

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

NEPR

Received:

Jun 20, 2023

6:30 PM

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 June 2023 Update
to PREPA-LUMA 90-Day Plan for T&D Projects

**MOTION SUBMITTING LUMA'S JUNE 2023 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 submits 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 June 2023 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”) updating the status of T&D Projects and providing a summary of key next steps for the upcoming 90 days (“June 2023 Update to PREPA-LUMA 90-Day Plan”). 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 March 23, 2023 (*see Exhibit 1 of Motion Submitting March 2023 Update to PREPA-LUMA 90-Day Plan for T&D Projects* filed by LUMA on that date) with the June 2023 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 June 2023 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 20th day of June 2023.

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 attorney for PREPA, Joannely Marrero-Cruz, jmarrero@diazvaz.law.



DLA Piper (Puerto Rico) LLC
500 Calle de la Tanca, Suite 401
San Juan, PR 00901-1969
Tel. 787-945-9132
Fax 939-697-6102

/s/ Yahaira De la Rosa Algarín
Yahaira De la Rosa Algarín
RUA Núm. 18,061
yahaira.delarosa@us.dlapiper.com

Exhibit 1

June 2023 T&D 90-Day Plan



FEMA



90-Day Plan

June 2023



June 2023

TABLE OF CONTENTS

I. Introduction 3

II. Overview of Focus Areas for the Next 90 Days..... 3

III. LUMA Estimated Schedule for Submission of DSOWs..... 7

Substations..... 8

Transmission.....10

Distribution12

IT & Telecom23

Buildings and Systems23

Vegetation24

IV. Self-Performing Work 24

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 electric transmission and distribution grid.

On June 1, 2021, LUMA assumed overall responsibilities for the Puerto Rico Electric Power Authority's (PREPA) Transmission and Distribution (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 Project) 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 five areas:

1. PREPA-LUMA Coordination and Alignment
2. Federal Grant Management
3. Funding and Reporting
4. Environmental and Historic Preservation
5. Engineering Management

1. PREPA-LUMA Coordination and Alignment

PREPA and LUMA goals for the next 90 days

- PREPA and LUMA leadership are participating in regular weekly meetings with the Central Office for Recovery, Reconstruction and Resiliency (COR3) & FEMA to ensure visibility of progress of project progress, the coordination and understanding of common matters, and to identify and resolve risks that involve points of integration between the two entities.
- LUMA will continue to coordinate with PREPA to support successful operations under the T&D OMA.

2. Federal Grant Management

LUMA goals for the next 90 days

- LUMA will continue working with COR3 and FEMA to obtain project obligations for the 53 detailed statements of work (DSOW) submitted to date.
- LUMA will continue advancing work on Section 428 projects towards finalizing DSOWs for submission to COR3 and FEMA. This effort includes the Section 406 404 Hazard Mitigation Grant Program (HMGP) and Environmental Planning and Historic Preservation (EHP) work. LUMA expects to submit DSOWs within the next 90-day period as per target schedule.
- LUMA will continue refining Section 406 Hazard Mitigation Grant Program strategies for distribution, transmission, substation, and streetlights. LUMA will conduct ongoing discussions with COR3 and FEMA for feedback and alignment.
- LUMA accounting will continue to develop distribution of feeder packages to submit work completed to FEMA.
- LUMA will continue providing the reconciliation costs to support submissions across all regions.
- LUMA expects to complete LEOC submissions for all six regions during the next period for a potential of \$116 million.
- LUMA will continue coordination with FEMA on the logistics of site visits to 315 locations based on the sampling methodology proposed by FEMA.
- While we have not received an ISOW for vegetation clearing, LUMA anticipates submitting DSOWs for high impact D and T lines.

During the last 90-day period, LUMA completed the following:

- Submitted 14 DSOWs to FEMA for approval representing \$803.8 million in capital investments.
- Submitted an amendment obligation for additional \$600 million to support Architecture and Engineering (A&E) resources.
- Obtained FEMA authorization and project obligations on 10 DSOWs representing \$127.7 million in capital investments.
- Progressed construction activities on 43 projects representing \$267.5 million.
- There has been a total of 13 projects formulated for total of \$13.5 million for Hurricane Fiona.

3. Funding and Reporting

LUMA goals for the next 90 days

- LUMA will continue to track project actual costs in accordance with FEMA, HUD, and COR3 standards to support financial reporting requirements for federally funded projects.
- LUMA will continue executing self-performing work (see section IV in this plan).

