Repairs	\$15,000	Vertech	100%	8/15/2020	9/14/2020	Completed	0	0
9	Crane Repairs (workstream not needed for unit start-up)	\$830,000	Master Link	0%	12/23/2020	2/24/2021	On Track	0	2
10	Air-Preheater Repairs	\$1,541,195	JC Mechanical Industrial Services LLC	100%	8/17/2020	9/9/2020	Completed	1	0
11	Balance of Plant Works	\$230,226	PREPA	0%	9/12/2020	11/25/2020	Delayed	0	0
12	Boiler Repair Works	\$2,550,508	PREPA	55%	6/1/2020	11/23/2020	On Track	3	10



Unit 6 Project Summary by Workstream (Cont'd)

ID	Workstream Description	Forecast Cost	Resources Assigned	% Complete	Scheduled Start	Scheduled Finish	Status	Tasks Completed	Tasks Pending
13	Burner Repairs	\$500,000	PREPA	100%	8/25/2020	9/25/2020	Completed	1	0
14	Condensate Circulating Water System Repairs	\$1,111,325	Environics Engineers, Malnat	100%	6/29/2020	10/3/2020	Completed	3	0
15	Condensate Storage Tank Demolition, Design, and New construction	\$962,513	Alonso Carus	62%	7/1/2020	12/22/2020	Delayed	2	4
17	Desuperheater Replacement Crossover Links	\$1,694,370	CARIBE GE INTERNATIONAL ENERGY	100%	7/24/2020	9/9/2020	Completed	58	0
18	Electrical and Instrumentation Works	\$1,443,065	PREPA, AIT Technologies, Engineering Services, ESI, LT Automation	54%	6/24/2020	11/26/2020	Delayed	13	37
19	Line and Safety Valves Repairs	\$186,723	Ensysa	61%	8/6/2020	11/21/2020	Delayed	0	1
20	Mechanical Inspection, Repair & Alignment (Heaters, Fans, Pumps, and Valves)	\$681,032	PREPA	20%	8/17/2020	12/2/2020	Delayed	3	20
21	Pipe Type Cable Repairs	\$104,000	Environics Engineers	0%	10/14/2020	10/27/2020	On Track	0	1
22	Stack, Insulation, and Refractory Works	\$749,676	JR Industrial Contractors	50%	6/1/2020	11/20/2020	On Track	3	4
23	Turbine-Generator Repairs	\$6,699,587	PREPA, MD&A	51%	8/12/2020	12/14/2020	On Track	14	23
24	Cooler Main Oil Tank Cleaning and Repairs and Hydrogen Cooler Cleaning	\$150,000	PREPA	30%	9/1/2020	11/16/2020	Delayed	0	1



Unit 6 Project Summary by Workstream (Cont'd)

ID	Workstream Description	Est. Cost	Resources Assigned	% Complete	Scheduled Start	Scheduled Finish	Status	Tasks Completed	Tasks Pending
25	Unit 6 Start Up and Commissioning	\$0	PREPA	0%	12/17/2020	12/23/2020	On Track	0	1
26	MPT 6 Secondary Containment Repair Works	\$29,550	5 Senses Solutions	95%	4/16/2020	10/14/2020	Overdue	0	1
27	Operational Test and Control Tasks Unit 6	\$0	PREPA	0%	11/23/2020	12/17/2020	On Track	0	11
MISC	Miscellaneous Expenses and Other Contracts	\$757,157	Heinsen Global Engineering (HGE), LT Automation	-	8/3/2020	TBD	On Track	0	0
	Total	\$23,052,060							



Unit 6 Procurement Plan - Pipeline

The following table outlines the procurements currently in the pipeline to support the Costa Sur U6 Assessment and Start-Up Repairs:

#	Procurement Description	Procurement Type*	Est. Amount	Status	Target Date
1	Mitigation Contract – Mechanical Repairs with Stamp R (Boiler)	Service Upon Request Agreement	\$250,000	Contract Available When Needed	TBD
2	Mitigation Contract – Mechanical Repairs without Stamp R	Service Upon Request Agreement	\$450,000	Contract Available When Needed	TBD
3	Mitigation Contract – Electrical and Instrumentation Repairs	Service Upon Request Agreement	\$125,000	Contract Available When Needed	TBD
4	New Natural Gas Ignitors (Not part of the Costa Sur Repairs budget)	TBD	\$1,928,000	In-Planning Stage	TBD
		Total	\$2,788,000		-



Unit 6 Procurement Plan – Awarded

The following table outlines the procurements currently in the pipeline to support the Costa Sur U6 Assessment and Repairs project:

#	Procurement Description	Procurement Type*	Est. Amount	Contract #	Vendor Name	
1	MPT 6 Secondary Contaiment Repair Works	Emergency Procurement	\$29,550	86581	5 SENSES SOLUTIONS LLC.	
2	Project Management and Data Analytics Support	Other	\$260,000	87670	ACUMENIAN LLC	
3	Civil, electrical and mechanical repairs to the Excitation Control Room Unit 6	Emergency Procurement	\$170,000	87646	AIT TECHNOLOGIES INC	
4	Turbine Oil Flush		\$59,895	80175	ALLIED POWER TECHNOLOGIES	
5	Design & Construction of a New Water Condensate 6	Request for Proposal Process	\$845,013	87958	ALONSO CARUS IRON WORKS INC	
6	Scaffolding Services	Service Upon Request Agreement	\$425,000	84611	BRAND ENERGY INFRASTRUCTURE	
7	Structural Repairs Unit 1-6	Request for Quotes (RFQs)	\$1,348,000	86331	CARIBE GE INTERNATIONAL ENERGY	
8	Desuperheater Link Repairs		\$1,694,370	87333	CARIBE GE INTERNATIONAL ENERGY	
9	Boiler Tube Purchase (Bifurcate)		\$137,564	87998	CARIBE GE INTERNATIONAL ENERGY	
10	Asbestos Removal & Disposal Works Unit 5	Emergency Procurement	\$100,000	86559	Caribe Hydroblasting	



The following table outlines the procurements currently in the pipeline to support the Costa Sur U6 Assessment and Repairs project:

#	Procurement Description	Procurement Type*	Est. Amount	Contract #	Vendor Name	
11	Project Management Services	Other		84270	CPM PR LLC	
12	Transformer Testing		\$48,000	87169	ENGINEERING SERVICES	
13	Safety Line Valves Repairs		\$186,723	85203	ENGINEERING SYSTEMS SALES	
14	Condenser Tube Cleaning and Outlet Boxes		\$193,325	84917	ENVIRONICS ENGINEERING	
15	Lead Paint and Asbestos Sampling Analysis			87203	Environmental Health & Safety Services	
16	Project Financial Controls Support		\$30,000	2020-P00087	FUSIONWORKS	
17	Boiler Assessment	Service Upon Request Agreement	\$450,000	TBD	GE FIELDCORE	
18	Boiler Hydroblasting	Service Upon Request Agreement	\$125,000	80903	INDUCHEM SERVICES	
19	Internal Cleaning Services for Steam Generator			78061	INDUCHEM SERVICES	
20	Lead Removal and Disposal Works - Structural Repairs Units 1-6	Emergency Procurement	\$150,000	86566	J R INDUSTRIAL CONTRACTORS INC	
21	Stack cleaning , painting, refractory, and insulation work	Service Upon Request Agreement	\$600,000	86283	J R INDUSTRIAL CONTRACTORS INC	



The following table outlines the procurements currently in the pipeline to support the Costa Sur U6 Assessment and Repairs project:

#	Procurement Description	Procurement Type*	Est. Amount	Contract #	Vendor Name
22	Replacement of Baskets Air Pre-heaters Baskets Unit 6	Emergency Procurement	\$387,705	87663	JC MECHANICAL INDUSTRIAL SERVICES LLC
23	Reverse Osmosis Filter Membrane Installation for Water Treatment		\$120,196	87433	LT AUTOMATION
24	Controls from interconnection work, all water condensate tank	Service Upon Request Agreement	\$67,000	65206	LT AUTOMATION
25	Condenser Discharge Tube Unit 6	Emergency Procurement	\$918,000	87630	MALNAT ASOCIADOS
26	High Pressure Heater Repairs			81838	MALNAT ASOCIADOS
27	Turbine and Generator Repairs		\$6,170,604	87501	MECHANICAL DYNAMICS ANALYSIS.3
28	Project Management Support	Other	\$30,000	85215	SCOTTMADDEN, INC
29	Cargo Elevators Repairs	Service Upon Request Agreement	\$15,000	82412	VERTECH INC
30	Consumables (rods, angles, gases, etc.)	Service Upon Request Agreement	\$100,000	TBD	TBD
31	Pipe Type Cable Repairs	Direct Negotiations	\$104,000	TBD	TBD
		Total	\$14,764,945		





