

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

NEPR

Received:

Dec 21, 2022

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IN RE:

IN RE: REVIEW OF THE PUERTO RICO
ELECTRIC POWER AUTHORITY'S 10-
YEAR INFRASTRUCTURE PLAN-
DECEMBER 2020

CASE NO. NEPR-MI-2021-0002

SUBJECT: Submittal of LUMA's December 2022
Update to PREPA-LUMA 90-Day Plan for T&D
Projects

**MOTION SUBMITTING LUMA'S DECEMBER 2022 UPDATE TO
PREPA-LUMA 90-DAY PLAN FOR T&D PROJECTS**

TO THE PUERTO RICO ENERGY BUREAU:

COME NOW LUMA Energy, LLC ("ManagementCo")¹, and **LUMA Energy ServCo, LLC** ("ServCo")², (jointly referred to as "LUMA"), through the undersigned legal counsel and respectfully submit the following:

1. Pursuant to the continued reporting requirements set forth in this Puerto Rico Energy Bureau's ("Energy Bureau") Resolution and Order of March 26, 2021,³ and in accordance with LUMA's Motion of July 15, 2021,⁴ and PREPA's and LUMA's Motion of September 21, 2021⁵, LUMA hereby submits, as *Exhibit 1* to this Motion, LUMA's December 2022 update to the PREPA-LUMA 90-Day Plan pertaining to the transmission and distribution system projects

¹ Register No. 439372.

² Register No. 439373.

³ In this Resolution and Order ("March 26th Resolution"), the Energy Bureau required, among others, that the Puerto Rico Electric Power Authority ("PREPA") "continue reporting to the Energy Bureau and [the Federal Emergency Management Agency ("FEMA")], within the next five (5) years, the progress of all ongoing efforts related to the final approval of the submitted projects not yet approved by the Energy Bureau". March 26th Resolution on page 19.

⁴ This refers to the *Motion Submitting the Corrected LUMA Presentation at the Technical Conference of July 11, 2021, and Requesting Approvals of Matters Presented and Proposed during the Technical Conference* filed by LUMA on July 15, 2021 ("July 15th Motion") wherein LUMA proposed, among others, that reporting in this docket be done quarterly and that updates to the 90-Day Plan in relation to the 10-Year Infrastructure Plan be provided to the Energy Bureau during the last month of every quarter as it is provided to FEMA. See the July 15th Motion on pages 8-9.

⁵ This refers to the *Motion Submitting September 2021 Update to PREPA-LUMA 90-Day Plan* jointly filed by LUMA and PREPA on September 21, 2021 ("LUMA September 21 Motion") wherein LUMA and PREPA informed that going forward; they would continue to file the PREPA-LUMA 90-Day Plans, instead of 90-Day updates of the 10-Year Infrastructure Plan given that FEMA only required the 90-Day Plans. See September 21 Motion on page 4.

(“T&D Projects”) (“December 2022 Update to PREPA-LUMA 90-Day Plan”) updating the status of T&D Projects and providing a summary of key next steps for the upcoming 90 days. LUMA and PREPA are submitting to the Central Office for Recovery, Reconstruction, and Resiliency (“COR3”) their respective updates to the PREPA-LUMA 90-Day Plan separately (LUMA with respect to the T&D Projects and PREPA with respect to generation-related projects), and COR3 will then submit the respective PREPA-LUMA 90-Day Plan to FEMA. Accordingly, LUMA will be submitting its 90-Day Plan updates separately to this Energy Bureau as they are submitted to COR3.

2. In addition, as *Exhibit 2* to this Motion, LUMA submits a redline version that compares the update to the PREPA-LUMA 90-Day Plan filed with this Energy Bureau on September 16, 2022 (*see Exhibit 1 of Motion Submitting September 2022 Update to PREPA-LUMA 90-Day Plan for T&D Projects* filed by LUMA on that date) with the December 2022 Update to PREPA-LUMA 90-Day Plan being submitted today.

WHEREFORE, LUMA respectfully requests that the Energy Bureau **take notice** of the aforementioned, and **accept** LUMA’s December 2022 Update to PREPA-LUMA 90-Day Plan for T&D Projects submitted herein as **Exhibit 1** to this Motion in compliance with LUMA’s reporting obligations.

RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 21st day of December 2022.

I hereby certify that I filed this motion using the electronic filing system of this Energy Bureau and that I will send an electronic copy of this motion to the attorneys for PREPA, Joannely Marrero-Cruz, jmarrero@diazvaz.law and Katiuska Bolaños-Lugo, kbolanos@diazvaz.law.



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Exhibit 1

December 2022 T&D 90-Day Plan



FEMA



LUMA 90-Day Plan

December 2022





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I. Introduction

In accordance with the directive received from FEMA to produce a 90-Day Plan, this document captures an overview of the key next steps and progress made on FEMA-funded projects for the Puerto Rico electrical system.

On June 1, 2021, LUMA assumed overall responsibilities for PREPA's T&D System as outlined within the O&M Agreement (OMA) between PREPA, P3A, and LUMA. Upon Commencement of the Service Period, PREPA refocused its efforts on projects in the Generation and Dams, Hydro, and Irrigation asset categories; while projects in the Transmission, Distribution, Substations, IT/Telecom, Buildings, and Environmental asset categories ("T&D Projects") were transitioned to and are now the responsibility of LUMA.

This 90-Day Plan provides information on various focus areas for LUMA.

II. Overview of Focus Areas for the Next 90-Days

The content below summarizes next steps across the following six areas: 1) PREPA-LUMA Coordination and Alignment; 2) Federal Grant Management; 3) Funding and Reporting; 4) Environmental and Historic Preservation; and 5) Engineering Management.

PREPA-LUMA Coordination and Alignment

PREPA and LUMA Focus Areas

- PREPA and LUMA leadership are participating in regular weekly meetings with COR3 & FEMA to ensure visibility of progress of project work, ensure the coordination and understanding of common matters, and to identify and resolve risks that involve points of integration between the two entities
- PREPA and LUMA will continue coordination to support successful operations under the OMA

Federal Grant Management

LUMA Focus Areas

- Continue working with COR3 and FEMA to obtain Project Obligations for the 72 Detailed SOWs submitted to date (i.e., 7 Substation Rebuild projects, 16 Transmission Line Rebuild projects, 3 Substation Minor Repair projects, 3

- Substation Physical Security projects, 2 Transmission Pole Replacement projects, and 34 Distribution Pole and Conductor Replacement projects, 5 Streetlight projects, 1 SCADA Remote Access and RTU Replacements project and 1 IT and Telecommunications projects)
- Continue advancing work on 428 projects towards finalizing *Detailed* SOWs for submission to COR3 and FEMA. This effort includes 406 Hazard Mitigation and EHP work. Expect to submit *Detailed* SOWs within the next 90-day period as per target schedule in Section IV
 - Continue refinement of 406 Hazard Mitigation Strategies for Distribution, Transmission, Substation and Streetlights and ongoing discussions with COR3 and FEMA for feedback and alignment
 - Developed an initial Scope of Work for the system network upgrades necessary to interconnect privately-owned energy projects of Tranche I. The project proposal will be presented to FEMA under Section 406 Hazard Mitigation.
 - During the last 90-day period, LUMA completed the following:
 - Submitted 38 *Detailed* SOWs to FEMA for approval representing \$1.02 billion in capital investments
 - Obtained FEMA Authorization and Project Obligations on *Detailed* SOWs for 9 *Detailed* SOWs representing \$72 million in capital investments
 - Progressed construction activities on 29 projects representing \$0.11 billion

Funding and Reporting

LUMA Focus Areas

- Continue tracking project actual costs in accordance with FEMA, HUD, and COR3 standards to support financial reporting requirements for federally funded projects
- Submitted progress and financial quarterly reports for period ending 9/30/2022 on all 428-obligated projects
- Submitted \$24.0 million in requests for reimbursements (RFRs) to COR3 to date and has another \$4 million in process to be submitted during the next 90 day period
- Commenced the implementation of Time Reporting and Enhancements technology project to automate RFR process related to Federally Funded

Projects and accelerate submissions to COR3 while ensuring federal compliance

- Incorporated additional best practices from RFRs submitted to date to prioritize projects, and optimize preparation time and overall quality of documentation for RFR submissions moving forward
- Engaged with our grid recovery partners on additional Federal Funding opportunities to include Department of Energy electrical system improvement Grants, HUD and PRDOH CDBG-DR Programs for Hazard mitigation, Grid Resilience and Cost Share as well as FEMA 406 Hazard Mitigation proposals in all major asset categories and projects.
- Worked on additional initial proposals utilizing the FEMA/SHPO 404 Hazard Mitigation program with four key back-up projects proposed and developed, representing \$900 million, should additional 404 HMGP funds become available.

