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Mar 31, 2020

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

IN RE:

REQUEST FOR PROPOSALS FOR TEMPORARY EMERGENCY GENERATION CASE NO.: NEPR-AP-2020-0001

SUBJECT:

Progress and Status Report

MOTION TO INFORM

TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

COMES NOW the Puerto Rico Electric Power Authority through the undersigned legal representation and respectfully informs:

- 1. The Puerto Rico Electric Power Authority (PREPA) is in the process of 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. PREPA herein submits to the to the Energy Bureau of the Puerto Rico Public Service Regulatory Board (the "Energy Bureau") the *Costa Sur Damage Assessment and Repairs Project Status Report* dated March 31, 2020 (the "Report"). The Report is a comprehensive document that outlines PREPA's progress in its assessment, repairs, and procurement activities aimed to repair the Costa Sur power plant facility.
- 2. As ordered by the Energy Bureau, PREPA will submit an updated report on the project and the status on or before the last day of each month.

WHEREFORE, PREPA requests the Energy Bureau to note the filing of the Report.

RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 31st day of March 2020.

/s Katiuska Bolaños Katiuska Bolaños kbolanos@diazvaz.law TSPR 18888

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Exhibit I

Costa Sur Damage Assessment and Repairs Project Status Report dated March 31, 2020



Puerto Rico Electric Power Authority (PREPA)

Costa Sur Damage Assessment and Repairs Progress Status Report March 31, 2020

Introduction, Project Details, and Outline

Introduction:

PREPA is in the process of 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. This report outlines PREPA's progress in its assessment, repairs, and procurement activities for Costa Sur.

Project Details:

Project Name	Costa Sur Damage Assessment and Repairs						
Project Sponsor(s)	Fernando Padilla / Daniel Hernández Project Lead Carlos Negrón PMO Lead Jaime Umpierre						
Scope Statement	Complete assessment of sustained damages in Costa Sur power plant and conduct necessary repairs to bring Unit 5 back in commercial operations by no later than the 4th quarter of 2020						

Report Outline	Page #
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■ Project Summary by Workstream	
Procurement Update	9
Project Schedule	10
■ Emergency Management KPI Dashboard	11
Mitigation Plans – RFP Temporary Generation (Status Update)	12
Project Team and Roles and Responsibilities	



Executive Summary

Scope, Budget, and Schedule Total Estimated Project Cost Per diem, mileage, overhead, and other costs still being developed \$34,397,801

TBD

Total Payments

TBD

Total Amount Invoiced

TBD

% Utilization (Invoices)

TBD

% Utilization (Payments)

Scope, Budget, and Schedule Highlights

- 8 of the 52 identified workstreams have been completed
- Governing Board approved resolution to repair Unit 5 structures though direct negotiations with GE at approximate cost \$2.2M
- Removal of lead paint and condense tanks rebuilding are top procurement priorities. PREPA to select independent PM.

52

Identified Workstreams

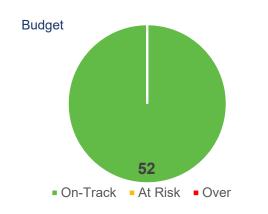
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Workstreams at 100% Completion

Key Highlights / Final Report Assessment Status

- PREPA is prepared to use emergency procurement procedures approved by the Governing Board via resolution (# 4598) to Procedure for Acquisition of Goods and Services in Emergency Situation
- Emergency procurement procedures will help PREPA expedite the procurement of all goods and services needed to support the repairs for Costa Sur's Unit 5
- Detailed project schedule with project dependencies and critical path is currently in development (see slide #10 on project schedule for details)
- Task 1 through 10 in the Project Summary by Workstream slides (see slides # 4-8) are engineering and technical studies, two have not been completed:
 - Task 8 "Inspection and Condition Survey Water Tunnel Condensers 5 and 6" delayed due to travel halts due to the COVID-19 virus situation have created delays; PREPA will seek alternatives if this represents a long-term delay.
 - Task 9 "Geotechnical Post Seismic Event Condition Survey", currently in progress and expected to be completed by week 1 in July. No reports available at this moment.