During the last 90-day period, LUMA completed the following:

- LUMA submitted \$55 million in requests for reimbursements (RFRs) to COR3 to date and has another \$30 million in process to be submitted during the next 90-day period.
- LUMA continued the implementation of time reporting and technology project to automate RFR process related to federally funded projects with a focus on accelerating submissions to COR3 while ensuring federal compliance.
- LUMA 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.
- LUMA engaged with our grid recovery partners on additional federal funding opportunities to include:
 - U.S. Department of Energy electrical system improvement grants
 - Grid resiliency
 - U.S. Department of Housing and Urban Development (HUD)
 - Puerto Rico Department of Housing's Community Development Block Grant – Disaster Recovery (PRDOH CDBG-DR) Program for hazard mitigation
- LUMA worked on initial proposals for the FEMA Section 404 Hazard Mitigation Grant Program as well as received approval for one project.
- LUMA submitted four full applications for funding under the Infrastructure Investment and Jobs Act (IIJA), including a \$180 million proposal to harden a portion of the underground transmission loop in San Juan.

4. Environmental and Historic Preservation

LUMA goals for the next 90 days

- LUMA will continue with FEMA meetings and consultations.

- LUMA will outline an environmental compliance strategy for vegetation clearance in accordance with the U.S. Fish and Wildlife Service.
- LUMA will review HSE Environmental 340-Stormwater & Erosion Control; 0100 Incident Management; 0274 Asbestos; 0310 Spill Response; and 0315 Waste Management.
- LUMA will develop process for work in areas that require managing lead materials.
- LUMA will implement the first phase of the corporate recycling program.
- LUMA will install containers to store used transformers in the technical offices of Bayamon, Guayama, Caguas, and Aguadilla in compliance with the Clean Water Law and the spill prevention program.

During the last 90-day period, LUMA completed the following:

- LUMA continued to review initial FEMA Record of Environmental Considerations (RECs) for approved projects for integration into project scopes.
- LUMA continued to support preconstruction and construction inspections visits, aided with implementing mitigation measures required by FEMA EHP and other agencies to meet environmental conditions. We also provided supporting documents for a class-three estimate.
- LUMA continued notifying and requesting endorsements from government agencies for projects obligated by FEMA.
- LUMA continued environmental support for Fiona projects.
- LUMA reviewed LUMA HSE Environmental Policies-0315-Vegetation Management; 0335-Wildlife, Avian and Historical Resources Protection 0325-Working Near Waterbodies. They will be loaded to library.
- LUMA developed underground injection control system closures template.

5. Engineering Management

LUMA goals for next 90-day report

- Continue preliminary engineering design work with existing A&E firms towards the development of DSOWs.
- Continue engineering on all projects with FEMA-approved DSOWs.
- Submit DSOWs for critical projects, including vegetation clearing, three critical lines, and distribution feeder rebuild projects

- Issue RFPs to execute work, including to procure additional A&E support, for Construction Services (MSAs), and EPC services to deploy six new substations.
- Continue to evaluate and prioritize existing FEMA projects against the needs and constraints of the electrical system and available contractor capacities to optimize the execution strategies.
- Continue working the area plan analysis to identify contingency issues and provide backup analysis to determine sectionalization and segmentation needs (e.g., installation of reclosers) to enhance reliability.

During the last 90-day period, LUMA completed the following:

- LUMA assigned additional substation and transmission line rebuild project engineering packages to engineering firms to finalize engineering scope, budget, and schedule. Preliminary engineering design to begin in October 2023.
- LUMA completed the planning technical studies and functional specifications on six transmission lines and 12 substations for long-term transmission reliability solutions.
- LUMA completed load interconnection reliability studies on eight load interconnections.
- LUMA completed line reliability recloser studies on twenty-two 38 kV transmission lines.
- LUMA completed 2023 day-peak and night-peak power flow model development.
- LUMA completed planning and analysis on 47 additional distribution feeders.

III. LUMA Estimated Schedule for Submission of DSOWs

Over the next 90 days, LUMA will be focused on preparing DSOWs and cost estimates for T&D projects that currently have both Puerto Rico Energy Bureau (PREB) approval and FEMA project numbers.