Environmental and Historic Preservation

LUMA Focus Areas

- Continue to consult with FEMA and COR3 on Project-Specific Programmatic Agreement (PSPA) measures specific to streetlight, telecommunications, substations, transmission, and distribution projects
- During the last 90-day period, LUMA completed the following:
 - Streamlined consultation process with FEMA relating to environmental studies, pre-construction, and construction disturbances and vegetation clearing
 - Continue to provide environmental training for A&E, construction contractors and LUMA operations crews in support of compliance with EHP requirements
 - Continue to review initial FEMA Record of Environmental Considerations (RECs) for approved projects to implement conditions into project scopes
 - Continue to support in pre-construction and construction inspections visits, aided with the implementation of mitigation measures required by FEMA EHP and other agencies to meet environmental conditions, and provided supporting documents for Class 3 estimate
 - Develop EHP Closeout guideline
 - Continued notifying and requesting endorsements from government agencies for projects obligated by FEMA (LUMA's Capital Programs and Permitting Office)

Engineering Management

LUMA Focus Areas

- Continue with preliminary engineering design work with existing A/E firms towards the development of *Detailed SOWs*
- Continue detailed engineering on all projects with FEMA approved *Detailed SOWs*
- Continue to finalize contracts for additional A/E resources to support the federally funded projects and leverage the successful engineering firm(s) to assign projects with FEMA project numbers to begin A/E design work towards the development of *Detailed SOWs*.
- Continue evaluating and prioritizing the existing projects with FEMA numbers against the needs and constraints of the electrical system and available contractor capacities to optimize and level the execution strategies
- Continue working the area plan analysis to identify contingency issues and provide a backup analysis to determine sectionalization and segmentation needs (e.g., installation of reclosers)
- During the last 90-day period, LUMA completed the following:
 - Assigned additional Substation and Transmission Line rebuild project engineering packages to engineering firms to finalize engineering scope, budget, and schedule and begin preliminary engineering design in October
 - Completed the planning technical studies and functional specifications on 22 transmission lines and 6 substations for long-term transmission reliability solutions
 - Completed load interconnection reliability studies on 6 load interconnections
 - Completed line reliability recloser studies on twenty-two 38 kV transmission lines
 - Completed transmission line outage matrix studies on 15 transmission lines
 - Completed 2022 day-peak and night-peak power flow model development
 - Completed planning and analysis on 19 additional distribution feeders

III. LUMA Estimated Schedule for Submission of *Detailed SOWs*

Over the next 90-days, LUMA will be focused on preparing *Detailed SOW* and cost estimates for T&D projects that currently have both PREB approval and FEMA project numbers.

The tables below show the current set of projects, by asset category, along with the estimated timing for *Detailed SOWs* submittals to COR3 and FEMA.

The estimation of project submission timing noted below is based on the best information available to LUMA at the time of this plan update. LUMA is focused on meeting or exceeding the project submission estimates listed in the table below.

SUBSTATIONS

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
174422	Catano Modernization & Hardening (Obligated)	Oct-2021 (Complete)	Apr-2023
165209	Culebra 3801 Substation (Obligated)	Apr-2022 (Complete)	Mar-2023
165225	Vieques 2501 Substation (Obligated)	Apr-2022 (Complete)	Mar-2023
179558	Manati TC BKR - T005 (Obligated)	May-2022 (Complete)	Nov-2022 (Completed)
165268	Rio Grande Estates - CH – 2306	May-2022 (Complete)	May-2024
169495	Tapia GIS 1102	May-2022 (Complete)	Jun-2024
169058	Llorens Torres 1106	May-2022 (Complete)	Oct-2024
169266	Centro Medico 1327 & 1359	May-2022 (Complete)	Jan-2024
169896	Costa Sur TC (Obligated)	Jun-2022 (Complete)	Feb-2024
178258	Taft 1105	Jun-2022 (Complete)	Mar-2026
169500	Bayamon TC - BKRS Y1 - 1711	Jul-2022 (Complete)	Nov-2023

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
178503	Aguirre TC -BKRS	Nov-2022 (Complete)	Nov-2023
178577	Cachete 1526	Feb-2023	Nov-2023
169276	Viaducto TC 1100	Feb-2023	Oct-2023
546370	Substation Minor Repairs-Group A	Apr-2022 (Complete)	Mar-2023
542758	Substation Minor Repairs-Group B	Jul-2022 (Complete)	Apr-2023
546371	Substation Minor Repairs-Group C	Jun-2022 (Complete)	Jul-2023
549715	Substation Minor Repairs-Group D	Feb-2023	Sep-2023
549725	Substation Minor Repairs-Group E	Feb-2023	Sep-2023
550910	Physical Security Group 1	Apr-2022 (Complete)	Mar-2023
549764	Physical Security Group 2	Jul-2022 (Complete)	Apr-2023
551861	Physical Security Group 3	Jun-2022 (Complete)	May-2023
660422	Physical Security Group 4	Feb-2023	Jun-2023
684920	Substations HV Equipment Replacement	Feb-2023	Mar-2023

TRANSMISSION

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
168226	38000 - San Juan - Isla Grande (LOOP)	May-2022 (Complete)	Dec-2023
176971	8200 - San Juan SP - Catano Sect	Jul-2022 (Complete)	Sep-2024
180052	Existing 38kV - Line 100, Line 200 Ponce TC to Jobos TC	Aug-2022 (Complete)	Aug-2024
180326	Existing 115 kV - Line 36800 Palmer Fajardo to Sabana Llana	Aug-2022 (Complete)	Jun-2024

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
166904	37800 - Caguas – Monacillo	Aug-2022 (Complete)	Apr-2024
167443	36200 - Monacillos - Juncos	Aug-2022 (Complete)	Jun-2027
176913	9500 - Palo Seco SP - Cantano Sect	Aug-2022 (Complete)	Jul-2024
176954	1100 - Garzas 1 HP - Garzas 2 HP	Aug-2022 (Complete)	Jul-2024
168483	36400 - Dos Bocas - Ponce	Aug-2022 (Complete)	May-2025
166860	37800 - Jobos – Caguas	Aug-2022 (Complete)	Nov-2025
167168	37100 - Costa Sur - Acacias	Aug-2022 (Complete)	Nov-2024
177191	39000 - Aguas Buenas – Caguas	Sep-2022 (Complete)	Dec-2024
165213	Main Land 5400 - Rio Blanco HP - Dagua TC	Nov-2022 (Complete)	Aug-2024
167508	50100 - Cambalache - Manati	Nov-2022 (Complete)	Aug-2027
166707	51300 - Ponce - Costa Sur	Nov-2022 (Complete)	Jul-2024
177134	4100 - Guaraguo TC - Comerio TC	Nov-2022 (Complete)	Apr-2024
167446	36100 - Dos Bocas - Monacillos	Jan-2023	Oct-2024
668669	230kV Transmission Priority Poles Replacements - Mora 50500	Apr-2022 (Complete)	Dec-2021 (Complete)
334468	38kV Transmission Priority Pole Replacement Line 2200 (Obligated)	May-2022 (Complete)	Feb-2023
550896	38kV Transmission Priority Pole Replacement Line 6700 (Obligated)	Jun-2022 (Complete)	May-2023
668583	38kV Transmission Priority Pole Replacement Line 13300 (Obligated)	Jun-2022 (Complete)	Apr-2023
668592	38kV Transmission Priority Pole Replacement Line 9800 (Obligated)	Jul-2022 (Complete)	Mar-2023
681672	38kV Transmission Priority Pole Replacement Line 2300	Nov-2022 (Complete)	May-2023