Project Status Summary by Workstream





Upcoming Milestones

Milestone Description	Target Date
Complete inspection and condition survey for water tunnel condensers	4/6/2020
Secure contractor for lead removal licensing and work	4/17/2020
Secure contractor for condensate tank work	4/24/2020

Key Procurements in Pipeline

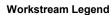
Contract Description	Workstream
Lead Removal Licensing and Work	All
Structural Steel Repair Works Unit 5	All
Condensate Water Tanks Work	Condensate Tanks



Project Summary by Workstream

Metric Legend								
Overdue	At-Risk		On-Track					

#	Workstream Description	Resources	Est. Cost	Status	Metric	Workstream Notes
1	Exterior Inspection Boilers Units 5 and 6	GE/Fieldcore	\$75,000	Work and Final Report Completed		
2	Preliminary Structural Inspection Work Units 3, 4, 5 and 6	GE/Fieldcore	\$40,000	Work and Final Report Completed		
3	Initial Assessment High Energy Piping Post Seismic Event Units 5 and 6	GE/Fieldcore	\$23,000	Work and Final Report Completed		
4	Lead Removal for Immediate Repair Works for Safety and Continuing Inspection Work Units 3, 4 and 5	Central Industrial	\$5,000	Work and Final Report Completed		
5	Immediate Repair Works For Safety and Continuing Inspection Work Units 3, 4 and 5	Enersys	\$100,000	Work Completed		
6	Water and Fuel Tank Condition Survey (20 Tanks)	HGE, PSC	\$140,000	Work and Final Report Completed		
7	Interior Inspection Work Boilers Units 5 and 6	GE/Fieldcore	\$75,000	Mobilization Work		
8	Inspection and Condition Survey Water Tunnel Condensers 5 and 6	GE/Fieldcore	\$150,000	On Contract Process		 Delayed due to the COVID-19 travel halts made informed by provider PREPA will seek alternatives if halt represent delays
9	Geotechnical Post Seismic Event Condition Survey	Earth Engineers, PSC	\$325,000	On Contract Process		The studies are in progress and projected date for reports to be completed is the first week of July
10	Project Management and Inspection Team for Repairs Unit 5 and Other Works	PREPA's Contractor	\$1,020,000	Planning Phase		 PREPA to begin search of firm that provides Project Management services
11	Phase 2, 3 and 4 Units 1-6 - Lead Removal Licensing and Work (cost based on Palo Seco's lead removal contract)	PREPA's Contractor	\$1,100,000	Proposal Request Phase		
12	Unit 5 Structural Steel Repair Works (Phase 2 Only)	GE/Fieldcore	\$1,308,328	Proposal Request Phase		



Eng. & Technical Studies
U5 Structural and Boiler Repairs
Fuel & Water Tank Repairs

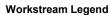
U5 Equipment Repairs
Office & Control Room Repairs
Temporary Operational Rooms

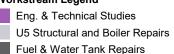
Mark VI and DCS Foxboro
U5 Start-Up & Commissioning
Project Management Team