Appendix



DEMAND (

CUSTOMERS ENERGIZED

2191



99.75%

- 10	1,464,542

Emergency Management KPI Dashboard

			Installed	Maximum Capacity	
Power Plant	Unit	Power Plant Type	Generation (MW)	(MW)	Actual Generation (MW)
San Juan	9	Base Load	100	90	87
Costa Sur	5	Base Load	410	287	282
Aguirre	2	Base Load	450	180	178
Aguirre CC	Stag 1	Base Load	296	150	91
Aguirre CC	Stag 2	Base Load	296	145	147
San Juan CC	CT 6	Base Load	160	160	150
San Juan CC	STG 6	Base Load	60	60	46
Cambalache	2	Peaker	82.5	75	77
Daguao	1-2	Peaker	21	16	0
Palo Seco Hidrogas	1-1	Peaker	21	19	18
Palo Seco Hidrogas	2-1	Peaker	21	21	21
Jobos	1-1	Peaker	21	19	19
Jobos	1-2	Peaker	21	18	0
Mayaguez	2	Peaker	55	55	39
Mayaguez	3	Peaker	55	25	0
Mayaguez	4	Peaker	55	50	50
Yabucoa	1-1	Peaker	21	18	0
Vega Baja	1-1	Peaker	21	21	21
Hidroeléctricas		Peaker	26	30	17
EcoEléctrica	1	Base Load	183	183	147
EcoEléctrica	2	Base Load	183	183	147
ECO	Steam	Base Load	184	184	147
AES	1	Base Load	262	238	239
AES	2	Base Load	262	237	239
Sub - Total			3267	2464	2162
Renewables		Renewables	194	29	29
Total			3461	2493	2191

						Ge	neratio	n Systen	n Progre	ss							
500 500 500	3,250	3,202	3,482	3,819	3,798	3,802	3,404	3,335	3,260	3,520	3,243	3,196	3,389	3,228	3,234		
500	2,553	2,565	2,528	2,425	2,538	2,609	2,653	2,460	2,443	2,279	2,388	2,383	2,522	2,494		2,493	Customers
500 — 500	1,464	1,463	1,465	1,457	1,464	1,454	1,466	1,462	1,466	1,463	1,466	1,466	1,460	1,466	1,464	1,464	
0 —	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	1-Oct	2-Oct	3-Oct	4-Oct	5-Oct	6-Oct	7-Oct	8-Oct	9-Oct	
			—Peak L	_oad			—M:	ax Cap (w)	Renewable	es			—Custo	omers			

Generation Units Out of Service					
			Installed Generation	Maximum Capacity	
Power Plant	Unit	Power Plant Type	(MW)	(MW)	Expected date to be onli
San Juan	7	Base Load	100	70	TBD
San Juan	8	Base Load	100	70	Available for Emergen
Palo Seco	3	Base Load	216	90	December 19, 2020
Palo Seco	4	Base Load	216	150	October 9, 2020
Costa Sur	6	Base Load	410	410	December 23, 2020
Aguirre	1	Base Load	450	450	October 12, 2020
Aguirre CC	Stag 1 (1-4)	Base Load	50	30	October 9, 2020
Aguirre CC	Steam 1	Base Load	96	18	TBD
Aguirre CC	Stag 2 (2-2)	Base Load	50	50	October 27, 2020
Aguirre CC	Steam 2	Base Load	96	50	TBD
San Juan CC	CT 5	Base Load	160	160	October 9, 2020
San Juan CC	STG 5	Base Load	60	60	October 9, 2020
Cambalache	3	Peaker	82.5	77	November 23, 2020
Daguao	1-1	Peaker	18	18	October 9, 2020
Aguirre Hidrogas	2-1	Peaker	21	21	TBD
Aguirre Hidrogas	2-2	Peaker	21	21	TBD
Palo Seco Hidrogas	1-2	Peaker	21	19	October 9, 2020
Palo Seco Megagens	1, 2, 3	Peaker	66	66	Available for Emergen
Costa Sur Hidrogas	1-1	Peaker	21	21	TBD
Costa Sur Hidrogas	1-2	Peaker	21	21	TBD
Mayaguez	1	Peaker	55	25	TBD
Yabucoa	1-2	Peaker	21	20	TBD
Vega Baja	1-2	Peaker	21	19	TBD
Sub-Total			2372.5	1936	
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	1	Base Load	85	65	Long Term Outage
Palo Seco	2	Base Load	85		Long Term Outage
San Juan Steam	10	Base Load	100		Long Term Outage
Sub-Total			416	65	
Total			2788	2001	
*The dates a	are as of current information and s	system conditions, which may vary	or change with unexpected ever	ents in the electrical system of	peration.

AS OF OCT 9, 2020

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