DISTRIBUTION

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
165226	Vieques Feeders 2501-01, 2501-02, 2501-03 and Culebra Feeders 3801-01, 3801-02	Dec-2022	Oct-2023
542690	Streetlighting – Maunabo (Obligated)	Feb-2022 (Complete)	Jun-2022 (Started)
542688	Streetlighting – Aguada (Obligated)	Mar-2022 (Complete)	Jun-2022 (Started)
542756	Streetlighting – Guanica (Obligated)	Mar-2022 (Complete)	Aug-2022 (Started)
542687	Streetlighting – Lajas (Obligated)	Mar-2022 (Complete)	Jul-2022 (Started)
542517	Streetlighting – Luquillo (Obligated)	Mar-2022 (Complete)	Jun-2022 (Started)
660239	Streetlighting- Villalba (Obligated)	Jul-2022 (Complete)	Oct-2022 (Started)
659715	Streetlighting – Aibonito	Jul-2022 (Complete)	Nov-2022 (Started)
659623	Streetlighting - Catano	Jul-2022 (Complete)	Nov-2022 (Started)
659625	Streetlighting- Dorado	Aug-2022 (Complete)	Nov-2022 (Started)
660227	Streetlighting- Hatillo	Aug-2022 (Complete)	Nov-2022 (Started)
660437	Streetlighting- Manati	Aug-2022 (Complete)	Nov-2022 (Started)
673504	Streetlighting- Gurabo	Feb-2023	Jun-2023
659968	Streetlighting- San German	Feb-2023	Jun-2023
666894	Streetlighting- San Juan	Mar-2023	Jul-2023
671502	Streetlighting- Yabucoa	Mar-2023	Aug-2023
671400	Streetlighting- Barceloneta	Mar-2023	Aug-2023
671396	Streetlighting- Utuado	Mar-2023	Aug-2023
334323	Distribution Pole and Conductor Repair- Ponce Group 1 (Obligated)	Jan-2022 (Complete)	Mar-2022 (Started)
334329	Distribution Pole and Conductor Repair- Ponce Group 2 (Obligated)	Jan-2022 (Complete)	Feb-2023

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
542762	Distribution Pole and Conductor Repair-Arecibo Group 2 (Obligated)	Feb-2022 (Complete)	Mar-2022 (Complete)
334488	Distribution Pole and Conductor Repair-Caguas Group 4 (Obligated)	Feb-2022 (Complete)	May-2022 (Started)
334527	Distribution Pole and Conductor Repair-Caguas Group 8 (Obligated)	Feb-2022 (Complete)	Sep-2022 (Complete)
673839	Distribution Pole and Conductor Repair-Bayamon Group 2 (Obligated)	Jun-2022 (Complete)	Apr-2022 (Complete)
674092	Distribution Pole and Conductor Repair-Caguas Group 5 (Obligated)	Jun-2022 (Complete)	Nov-2022 (Started)
674098	Distribution Pole and Conductor Repair-Caguas Group 7 (Obligated)	Jun-2022 (Complete)	Dec-2022
673847	Distribution Pole and Conductor Repair-Carolina Group 2 (Obligated)	Jun-2022 (Complete)	Mar-2022 (Started)
673848	Distribution Pole and Conductor Repair-Carolina Group 3 (Obligated)	Jun-2022 (Complete)	Jan-2022 (Started)
673774	Distribution Pole and Conductor Repair-Mayaguez Group 1 (Obligated)	Jun-2022 (Complete)	Mar-2022 (Started)
673795	Distribution Pole and Conductor Repair- Mayaguez Group 4 (Obligated)	Jun-2022 (Complete)	Mar-2023
673818	Distribution Pole and Conductor Repair- San Juan Group 1 (Obligated)	Jun-2022 (Complete)	Nov-2021 (Started)
673838	Distribution Pole and Conductor Repair- San Juan Group 2 (Obligated)	Jun-2022 (Complete)	Dec-2022
673771	Distribution Pole and Conductor Repair-Arecibo Group 1 (Obligated)	Jul-2022 (Complete)	Nov-2021 (Started)
673836	Distribution Pole and Conductor Repair-Bayamon Group 1	Jul-2022 (Complete)	Mar-2022 (Started)
673843	Distribution Pole and Conductor Repair-Bayamon Group 3 (Obligated)	Jul-2022 (Complete)	Dec-2022
674072	Distribution Pole and Conductor Repair-Caguas Group 1 (Obligated)	Jul-2022 (Complete)	Nov-2022 (Started)
674083	Distribution Pole and Conductor Repair-Caguas Group 2 (Obligated)	Jul-2022 (Complete)	Dec-2022
674088	Distribution Pole and Conductor Repair-Caguas Group 3 (Obligated)	Jul-2022 (Complete)	Dec-2021 (Started)
674096	Distribution Pole and Conductor Repair-Caguas Group 6 (Obligated)	Jul-2022 (Complete)	Dec-2022
673772	Distribution Pole and Conductor Repair- Mayaguez Group 2 (Obligated)	Jul-2022 (Complete)	Mar-2023

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
673775	Distribution Pole and Conductor Repair- Mayaguez Group 3	Jul-2022 (Complete)	Dec-2021 (Started)
673844	Distribution Pole and Conductor Repair- San Juan Group 3 (Obligated)	Jul-2022 (Complete)	Dec-2022
678985	Distribution Pole and Conductor Repair - Bayamon Group 4	Aug-2022 (Complete)	Jan-2023
679025	Distribution Pole and Conductor Repair - San Juan Group 4	Aug-2022 (Complete)	Feb-2023
679033	Distribution Pole and Conductor Repair - Caguas Group 9	Aug-2022 (Complete)	Jan-2023
679127	Distribution Pole and Conductor Repair - Arecibo Group 3	Aug-2022 (Complete)	Feb-2023
679149	Distribution Pole and Conductor Repair - Mayaguez Group 5	Aug-2022 (Complete)	Feb-2023
679457	Distribution Pole and Conductor Repair - Ponce Group 3	Aug-2022 (Complete)	Feb-2023
678988	Distribution Pole and Conductor Repair - Bayamon Group 5	Sep-2022 (Complete)	Feb-2023
679026	Distribution Pole and Conductor Repair - San Juan Group 5	Sep-2022 (Complete)	Jan-2023
679133	Distribution Pole and Conductor Repair - Arecibo Group 4	Sep-2022 (Complete)	Feb-2023
679134	Distribution Pole and Conductor Repair - Caguas Group 10	Sep-2022 (Complete)	Jan-2023
679153	Distribution Pole and Conductor Repair - Mayaguez Group 6	Sep-2022 (Complete)	Feb-2023
679458	Distribution Pole and Conductor Repair - Ponce Group 4	Sep-2022 (Complete)	Jan-2023
685477	Distribution Pole and Conductor Repair - Arecibo Group 6	Nov-2022 (Complete)	Apr-2023
682910	Distribution Pole and Conductor Repair - Bayamon Group 7	Nov-2022 (Complete)	Apr-2023
682890	Distribution Pole and Conductor Repair - Caguas Group 12	Nov-2022 (Complete)	Apr-2023
685370	Distribution Pole and Conductor Repair - Mayaguez Group 8	Nov-2022 (Complete)	Mar-2023
685263	Distribution Pole and Conductor Repair - Ponce Group 6	Nov-2022 (Complete)	Apr-2023
682865	Distribution Pole and Conductor Repair - San Juan Group 7	Nov-2022 (Complete)	May-2023