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	Overdue	At-Risk	On-Track

#	Workstream Description	Resources	Est. Cost	Status	Metric	Workstream Notes
13	Unit 5 Structural Steel Repair Works (Phase 3&4 and Buckstays and Guides)	GE/Fieldcore	\$657,503	Proposal Request Phase		
14	Unit 1&2 Structural Steel Repair Works (Phase 2)	GE/Fieldcore	\$286,669	Proposal Request Phase		
15	Unit 3&4 Structural Steel Repair Works (Phases 2&3)	GE/Fieldcore	\$282,138	Proposal Request Phase		
16	Unit 6 Structural Steel Repair Works (All Phases and Buckstays and Guides) and Mobilization / Demobilization for All Units	GE/Fieldcore	\$1,465,363	Proposal Request Phase		
17	Interior Boiler Unit 5 Repair Works	GE/Fieldcore	\$500,000	Planning Phase		
18	Environmental Works on Unit 5 (Boiler Wash and Other)	PREPA's Contractor	\$1,000,000	Planning Phase		
19	Temporary Condensate Water Tanks Repairs and New Water Piping with Supports and Commissioning	PREPA's Contractor	\$250,000	Proposal Request Phase		
20	New Raw Water Tank 1 (Design and Build)	PREPA's Contractor	\$6,000,000	Planning Phase		
21	New Condensate Water Tanks Design and Build & Construction	PREPA's Contractor & Personnel	\$1,700,000	Planning Phase		 Tank 5 to be repaired; options include repairing existing tank or running a temporary connection to tank 3&4 Tank 6 to be demolished and reconstructed
22	Demineralized Water Treatment Plant Works (Demi Aero, Demi Resina)	PREPA's Contractor & Personnel	\$840,000	Work on Progress		
23	Structural Repair Works On Overhead Crane 5 and 6	PREPA's Contractor	\$48,000	Work Completed		
24	Civil and Interior Works at Unit 5 and 6 Control Room	PREPA's Contractor	\$240,000	Proposal Request Phase		



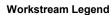


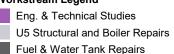
Mark VI and DCS Foxboro
U5 Start-Up & Commissioning
Project Management Team





#	Workstream Description	Resources	Est. Cost	Status	Metric	Workstream Notes
25	Compressor Room Demolition and Reconstruction	PREPA's Contractor	\$120,000	Proposal Request Phase		
26	Engineering Room Demolition and Reconstruction	PREPA's Contractor	\$120,000	Proposal Request Phase		
27	Civil Repair Work Shift Engineer Room	PREPA's Contractor	\$240,000	Proposal Request Phase		
28	Crossover Link Desuperheater R&L Installation Work	PREPA's Contractor	\$1,800,000	Planning Phase		
29	Mechanical Inspection, Repair & Alignment (Fans and Pumps)	PREPA's Personnel	\$120,000	Planning Phase		
30	Non-Destructive Tests On Steam Piping Unit 5	PREPA's Contractor	\$300,000	Planning Phase		
31	Repair Works on Valves (de Línea) Unit 5	PREPA's Contractor	\$120,000	Planning Phase		
32	Repair Work on Safety Valves Unit 5	PREPA's Contractor	\$180,000	Planning Phase		
33	Overhead Crane for Units 3-6 (This crane shall be used for maintenance work on Units 5 and 6)	PREPA's Contractor	\$5,200,000	Work on Progress		
34	Insulation Repair Works on Boilers Unit 5	PREPA's Contractor	\$700,000	Planning Phase		
35	Mechanical Repair Works on Condensers Unit 5	PREPA's Contractor	\$180,000	Planning Phase		
36	Condenser Circulator Discharge Pipe Coating	PREPA's Contractor	\$1,800,000	Planning Phase		



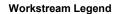


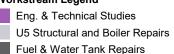






#	Workstream Description	Resources	Est. Cost	Status	Metric	Workstream Notes
37	Cargo Elevators Units 5 and 6 Repair Works	PREPA's Contractor	\$60,000	Work Completed		
38	Inspection on High Energy Supports (Pipe Hangers)	PREPA's Contractor	\$250,000	Planning Phase		
39	Emergency Generators, Measuring Station, Automation, TWI, Opacimeters 5-6, Heater Repairs, Safety Valves, E Heater Repairs, Oil Flush Turbine U5, Induced and Forced Fans Actuators Installation	PREPA's Contractor & Personnel	\$1,812,000	Planning Phase		
40	DCS Foxboro (Boilers)	PREPA's Contractor	\$60,000	Planning Phase		
41	Mark VI - Turbines	PREPA's Contractor	\$60,000	Planning Phase		
42	Trip Tests Boilers and Turbine	PREPA's Personnel	\$6,000	Planning Phase		
43	Repairs on Structural Support Natural Gas Line Pipe	PREPA's Contractor	\$1,000,000	Planning Phase		
44	Inspection and Tests MPT Unit 5 and Repair of Dikes	PREPA's Personnel	\$42,000	Planning Phase		
45	Reestablishment of Potable Water System	PREPA's Personnel	\$12,000	Planning Phase		
46	Reestablishment of Compressed Gases, Sulfuric Acid, CO2 and Caustic Soda Systems	PREPA's Contractor	\$12,000	Planning Phase		
47	Blow Off Pumps - Tests	PREPA's Personnel	\$6,000	Planning Phase		
48	Hydrostatic Test Boiler Unit 5	PREPA's Personnel	\$6,000	Planning Phase		