The tables below show the current set of projects, by asset category, along with the estimated timing for DSOWs 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 Project #	Project Name	DSOW Submission Estimate	Construction Start Date
165225	Vieques Substation (Phase 2)	Feb-23 (Completed)	Jan-25
165209	Culebra Substation (Phase 2)	Feb-23 (Completed)	Jan-25
682834	Costa Sur-TC – Phase II & III (Substation)	Mar-23 (Completed)	Jan-25
169276	Viaducto TC 1100	Mar-23 (Completed)	Apr-24
TBD	Sabana Llana TC	May-23 (Completed)	Jan-25
682121	Aguirre TC-Phase II (Substation)	May-23 (Completed)	Jan-25
TBD	Jobos TC	May-23 (Completed)	Jan-25
TBD	San Juan SP TC	May-23 (Completed)	Jan-25
550950	Monacillos Substation	May-23 (Completed)	Jan-25
660422	Physical Security Group 4	Jun-23 (Completed)	Apr-24
549715	Substation Minor Repairs-Group D	Jun-23	Apr-24
549725	Substation Minor Repairs-Group E	Jun-23	Apr-24
684920	Substations HV Equipment Replacement Group 1	Jun-23	Apr-23
550980	Parques y Recreos	Jun-23	Dec-24
547243	Egozcue	Jun-23	Dec-24
550099	Esc. Industrial Miguel Such 1423	Jun-23	Nov-24

547241	Tallaboa 5402	Jun-23	Jan-25
550162	Berwind TC- Metalclad - 1336	Jun-23	Jun-25
551260	Guaynabo Pueblo Rebuild	Jun-23	Feb-25
551912	Puerto Nuevo Metalclad 1520	Jun-23	Dec-24
550986	Condado 1113	Jun-23	Jun-24
551918	Crematorio 1512	Jun-23	Aug-24
547344	Acacias TC Relocation	Jun-23	Jun-25
550894	Baldrich 1422	Jun-23	Jun-25
550106	Conquistador - CH	Jun-23	Mar-23
178577	Cachete 1526	Jun-23	Sep-24
551914	Caparra 1911 & 1924	Aug-23	Mar-26
547187	Arecibo Pueblo 8002 Relocation	Aug-23	Jan-25
547273	Charco Hondo 8008 Relocation	Aug-23	Jul-25
550498	Pampanos Relocation	Sept-23	Jun-25
682645	Substation Minor Repairs-Group F	Sept-23	Sep-24
685869	Substation Minor Repairs-Group G	Sept-23	Sep-24
TBD	Substations HV Equipment Replacement Group 2	Sept-23	Dec-23

Transmission

FEMA Project #	Project Name	DSOW Submission Estimate	Construction Start Date
176971	8200 - San Juan SP - Cataño Sect.	Jul-22 (Completed)	Oct-24
180052	Existing 38kV - Line 100, Line 200 Ponce TC to Jobos TC	Aug-22 (Completed)	Nov-24
180326	Existing 115 kV - Line 36800 Palmer Fajardo o Sabana Llana	Aug-22 (Completed)	Jun-24
166904	37800 - Caguas – Monacillo	Aug-22 (Completed)	May-24
167443	36200 - Monacillos - Juncos	Aug-22 (Completed)	Jun-27
176913	9500 - Palo Seco SP - Cantaño Sect	Aug-22 (Completed)	Jul-24
176954	1100 - Garzas 1 HP - Garzas 2 HP	Aug-22 (Completed)	Jul-24
168483	36400 - Dos Bocas - Ponce	Aug-22 (Completed)	May-25
166860	37800 - Jobos – Caguas	Aug-22 (Completed)	Dec-25
167168	37100 - Costa Sur - Acacias	Aug-22 (Completed)	Nov-24
177191	39000 - Aguas Buenas – Caguas	Sep-22 (Completed)	Dec-24
165213	Mainland 5400 - Rio Blanco HP - Dagao TC	Nov-22 (Completed)	Sep-24
167508	50100 - Cambalache - Manati	Nov-22 (Completed)	Aug-27
166707	51300 - Ponce - Costa Sur	Nov-22 (Completed)	Sep-24
177134	4100 - Guaraguo TC - Comerio TC	Nov-22 (Completed)	Aug-24
681672	Transmission Priority Pole Replacements –38kV Line 2300	Nov-22 (Completed)	Feb-24