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
682135	Distribution Pole and Conductor Repair - Bayamon Group 8	Nov-2022 (Complete)	May-2023
682324	Distribution Pole and Conductor Repair - Caguas Group 13	Nov-2022 (Complete)	May-2023
682870	Distribution Pole and Conductor Repair - San Juan Group 6	Nov-2022 (Complete)	Apr-2023
682882	Distribution Pole and Conductor Repair - Caguas Group 11	Nov-2022 (Complete)	Apr-2023
682898	Distribution Pole and Conductor Repair - Bayamon Group 6	Nov-2022 (Complete)	Apr-2023
685943	Distribution Pole and Conductor Repair - Ponce Group 5	Nov-2022 (Complete)	Apr-2023
686453	Distribution Pole and Conductor Repair - Mayaguez Group 7	Nov-2022 (Complete)	Mar-2023
686471	Distribution Pole and Conductor Repair - Arecibo Group 5	Nov-2022 (Complete)	Apr-2023
682178	Distribution Pole and Conductor Repair - Arecibo Group 7	Dec-2022 (Complete)	May-2023
682210	Distribution Pole and Conductor Repair - Mayaguez Group 9	Dec-2022	May-2023
686480	Distribution Pole and Conductor Repair - Ponce Group 7	Dec-2022 (Complete)	May-2023
682028	Distribution Pole and Conductor Repair - San Juan Group 8	Dec-2022 (Complete)	May-2023
682172	Distribution Pole and Conductor Repair - Arecibo Group 8	Dec-2022	May-2023
682136	Distribution Pole and Conductor Repair - Bayamon Group 9	Dec-2022	May-2023
682373	Distribution Pole and Conductor Repair - Caguas Group 14	Dec-2022 (Complete)	May-2023
682180	Distribution Pole and Conductor Repair - Mayaguez Group 10	Dec-2022 (Complete)	May-2023
682228	Distribution Pole and Conductor Repair - Ponce Group 8	Dec-2022	May-2023
682031	Distribution Pole and Conductor Repair - San Juan Group 9	Dec-2022	May-2023
688627	Distribution Pole and Conductor Repair - Arecibo Group 9	Dec-2022	May-2023
688096	Distribution Pole and Conductor Repair - Caguas Group 15	Dec-2022	May-2023
688472	Distribution Pole and Conductor Repair - Mayaguez Group 11	Dec-2022	May-2023
688774	Distribution Pole and Conductor Repair - Ponce Group 9	Dec-2022	Jun-2023

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
691246	Distribution Pole and Conductor Repair - San Juan Group 10	Dec-2022	Jun-2023
688109	Distribution Pole and Conductor Repair - San Juan Group 11	Dec-2022	Jun-2023
688198	Distribution Pole and Conductor Repair - Arecibo Group 10	Dec-2022	Jun-2023
688625	Distribution Pole and Conductor Repair - Ponce Group 10	Dec-2022	Jun-2023
688629	Distribution Pole and Conductor Repair - Mayaguez Group 13	Dec-2022	Jun-2023
688630	Distribution Pole and Conductor Repair - Mayaguez Group 12	Dec-2022	May-2023
689071	Distribution Pole and Conductor Repair - Arecibo Group 11	Dec-2022	Jun-2023
TBD	Distribution Pole and Conductor Repair - San Juan Group 12	Dec-2022	Jun-2023
TBD	Distribution Pole and Conductor Repair - Ponce Group 11	Dec-2022	Jun-2023
TBD	Distribution Pole and Conductor Repair - Ponce Group 13	Jan-2023	Jul-2023
TBD	Distribution Pole and Conductor Repair - Ponce Group 12	Jan-2023	Jul-2023
TBD	Distribution Pole and Conductor Repair - Mayaguez Group 14	Jan-2023	Jul-2023
TBD	Distribution Pole and Conductor Repair - Arecibo Group 12	Jan-2023	Jul-2023
TBD	Distribution Pole and Conductor Repair - Arecibo Group 13	Feb-2023	Aug-2022
TBD	Distribution Pole and Conductor Repair - Bayamon Group 10	Feb-2023	Aug-2023
TBD	Distribution Pole and Conductor Repair - Caguas Group 16	Feb-2023	Aug-2023
TBD	Distribution Pole and Conductor Repair - Mayaguez Group 15	Feb-2023	Aug-2023
TBD	Distribution Pole and Conductor Repair - Ponce Group 14	Feb-2023	Aug-2023
TBD	Distribution Pole and Conductor Repair - San Juan Group 13	Feb-2023	Aug-2023
TBD	Distribution Pole and Conductor Repair - Arecibo Group 14	Feb-2023	Aug-2023
TBD	Distribution Pole and Conductor Repair - Bayamon Group 11	Feb-2023	Aug-2023
TBD	Distribution Pole and Conductor Repair - Caguas Group 17	Feb-2023	Aug-2023
TBD	Distribution Pole and Conductor Repair - Arecibo Group 15	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - Bayamon Group 12	Mar-2023	Sep-2023

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
TBD	Distribution Pole and Conductor Repair - Caguas Group 18	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - Mayaguez Group 16	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - Mayaguez Group 17	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - Ponce Group 15	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - Ponce Group 16	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - San Juan Group 14	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - San Juan Group 15	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - Arecibo Group 16	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - Bayamon Group 14	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - San Juan Group 16	Mar-2023	Sep-2023
688623	Transmission and Distribution Automation Program – Group 1	Jan-2023	Jan-2022 (Started)

IT & TELECOM

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
657300	Energy Management System (EMS) (Obligated)	Jul-2022 (Complete)	Oct-2023
551925	SCADA Remote Access and RTU Replacements - Group 1	Jul-2022 (Complete)	Mar-2023
675345	IT OT Technology Systems Repairs	Mar-2023	Jun-2023
662238	Microwave Point to Point Backbone – Group A (Microwave Network Upgrades – Group A)	Jan-2023	Oct-2023
551926	SCADA Remote Access and RTU Replacements - Group 2	Mar-2023	Aug-2023
551927	SCADA Remote Access and RTU Replacements - Group 3	Mar-2023	Aug-2023

BUILDINGS

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
679006	Test and Technology Laboratory	Nov-2022 (Complete)	Jul-2024

Exhibit 2

*Redline showing changes from September 2022 Update to PREPA-LUMA 90-Day Plan
for T&D Projects to the December 2022 Update to PREPA-LUMA 90-Day Plan for T&D
Projects*



FEMA



LUMA 90-Day Plan

~~September~~December 2022

LUMA 



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I. Introduction

In accordance with the directive received from FEMA to produce a 90-Day Plan, this document captures an overview of the key next steps and progress made on FEMA-funded projects for the Puerto Rico electrical system.

On June 1, 2021, LUMA assumed overall responsibilities for PREPA's T&D System as outlined within the O&M Agreement (OMA) between PREPA, P3A, and LUMA. Upon Commencement of the Service Period, PREPA refocused its efforts on projects in the Generation and Dams, Hydro, and Irrigation asset categories; while projects in the Transmission, Distribution, Substations, IT/Telecom, Buildings, and Environmental asset categories ("T&D Projects") were transitioned to and are now the responsibility of LUMA.

This 90-Day Plan provides information on various focus areas for LUMA.

II. Overview of Focus Areas for the Next 90-Days

The content below summarizes next steps across the following six areas: 1) PREPA-LUMA Coordination and Alignment; 2) Federal Grant Management; 3) Funding and Reporting; 4) Environmental and Historic Preservation; and 5) Engineering Management; ~~and 6) Enterprise Project Management ("EPM").~~

PREPA-LUMA Coordination and Alignment

PREPA and LUMA Focus Areas

- PREPA and LUMA leadership are participating in regular weekly meetings with COR3 & FEMA to ensure visibility of progress of project work, ensure the coordination and understanding of common matters, and to identify and resolve risks that involve points of integration between the two entities
- PREPA and LUMA will continue coordination to support successful operations under the OMA

Federal Grant Management

LUMA Focus Areas

- Continue working with COR3 and FEMA to obtain Project Obligations for the ~~4872~~ Detailed SOWs submitted to date (i.e., ~~67~~ Substation Rebuild projects, ~~4216~~ Transmission Line Rebuild projects, 3 Substation Minor Repair projects,