Mark VI and DCS Foxboro
U5 Start-Up & Commissioning
Project Management Team





#	Workstream Description	Resources	Est. Cost	Status	Metric	Workstream Notes
49	Temporary Laboratory Preparation and Commissioning (12'x40') Trailer for 1 year, including power, communications, and water connection. Installation of an exhaust hood for tests	PREPA's Contractor and PREPA's Personnel	\$60,000	Proposal Request Phase		 Working on specifications for renting temporary mobile space
50	Temporary office for Shift Engineer (12'x 40') Trailer for 1 year, including power, communications, and water connection	PREPA's Contractor	\$28,800	Proposal Request Phase		 Secured room in Costa Sur power plant facility that is in good conditions to be used
51	New Laboratory and Administration Building	PREPA's Contractor	\$2,400,000	Planning Phase		
52	Units 5 Start Up and Commissioning Test and Commissioning Boilers and Turbo-Generator	PREPA's Contractor and PREPA's Personnel	\$72,000	Planning Phase		



Eng. & Technical Studies
U5 Structural and Boiler Repairs
Fuel & Water Tank Repairs

U5 Equipment Repairs
Office & Control Room Repairs
Temporary Operational Rooms

Mark VI and DCS Foxboro
U5 Start-Up & Commissioning
Project Management Team



Procurement Plan

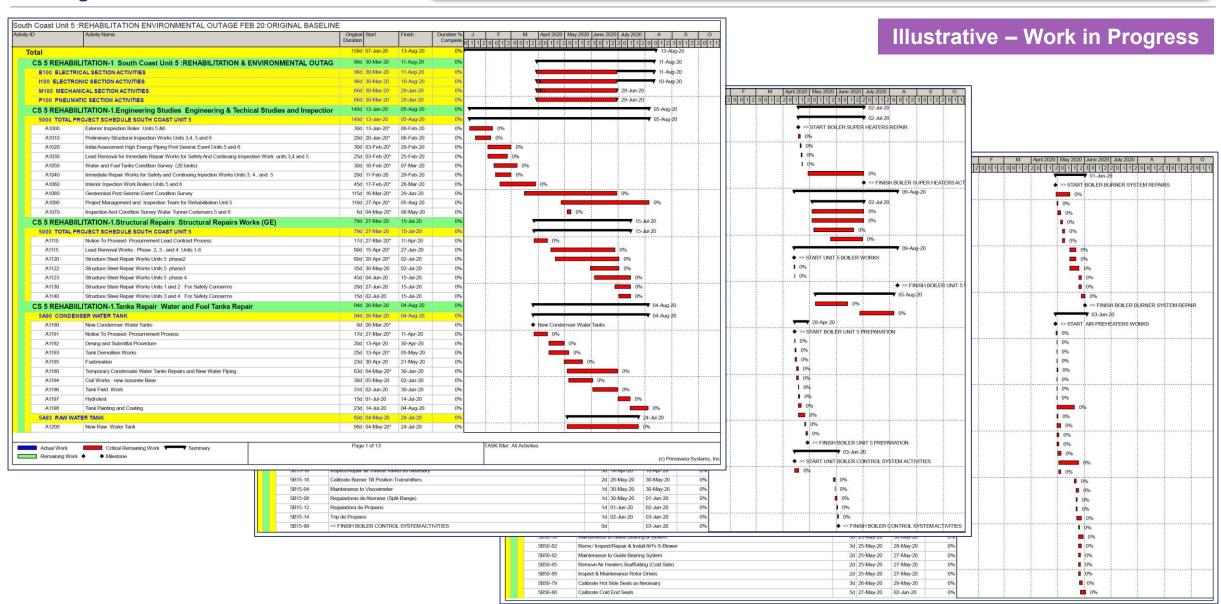
The following table outlines the procurements currently in the pipeline to support the Costa Sur Assessment and Repairs project:

Procurement Description	Procurement Type	Contract Type	Est. Amount	Status	Target Date	Update
Task 11: Phase 2, 3 and 4 Units 1-6 - Lead Removal Licensing and Work	Competitive Emergency Procurement	Construction	\$1.1M	Pending Competitive Process	4/17/2020	Pending CEO approval for procedures for acquisition of goods or services in emergency situations
Task 12: Phase 2 - Structural Steel Repair Works Unit 5	Direct Negotiation	Engineering & Construction	\$5.2M	Contract Negotiations	4/24/2020	\$2.2MM will be for CS5
Task 21: New Condensate Water Tanks Design and Construction	Competitive Emergency Procurement	Engineering & Construction	\$1.7M	On-Hold	4/24/2020	Pending CEO approval for procedures for acquisition of goods or services in emergency situations



Project Schedule

Detailed project schedule in Microsoft Project is currently in development. Detailed activities, task, dependencies, and critical path will be identified as part of the master schedule.



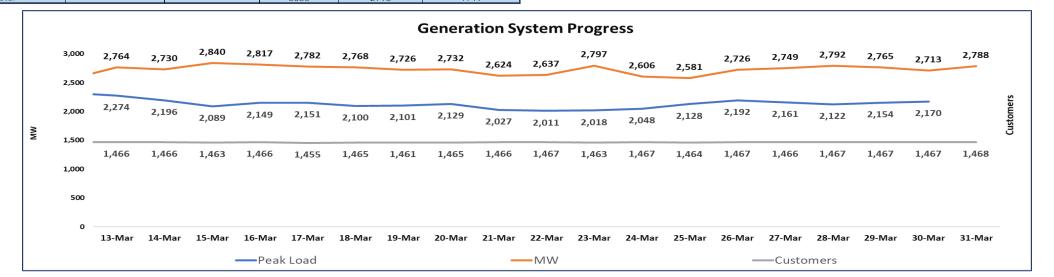
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Emergency Management KPI Dashboard

Progress of Critical Generation System						
			Installed	Maximum Capacity	Actual Generation	
Power Plant	Unit	Power Plant Type	Generation (MW)	(MW)	(MW)	
San Juan	7	Base Load	100	70	69	
San Juan	9	Base Load	100	90	88	
Palo Seco	1	Base Load	85	60	60	
Palo Seco	3	Base Load	216	150	140	
Palo Seco	4	Base Load	216	165	140	
Aguirre	1	Base Load	450	400	241	
Aguirre CC	Stag 1	Base Load	296	200	30	
Aguirre CC	Stag 2	Base Load	296	150	30	
Cambalache	2	Peaker	82.5	79	0	
Cambalache	3	Peaker	82.5	78	0	
Daguao	1-1	Peaker	18	18	0	
Daguao	1-2	Peaker	21	16	0	
Aguirre Hidrogas	2-2	Peaker	21	21	0	
Palo Seco Hidrogas	1-1	Peaker	21	21	21	
Palo Seco Hidrogas	1-2	Peaker	21	19	19	
Palo Seco Megagens	1, 2, 3	Peaker	66	66	30	
Jobos	1-2	Peaker	21	18	0	
Mayaguez	1	Peaker	55	49	0	
Mayaguez	3	Peaker	55	51	0	
Yabucoa	1-1	Peaker	21	18	0	
Vega Baja	1-2	Peaker	21	19	0	
Hidroeléctricas		Peaker	15.5	15	0	
AES	1	Base Load	262	244	244	
AES	2	Base Load	262	244	244	
EcoEléctrica	1	Base Load	177	175	128	
EcoEléctrica	2	Base Load	178	176	128	
ECO	Steam	Base Load	176	176	128	
Sub - Total			3336	2788	1739	
Renewables		Renewables	194	10	10	
Total			3530	2798	1749	