- 3 Substation Physical Security projects, 2 Transmission Pole Replacement projects, and ~~1534~~ Distribution Pole and Conductor Replacement projects, 5 Streetlight projects, 1 SCADA Remote Access and RTU Replacements project and 1 ~~Energy Management System (EMS)~~ IT and Telecommunications projects)
- Continue advancing work on 428 projects towards finalizing *Detailed SOWs* for submission to COR3 and FEMA. This effort includes 406 Hazard Mitigation and EHP work. Expect to submit *Detailed SOWs* within the next 90-day period as per target schedule in Section IV
 - Continue refinement of 406 Hazard Mitigation Strategies for Distribution, Transmission, Substation and Streetlights and ongoing discussions with COR3 and FEMA for feedback and alignment
 - Developed an initial Scope of Work for the system network upgrades necessary to interconnect privately-owned energy projects of Tranche I. The project proposal will be presented to FEMA under Section 406 Hazard Mitigation.
 - During the last 90-day period, LUMA completed the following:
 - ~~Received PREB approval for 7 Initial SOWs projects and programs representing \$567 million in capital investments~~
 - Submitted ~~5438~~ 5438 *Detailed SOWs* to FEMA for approval representing \$1.~~502~~ 502 billion in capital investments
 - Obtained FEMA Authorization and Project Obligations on *Detailed SOWs* for ~~499~~ 499 *Detailed SOWs* representing \$~~0.1 billion~~ 72 million in capital investments
 - ~~Obtained FEMA Project Obligations for Long Lead Materials representing \$0.65 billion in capital investments~~
 - ~~Construction activities on 11 projects representing \$0.1 billion~~
 - ~~Completed~~ Progressed construction activities on ~~1 project~~ (429 projects completed to date) representing \$0.~~411~~ 411 billion)
 - ~~Continue to work with the representatives from COR3 and FEMA on key issues identified to date and identified as the work progresses~~

Funding and Reporting

LUMA Focus Areas

- Continue tracking project actual costs in accordance with FEMA, HUD, and COR3 standards to support financial reporting requirements for federally funded projects
- Submitted progress and financial quarterly reports for period ending 69/30/2022 on all 428-obligated projects
- Submitted \$11.824.0 million in requests for reimbursements (RFRs) to COR3 to date and has another \$9.54 million in process to be submitted leveraging established during the next 90 day period
- Commenced the implementation of Time Reporting and Enhancements technology project to automate RFR processes for document managements, as required by FEMA, HUD, and process related to Federally Funded Projects and accelerate submissions to COR3 while ensuring federal compliance
- Incorporated learnings additional best practices from RFR preparation RFRs submitted to date to improve prioritize projects, and optimize preparation time and overall quality of documentation for RFR submissions moving forward
- ~~Started compiling and preparing documentation for a material (inventory) RFR~~
- Engaged with our grid recovery partners on additional Federal Funding opportunities to include Department of Energy electrical system improvement Grants, HUD and PRDOH CDBG-DR Programs for Hazard mitigation, Grid Resilience and Cost Share as well as FEMA 406 Hazard Mitigation proposals in all major asset categories and projects.
- ~~Continued working~~ Worked on additional initial proposals utilizing the FEMA/SHPO 404 Hazard Mitigation program with 4four key back-up projects proposed and developed, representing \$900 million, should additional 404 HMGP funds become available. ~~These projects were included in the PRDOH's draft Disaster Recovery Action Plan for public consultations. Of the four projects, three were included in PRDOH's submission to HUD in January 2022 and LUMA awaits the final recommendation before developing a SOW for PREB's review and approval and a subsequent submission to PRDOH and HUD for final approval~~
- ~~Continued engagement with PRDOH/Vivienda on implementing ER-1 Cost Share Program for CDBG-DR funds against specific projects. Current efforts are towards Catano Substation 1801 as a pilot project~~

Environmental and Historic Preservation

LUMA Focus Areas

- ~~Continue to complete Endangered and Threatened Species Biological Studies and Wetland Hydrological Studies to support construction planning, permitting, and the development of appropriate environmental mitigations~~
- Continue to consult with FEMA and COR3 on Project-Specific Programmatic Agreement (PSPA) measures specific to streetlight, telecommunications, substations, transmission, and distribution projects
- During the last 90-day period, LUMA completed the following:
 - ~~Project Specific Programmatic Agreement was executed on June 2, 2022~~
 - Streamlined consultation process with FEMA relating to environmental studies, pre-construction, and construction disturbances and vegetation clearing
 - Continue to provide environmental training for A&E, construction contractors and LUMA operations crews in support of compliance with EHP requirements
 - Continue to review initial FEMA Record of Environmental Considerations (RECs) for approved projects to implement conditions into project scopes
 - Continue to support in pre-construction and construction inspections visits, aided with the implementation of mitigation measures required by FEMA EHP and other agencies to meet environmental conditions, and provided supporting documents for Class 3 estimate
 - Develop EHP Closeout guideline
 - ~~Began~~Continued notifying and requesting endorsements from government agencies for projects obligated by FEMA (LUMA's Capital Programs and Permitting Office)

Engineering Management

LUMA Focus Areas

- ~~Start preliminary engineering design on additional distribution line, substation, and transmission line projects working with new and existing A/E firms~~
- Continue with preliminary engineering design work with existing A/E firms towards the development of *Detailed* SOWs
- Continue detailed engineering on all projects with FEMA approved *Detailed* SOWs
- Continue to finalize contracts for additional A/E resources to support the federally funded projects and leverage the successful engineering firm(s) to assign projects with FEMA project numbers to begin A/E design work towards

- the development of *Detailed* SOWs. ~~These contracts are in various stages from agreeing to terms and conditions to FOMB approval~~
- Continue evaluating and prioritizing the existing projects with FEMA numbers against the needs and constraints of the electrical system and available contractor capacities to optimize and level the execution strategies
 - Continue working the area plan analysis to identify contingency issues and provide a backup analysis to determine sectionalization and segmentation needs (e.g., installation of reclosers)
 - During the last 90-day period, LUMA completed the following:
 - ~~Finalized and executed 6 contracts for additional A/E resources to support the federally funded projects and leverage the successful engineering firm(s) to assign projects with FEMA project numbers to begin A/E design work~~
 - Assigned additional distribution Substation and Transmission Line rebuild project engineering packages to engineering firms to finalize engineering scope, budget, and schedule and begin preliminary engineering design in October
 - ~~Commenced process of incorporating NERC Compliance efforts for transmission system studies and analysis (e.g., TPL001 through 4, MOD 29 and CIP 14)~~
 - Completed the planning technical studies and functional specifications on 4222 transmission lines and 6 substations for long-term transmission reliability solutions
 - Completed load interconnection reliability studies on 6 load interconnections
 - Completed line reliability recloser studies on twenty-two 38 kV transmission lines
 - Completed transmission line outage matrix studies on 15 transmission lines
 - Completed 2022 day-peak and night-peak power flow model development
 - Completed planning and analysis on 7019 additional distribution feeders
 - ~~Completed high-level assessment on 113 substations (29 of the 113 have completed functional specifications)~~
 - ~~Issued Request for Proposal for the Energy Management System~~

Enterprise Project Management (“EPM”)

LUMA Focus Areas

- ~~Execute contract(s) for Program Management services to support the federally funded projects~~
- ~~Continue to ramp-up project management resources, systems, and processes related to the execution of project within the infrastructure plan and continue to monitor resource needs as additional projects are launched~~
- ~~Continue to track and monitor project schedules and costs within the EPM System leveraging the quality controls developed by LUMA~~

X.III. LUMA Estimated Schedule for Submission of *Detailed SOWs*

Over the next 90-days, LUMA will be focused on preparing *Detailed SOW* and cost estimates for T&D projects that currently have both PREB approval and FEMA project numbers.

The tables below show the current set of projects, by asset category, along with the estimated timing for *Detailed SOWs* submittals to COR3 and FEMA.

The estimation of project submission timing noted below is based on the best information available to LUMA at the time of this plan update. LUMA is focused on meeting or exceeding the project submission estimates listed in the table below.

SUBSTATIONS

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
174422	Catano Modernization & Hardening (Obligated)	Oct-2021 (Completed Complete)	Dec-2022 Apr-2023
165209	Culebra 3801 Substation (Obligated)	Apr-2022 (Completed Complete)	JanMar-2023
165225	Vieques 2501 Substation (Obligated)	Apr-2022 (Completed Complete)	JanMar-2023
179558	Manati TC BKR - T005 (Obligated)	May-2022 (Completed Complete)	Nov-20232022 (Completed)
165268	Rio Grande Estates - CH – 2306	May-2022 (Completed Complete)	FebMay-2024
169495	Tapia GIS 1102	May-2022 (Completed Complete)	Dec-2023 Jun-2024

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
169058	Llorens Torres 1106	May-2022 (Completed Complete)	Dec-2023 Oct-2024
169266	Centro Medico 1327 & 1359	May-2022 (Completed Complete)	Jan-2024
169896	Costa Sur TC (Obligated)	Jun-2022 (Completed Complete)	Nov-2023 Feb-2024
178258	Taft 1105	Jun-2022 (Completed Complete)	Jul-2025 Mar-2026
169500	Bayamon TC - BKRS Y1 - 1711	Jul-2022 (Completed Complete)	Aug Nov-2023
178503	Aguirre TC -BKRS	Sep Nov-2022 (Complete)	Sep Nov-2023
178577	Cachete 1526	Nov-2022 Feb-2023	Aug Nov-2023
169276	Viaducto TC 1100	Nov-2022 Feb-2023	Oct-2023
546370	Substation Minor Repairs-Group A	Apr-2022 (Completed Complete)	Feb Mar-2023
542758	Substation Minor Repairs-Group B	Jul-2022 (Completed Complete)	Apr-2023
546371	Substation Minor Repairs-Group C	Jun-2022 (Completed Complete)	Jul-2023
549715	Substation Minor Repairs-Group D	Dec-2022 Feb-2023	Sep-2023
549725	Substation Minor Repairs-Group E	Dec-2022 Feb-2023	Sep-2023
550910	Physical Security Group 1	Apr-2022 (Completed Complete)	Feb Mar-2023
549764	Physical Security Group 2	Jul-2022 (Completed Complete)	Apr-2023
551861	Physical Security Group 3	Jun-2022 (Completed Complete)	May-2023
660422	Physical Security Group 4	Dec-2022 Feb-2023	Jun-2023
684920	Substations HV Equipment Replacement	Feb-2023	Mar-2023

TRANSMISSION

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
168226	38000 - San Juan - Isla Grande (LOOP)	May-2022 (Complete)	Sep Dec -2023
176971	8200 - San Juan SP - Catano Sect	Jul-2022 (Complete)	Apr Sep -2024
180052	Existing 38kV - Line 100, Line 200 Ponce TC to Jobos TC	Aug-2022 (Complete)	Aug-2024
180326	Existing 115 kV - Line 36800 Palmer Fajardo to Sabana Llana	Aug-2022 (Complete)	Apr Jun -2024
166904	37800 - Caguas – Monacillo	Aug-2022 (Complete)	Apr-2024
167443	36200 - Monacillos - Juncos	Aug-2022 (Complete)	Mar Jun -2027
176913	9500 - Palo Seco SP - Cantano Sect	Aug-2022 (Complete)	Jul-2024
176954	1100 - Garzas 1 HP - Garzas 2 HP	Aug-2022 (Complete)	Mar Jul -2024
168483	36400 - Dos Bocas - Ponce	Aug-2022 (Complete)	Mar May -2025
166860	37800 - Jobos – Caguas	Aug-2022 (Complete)	Oct Nov -2025
167168	37100 - Costa Sur - Acacias	Aug-2022 (Complete)	Nov-2024
177191	39000 - Aguas Buenas – Caguas	Sep-2022 (Complete)	Dec-2024
165213	Main Land 5400 - Rio Blanco HP - Dagua TC	Sep Nov -2022 (Complete)	May Aug -2024
167508	50100 - Cambalache - Manati	Sep Nov -2022 (Complete)	Apr Aug -2027
166707	51300 - Ponce - Costa Sur	Nov-2022 (Complete)	Jul-2024
177134	4100 - Guaraguo TC - Comerio TC	Nov-2022 (Complete)	Apr-2024
167446	36100 - Dos Bocas - Monacillos	Dec -2022 Jan -2023	May -2023 Oct -2024
668669	230kV Transmission Priority Poles Replacements - Mora 50500	Apr-2022 (Complete)	Mar -2022 Dec -2021 (Complete)

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
334468	38kV Transmission Priority Pole Replacement Line 2200 (Obligated)	May-2022 (Complete)	Dec-2022 Feb-2023
550896	38kV Transmission Priority Pole Replacement Line 6700 (Obligated)	Jun-2022 (Complete)	Nov-2022 May-2023
668583	38kV Transmission Priority Pole Replacement Line 13300 (Obligated)	Jun-2022 (Complete)	JanApr-2023
668592	38kV Transmission Priority Pole Replacement Line 9800 (Obligated)	Jul-2022 (Complete)	Mar-2023
681672	38kV Transmission Priority Pole Replacement Line 2300	Sep Nov-2022 (Complete)	May-2023

DISTRIBUTION

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
165226	Vieques Feeders 2501-01, 2501-02, 2501-03 and Culebra Feeders 3801-01, 3801-02	Oct Dec-2022	May Oct-2023
542690	Streetlighting – Maunabo (Obligated)	Feb-2022 (Completed Complete)	Jun-2022 (Started)
542688	Streetlighting – Aguada (Obligated)	Mar-2022 (Completed Complete)	Jun-2022 (Started)
542756	Streetlighting – Guanica (Obligated)	Mar-2022 (Completed Complete)	JulAug-2022 (Started)
542687	Streetlighting – Lajas (Obligated)	Mar-2022 (Completed Complete)	AugJul-2022 (Started)
542517	Streetlighting – Luquillo (Obligated)	Mar-2022 (Completed Complete)	JulJun-2022 (Started)
660239	Streetlighting- Villalba (Obligated)	Jul-2022 (Completed Complete)	Sep Oct-2022 (Started)
659715	Streetlighting – Aibonito	Jul-2022 (Completed Complete)	Jan-2023Nov-2022 (Started)
659623	Streetlighting - Catano	Jul-2022 (Completed Complete)	Dec Nov-2022 (Started)
659625	Streetlighting- Dorado	Aug-2022 (Completed Complete)	Dec Nov-2022 (Started)

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
660227	Streetlighting- Hatillo	Aug-2022 (CompletedComplete)	OctNov-2022 (Started)
660437	Streetlighting- Manati	Aug-2022 (CompletedComplete)	OctNov-2022 (Started)
673504	Streetlighting- Gurabo	Dec-2022Feb-2023	FebJun-2023
659968	Streetlighting- San German	Nov-2022Feb-2023	MarJun-2023
666894	Streetlighting- San Juan	Nov-2022Mar-2023	FebJul-2023
<u>671502</u>	<u>Streetlighting- Yabucoa</u>	<u>Mar-2023</u>	<u>Aug-2023</u>
<u>671400</u>	<u>Streetlighting- Barceloneta</u>	<u>Mar-2023</u>	<u>Aug-2023</u>
<u>671396</u>	<u>Streetlighting- Utuado</u>	<u>Mar-2023</u>	<u>Aug-2023</u>
<u>334323</u> 436646	Distribution Pole and Conductor Repair- <u>Arecibo Ponce</u> Group 1- (Obligated)	JulJan-2022 (CompletedComplete)	NovMar-2022- (Started)
<u>334329</u>	<u>Distribution Pole and Conductor Repair- Ponce Group 2</u> (Obligated)	Jan-2022 (Complete)	Feb-2023
542762	Distribution Pole and Conductor Repair-Arecibo Group 2 (Obligated)	Feb-2022 (CompletedComplete)	AugMar-2022 (Completed (Complete)
<u>334488</u> 334473	Distribution Pole and Conductor Repair- <u>BayamonCaguas</u> Group 14 (Obligated)	JulFeb-2022 (CompletedComplete)	OctMay-2022 (Started)
<u>334527</u> 334474	Distribution Pole and Conductor Repair- <u>BayamonCaguas</u> Group 28 (Obligated)	JunFeb-2022 (CompletedComplete)	OctSep-2022- (Completed (Complete)
<u>334475</u> 673839	Distribution Pole and Conductor Repair-Bayamon Group 32 (Obligated)	JulJun-2022 (CompletedComplete)	NovApr-2022- (Complete)
<u>334420</u> 674092	Distribution Pole and Conductor Repair-Caguas Group 45 (Obligated)	JulJun-2022 (CompletedComplete)	Nov-2022 (Started)
<u>334443</u> 674098	Distribution Pole and Conductor Repair-Caguas Group 27 (Obligated)	JulJun-2022 (CompletedComplete)	SepDec-2022
<u>334452</u> 673847	Distribution Pole and Conductor Repair- <u>CaguasCarolina</u> Group 32 (Obligated)	JulJun-2022 (CompletedComplete)	NovMar-2022- (Started)
<u>673848</u> 334488	Distribution Pole and Conductor Repair- <u>CaguasCarolina</u> Group 43 (Obligated)-	FebJun-2022 (CompletedComplete)	AugJan-2022- (Started)
<u>334491</u> 673774	Distribution Pole and Conductor Repair- <u>CaguasMayaguez</u> Group 51 (Obligated)	Jun-2022 (CompletedComplete)	SepMar-2022 (Started)
<u>334497</u> 673795	Distribution Pole and Conductor Repair- <u>Caguas</u> <u>Mayaguez</u> Group 64 (Obligated)	JulJun-2022 (CompletedComplete)	Aug-2022Mar- 2023