Generation Units Out of Service						
			Installed Generation	Maximum Capacity		
Power Plant	Unit	Power Plant Type	(MW)	(MW)	Expected date to be online*	
Aguirre	2	Base Load	450	300	August 31, 2020	
Aguirre CC	Steam 1	Base Load	96	50	April 10, 2020	
Aguirre CC	Steam 2	Base Load	96	50	April 30, 2020	
San Juan	8	Base Load	100	50	April 5, 2020	
San Juan CC	STG 5	Base Load	60	60	April 15, 2020	
San Juan CC	CT 5	Base Load	220	160	March 31, 2020	
San Juan CC	6	Base Load	220	120	April 17, 2020	
Aguirre CC	Stag 2 (2-2)	Peaker	50	50	April 17, 2020	
Aguirre Hidrogas	2-1	Peaker	21	21	TBD	
Palo Seco Hidrogas	2-1	Peaker	20	20	April 3, 2020	
Jobos	1-1	Peaker	21	18	June 20, 2020	
Mayaguez	2	Peaker	55	55	April 10, 2020	
Mayaguez	4	Peaker	55	50	April 30, 2020	
Yabucoa	1-2	Peaker	21	19	TBD	
Vega Baja	1-1	Peaker	21	18	May 1, 2020	
Sub-Total			1506	1041		
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	
Costa Sur	Power Plant	Base Load	820		Long Term Outage	
Palo Seco	2	Base Load	85		Long Term Outage	
San Juan Steam	10	Base Load	100		Long Term Outage	
Sub-Total			1151	0		
Total			2657	1041		
*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 MAR 31, 2020



Mitigation Plans – RFP Temporary Generation (Status Update)

Request for Proposal (RFP) for up to 500MWs of temporary mobile generation has been issued to ensure PREPA has additional sources of generation capacity before summer peak demand. Funding for temporary generation seeks to leverage federal funding available from FEMA as well as funding available through insurance claims. The table below outlines the high-level timeline of this procurement effort.

Milestone	Target Due Date
Request for Proposal Issued	March 12, 2020
Kickoff Meeting	March 18, 2020
Site Visits (Cancelled due to COVID-19 pandemic)	March 18-20, 2020
Proponents Request for Clarifications	March 31, 2020
PREPA Responds to Request for Clarifications	April 3, 2020
Proposal Submittal Deadline (RFP Closing Date)	April 7, 2020
Interviews/Presentations with Proponents	April 16-20, 2020
Selection Announcement	April 22, 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	Members	Key Roles and Responsibilities
Executive Team	Fernando PadillaDaniel Hernández	 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	 Carlos Negrón Jaime Umpierre Delis Zambrana Mireya Rodríguez Francisco Santos Fernando Padilla Daniel Hernández Sammy Rodríguez 	 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	 Delis Zambrana Francisco Santos Miguel Del Valle 	 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	 Jaime Umpierre José Bermúdez Ferdinand Correa Carlos Negrón 	 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	 Mireya Rodríguez Maricarmen Rivera Ferdinand Correa Ingrid Galarza* Carolina Colon* 	 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	 Miguel Del Valle Mireya Rodriguez Maricarmen Rivera Gerardo Morales* Carolina Colon* 	 Develop standard project status progress reports Manage stakeholder needs and request for communications
PREB/FOMB Interface Team	 Efrán Paredes Fernando Padilla Katiuska Bolanos* 	 Identify stakeholder engagement and communication needs Communicate with Management and Executive Team on stakeholder requests Review all communications issued to the stakeholder group
FEMA Interface Team	 Arturo Deliz Fernando Padilla Suzzette Díaz* 	 Identify stakeholder engagement and communication needs Communicate with Management and Executive Team on stakeholder requests Review all communications issued to the stakeholder group