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
334518673818	Distribution Pole and Conductor Repair- Caguas <u>San Juan</u> Group 71 (Obligated)	Jun-2022 (Completed <u>Complete</u>)	Nov- 2022 <u>2021</u> (Started)
673838 334527	Distribution Pole and Conductor Repair- Caguas <u>San Juan</u> Group 82 (Obligated)	Feb <u>Jun</u> -2022 (Completed <u>Complete</u>)	Aug <u>Dec</u> -2022 (Completed)
334476673771	Distribution Pole and Conductor Repair- Carolina <u>Arecibo</u> Group 2-1 (Obligated)	Jun <u>Jul</u> -2022 (Completed <u>Complete</u>)	Oct-2022 <u>Nov-2021</u> (Started)
334477673836	Distribution Pole and Conductor Repair- Carolina <u>Bayamon</u> Group 3 -(Obligated) <u>1</u>	Jun <u>Jul</u> -2022 (Completed <u>Complete</u>)	Aug <u>Mar</u> -2022- (Started)
334308673843	Distribution Pole and Conductor Repair- Mayaguez <u>Bayamon</u> Group 13 (Obligated)	Jun <u>Jul</u> -2022 (Completed <u>Complete</u>)	Sep <u>Dec</u> -2022
334285674072	Distribution Pole and Conductor Repair- Mayaguez <u>Caguas</u> Group 21 (Obligated)	Jul-2022 (Completed <u>Complete</u>)	Oct <u>Nov</u> -2022- (Started)
334191674083	Distribution Pole and Conductor Repair- Mayaguez <u>Caguas</u> Group 3-2 (Obligated)	Jul-2022 (Completed <u>Complete</u>)	Aug <u>Dec</u> -2022
334293674088	Distribution Pole and Conductor Repair- Mayaguez <u>Caguas</u> Group 43 (Obligated)	Jun <u>Jul</u> -2022 (Completed <u>Complete</u>)	Sep-2022 <u>Dec-2021</u> (Started)
674096 334323	Distribution Pole and Conductor Repair- Ponce <u>Caguas</u> Group 16 (Obligated)	Jan <u>Jul</u> -2022 (Completed <u>Complete</u>)	Sept <u>Dec</u> -2022
334329673772	Distribution Pole and Conductor Repair- Ponce <u>Mayaguez</u> Group 2 (Obligated)	Jan <u>Jul</u> -2022 (Completed <u>Complete</u>)	Oct-2022 <u>Mar-2023</u>
673775	<u>Distribution Pole and Conductor Repair- Mayaguez Group 3</u>	Jul-2022 (Complete)	Dec-2021 (Started)
334471673844	Distribution Pole and Conductor Repair- San Juan Group 1-3 (Obligated)	Jun <u>Jul</u> -2022 (Completed <u>Complete</u>)	Oct <u>Dec</u> -2022
678985	<u>Distribution Pole and Conductor Repair - Bayamon Group 4</u>	Aug-2022 (Complete)	Jan-2023
334472679025	Distribution Pole and Conductor Repair - San Juan Group 2 -(Obligated) <u>4</u>	Jun <u>Aug</u> -2022 (Completed <u>Complete</u>)	Oct-2022 <u>Feb-2023</u>
679033	<u>Distribution Pole and Conductor Repair - Caguas Group 9</u>	Aug-2022 (Complete)	Jan-2023
679127	<u>Distribution Pole and Conductor Repair - Arecibo Group 3</u>	Aug-2022 (Complete)	Feb-2023
679149	<u>Distribution Pole and Conductor Repair - Mayaguez Group 5</u>	Aug-2022 (Complete)	Feb-2023
679457	<u>Distribution Pole and Conductor Repair - Ponce Group 3</u>	Aug-2022 (Complete)	Feb-2023
678988	<u>Distribution Pole and Conductor Repair - Bayamon Group 5</u>	Sep-2022 (Complete)	Feb-2023

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
546374679026	Distribution Pole and Conductor Repair - San Juan Group 3 (Obligated) 5	Jul Sep-2022 (Completed Complete)	Oct-2022-Jan- 2023
679133	Distribution Pole and Conductor Repair - Arecibo Group 4	Sep-2022 (Complete)	Feb-2023
679134	Distribution Pole and Conductor Repair - Caguas Group 10	Sep-2022 (Complete)	Jan-2023
679153	Distribution Pole and Conductor Repair - Mayaguez Group 6	Sep-2022 (Complete)	Feb-2023
679458	Distribution Pole and Conductor Repair - Ponce Group 4	Sep-2022 (Complete)	Jan-2023
TBD 685477	Distribution Pole and Conductor Repair - Arecibo Group 6	Oct Nov-2022 (Complete)	Jan Apr-2023
TBD 682910	Distribution Pole and Conductor Repair - Bayamon Group 7	Oct Nov-2022 (Complete)	Jan Apr-2023-
TBD 682890	Distribution Pole and Conductor Repair - Caguas Group 12	Oct Nov-2022 (Complete)	Jan Apr-2023-
TBD 685370	Distribution Pole and Conductor Repair - Mayaguez Group 8	Oct Nov-2022 (Complete)	Jan Mar-2023
TBD 685263	Distribution Pole and Conductor Repair - Ponce Group 6	Oct Nov-2022 (Complete)	Jan Apr-2023-
TBD 682865	Distribution Pole and Conductor Repair - San Juan Group 7	Oct Nov-2022 (Complete)	Jan May-2023-
682135	Distribution Pole and Conductor Repair - Bayamon Group 8	Nov-2022 (Complete)	May-2023
682324	Distribution Pole and Conductor Repair - Caguas Group 13	Nov-2022 (Complete)	May-2023
682870	Distribution Pole and Conductor Repair - San Juan Group 6	Nov-2022 (Complete)	Apr-2023
682882	Distribution Pole and Conductor Repair - Caguas Group 11	Nov-2022 (Complete)	Apr-2023
682898	Distribution Pole and Conductor Repair - Bayamon Group 6	Nov-2022 (Complete)	Apr-2023
685943	Distribution Pole and Conductor Repair - Ponce Group 5	Nov-2022 (Complete)	Apr-2023
686453	Distribution Pole and Conductor Repair - Mayaguez Group 7	Nov-2022 (Complete)	Mar-2023
686471	Distribution Pole and Conductor Repair - Arecibo Group 5	Nov-2022 (Complete)	Apr-2023

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
682124 <u>682178</u>	Distribution Pole and Conductor Repair - Arecibo Group 7	Oct <u>Dec</u> -2022 (Complete)	Jan <u>May</u> -2023-
<u>682210</u>	<u>Distribution Pole and Conductor Repair - Mayaguez Group 9</u>	<u>Dec-2022</u>	<u>May-2023</u>
<u>686480</u>	<u>Distribution Pole and Conductor Repair - Ponce Group 7</u>	<u>Dec-2022</u> (Complete)	<u>May-2023</u>
<u>682028</u>	<u>Distribution Pole and Conductor Repair - San Juan Group 8</u>	<u>Dec-2022</u> (Complete)	<u>May-2023</u>
<u>682172</u>	<u>Distribution Pole and Conductor Repair - Arecibo Group 8</u>	<u>Dec-2022</u>	<u>May-2023</u>
682136 <u>682135</u>	Distribution Pole and Conductor Repair - Bayamon Group 89	Oct <u>Dec</u> -2022	Jan <u>May</u> -2023-
TBD <u>682373</u>	Distribution Pole and Conductor Repair - Caguas Group 43 <u>14</u>	Oct <u>Dec</u> -2022 (Complete)	Jan <u>May</u> -2023-
TBD <u>682180</u>	Distribution Pole and Conductor Repair - Mayaguez Group 9 <u>10</u>	Oct <u>Dec</u> -2022 (Complete)	Jan <u>May</u> -2023-
<u>682228</u>	<u>Distribution Pole and Conductor Repair - Ponce Group 8</u>	<u>Dec-2022</u>	<u>May-2023</u>
<u>682031</u>	<u>Distribution Pole and Conductor Repair - San Juan Group 9</u>	<u>Dec-2022</u>	<u>May-2023</u>
<u>688627</u>	<u>Distribution Pole and Conductor Repair - Arecibo Group 9</u>	<u>Dec-2022</u>	<u>May-2023</u>
<u>688096</u>	<u>Distribution Pole and Conductor Repair - Caguas Group 15</u>	<u>Dec-2022</u>	<u>May-2023</u>
<u>688472</u>	<u>Distribution Pole and Conductor Repair - Mayaguez Group 11</u>	<u>Dec-2022</u>	<u>May-2023</u>
<u>688774</u>	<u>Distribution Pole and Conductor Repair - Ponce Group 9</u>	<u>Dec-2022</u>	<u>Jun-2023</u>
<u>691246</u>	<u>Distribution Pole and Conductor Repair - San Juan Group 10</u>	<u>Dec-2022</u>	<u>Jun-2023</u>
<u>688109</u>	<u>Distribution Pole and Conductor Repair - San Juan Group 11</u>	<u>Dec-2022</u>	<u>Jun-2023</u>
<u>688198</u>	<u>Distribution Pole and Conductor Repair - Arecibo Group 10</u>	<u>Dec-2022</u>	<u>Jun-2023</u>
<u>688625</u>	<u>Distribution Pole and Conductor Repair - Ponce Group 10</u>	<u>Dec-2022</u>	<u>Jun-2023</u>
<u>688629</u>	<u>Distribution Pole and Conductor Repair - Mayaguez Group 13</u>	<u>Dec-2022</u>	<u>Jun-2023</u>
<u>688630</u>	<u>Distribution Pole and Conductor Repair - Mayaguez Group 12</u>	<u>Dec-2022</u>	<u>May-2023</u>

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
<u>689071</u>	<u>Distribution Pole and Conductor Repair - Arecibo Group 11</u>	<u>Dec-2022</u>	<u>Jun-2023</u>
<u>TBD</u>	<u>Distribution Pole and Conductor Repair - San Juan Group 12</u>	<u>Dec-2022</u>	<u>Jun-2023</u>
<u>TBD</u>	<u>Distribution Pole and Conductor Repair - Ponce Group 11</u>	<u>Dec-2022</u>	<u>Jun-2023</u>
TBD	Distribution Pole and Conductor Repair - Ponce Group <u>713</u>	<u>Oct-2022Jan-2023</u>	<u>JanJul-2023</u>
<u>682028TBD</u>	Distribution Pole and Conductor Repair - <u>San JuanPonce</u> Group <u>812</u>	<u>Oct-2022Jan-2023</u>	<u>JanJul-2023</u>
<u>TBD</u>	<u>Distribution Pole and Conductor Repair - Mayaguez Group 14</u>	<u>Jan-2023</u>	<u>Jul-2023</u>
TBD	Distribution Pole and Conductor Repair - Arecibo Group <u>812</u>	<u>Nov-2022Jan-2023</u>	<u>FebJul-2023-</u>
<u>TBD</u>	<u>Distribution Pole and Conductor Repair - Arecibo Group 13</u>	<u>Feb-2023</u>	<u>Aug-2022</u>
<u>TBD682136</u>	Distribution Pole and Conductor Repair - Bayamon Group <u>910</u>	<u>Nov-2022Feb-2023</u>	<u>FebAug-2023</u>
TBD	Distribution Pole and Conductor Repair - Caguas Group <u>4416</u>	<u>Nov-2022Feb-2023</u>	<u>FebAug-2023</u>
TBD	Distribution Pole and Conductor Repair - Mayaguez Group <u>4015</u>	<u>Nov-2022Feb-2023</u>	<u>FebAug-2023</u>
TBD	Distribution Pole and Conductor Repair - Ponce Group <u>814</u>	<u>Nov-2022Feb-2023</u>	<u>FebAug-2023</u>
<u>682034TBD</u>	Distribution Pole and Conductor Repair - San Juan Group <u>913</u>	<u>Nov-2022Feb-2023</u>	<u>FebAug-2023</u>
<u>TBD</u>	<u>Distribution Pole and Conductor Repair - Arecibo Group 14</u>	<u>Feb-2023</u>	<u>Aug-2023</u>
<u>TBD</u>	<u>Distribution Pole and Conductor Repair - Bayamon Group 11</u>	<u>Feb-2023</u>	<u>Aug-2023</u>
<u>TBD</u>	<u>Distribution Pole and Conductor Repair - Caguas Group 17</u>	<u>Feb-2023</u>	<u>Aug-2023</u>
TBD	Distribution Pole and Conductor Repair - Arecibo Group <u>915</u>	<u>Mar-2023Dec-2022</u>	<u>MarSep-2023-</u>
<u>TBD</u>	<u>Distribution Pole and Conductor Repair - Bayamon Group 12</u>	<u>Mar-2023</u>	<u>Sep-2023</u>
TBD	Distribution Pole and Conductor Repair - Caguas Group <u>4518</u>	<u>Mar-2023Dec-2022</u>	<u>MarSep-2023</u>
TBD	Distribution Pole and Conductor Repair - Mayaguez Group <u>4416</u>	<u>Mar-2023Dec-2022</u>	<u>MarSep-2023</u>

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
TBD	Distribution Pole and Conductor Repair - Ponce Mayaguez Group 9 17	Mar-2023 Dec-2022	Mar Sep-2023
TBD	Distribution Pole and Conductor Repair - San Juan Ponce Group 10 15	Mar-2023 Dec-2022	Mar Sep-2023
TBD	Distribution Pole and Conductor Repair - Ponce Group 16	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - San Juan Group 14	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - San Juan Group 15	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - Arecibo Group 16	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - Bayamon Group 14	Mar-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair - San Juan Group 16	Mar-2023	Sep-2023
TBD 688623	Transmission and Distribution Automation Program – Group 1	Nov-2022 Jan-2023	Jan-2022 (Started)

IT & TELECOM

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
657300	Energy Management System (EMS) (Obligated)	Jul-2022 (Completed Complete)	Oct-2023
551925	SCADA Remote Access and RTU Replacements - Group 1	Jul-2022 (Complete)	Mar-2023
675345	IT OT Technology Systems Reparatons	Mar-2023 Dec-2022	Jun-2023
662238	Microwave Point to Point Backbone – Group A (Microwave Network Upgrades – Group A)	Jan-2023	Oct-2023
551926	SCADA Remote Access and RTU Replacements - Group 2	Mar-2023	Aug-2023
551927	SCADA Remote Access and RTU Replacements - Group 3	Mar-2023	Aug-2023



BUILDINGS

FEMA Prj. #	Project Name	DSOW Submission Estimate	Construction Start Estimate
679006	Test &and Technology Laboratory	Oct Nov-2022 (Complete)	Dec-2023 Jul-2024