168226	San Juan 115kV Underground Transmission Loop	Mar-22 (Completed)	Jan-25
334468	Transmission Priority Pole Replacements – Line 2200	Apr-22 (Completed)	Aug-23
668592	Line 9800 Bayamón TC - Guaraguo Sect	Jun-22 (Completed)	Dec-23
550896	Transmission Priority Pole Replacements – Line 6700	Jun-22 (Completed)	Jun-23
668583	Transmission Priority Pole Replacements – Line 13300	Jun-22 (Completed)	Oct-23
334470	3100 - Monacillo TC to Daguo TC	Jun-23	Feb-26
550019	600 - Caguas TC to Gautier Benitez Sect.	Jun-23	Feb-27
718955	TL-50200 - Costa Sur SP to Bayamon TC	Jul-23	Dec-28
718971	TL-50300 - Costa Sur SP to Aguirre SP	Jul-23	Dec-28
718951	TL-51200- Costa Sur to Cambalache	Jul-23	Dec-28
167446	36100 - Dos Bocas – Monacillos	Sep-23	Oct-24
334331	1900 - Dos Bocas to San Sebastian	Sep-23	Jun-25
334482	3000 - Monacillos TC to Martin Pena	Sep-23	Dec-25
435257	36200 - Fajardo to Rio Blanco (Evaluating for relocation)	Sep-23	Mar-28
547251	2400 - Dos Bocas to America Apparel	Sep-23	Jul-24
547259	2700 - Victoria TC to Quebradillas Sect.	Sep-23	Apr-25
547269	2800 - Aguadilla Hospital Distrito Sect to T-Bone TO	Sep-23	Jan-27
547350	13300 - Bayamón Tc to Plaza del Sol	Sep-23	Sep-26
551911	9100 - Guaraguo TC to Bayamón Pueblo Sect.	Sep-23	Sep-26

Distribution

Distribution Type	FEMA Project #	Project Name	DSOW Submission Estimate	Construction Start Date
Distribution Poles	334323	Distribution Pole and Conductor Repair-Ponce Group 1	Jan-22 (Completed)	Mar-22 (Started)
Distribution Poles	334329	Distribution Pole and Conductor Repair-Ponce Group 2	Jan-22 (Completed)	Jul-23
Streetlighting	542690	Maunabo Streetlighting] (Distribution)	Feb-22 (Completed)	Jun-22 (Started)
Distribution Poles	542762	Distribution Pole and Conductor Repair-Arecibo Group 2	Feb-22 (Completed)	Mar-22 (Completed)
Distribution Poles	334488	Distribution Pole and Conductor Repair-Caguas Group 4	Feb-22 (Completed)	May-22 (Started)
Distribution Poles	334527	Distribution Pole and Conductor Repair-Caguas Group 8	Feb-22 (Completed)	Sep-22 (Completed)
Streetlighting	542688	Aguada Streetlighting (Distribution)	Mar-22 (Completed)	Jun-22 (Started)
Streetlighting	542756	Streetlighting - Guánica (Distribution)	Mar-22 (Completed)	Aug-22 (Started)
Streetlighting	542687	Lajas Streetlighting (Distribution)	Mar-22 (Completed)	Jul-22 (Started)
Streetlighting	542517	Luquillo Distribution Streetlighting - Distribution	Mar-22 (Completed)	Jun-22 (Started)
Distribution Poles	673839	Distribution Pole and Conductor Repair-Bayamon Group 2	Jun-22 (Completed)	Apr-22 (Completed)

Distribution Poles	674092	Distribution Pole and Conductor Repair-Caguas Group 5	Jun-22 (Completed)	Nov-22 (Started)
Distribution Poles	674098	Distribution Pole and Conductor Repair-Caguas Group 7	Jun-22 (Completed)	Feb-23 (Completed)
Distribution Poles	673847	Distribution Pole and Conductor Repair-Carolina Group 2	Jun-22 (Completed)	Mar-22 (Started)
Distribution Poles	673848	Distribution Pole and Conductor Repair-Carolina Group 3	Jun-22 (Completed)	Jan-22 (Started)
Distribution Poles	673774	Distribution Pole and Conductor Repair-Mayaguez Group 1	Jun-22 (Completed)	Mar-22 (Started)
Distribution Poles	673795	Distribution Pole and Conductor Repair-Mayaguez Group 4	Jun-22 (Completed)	Apr-23 (Started)
Distribution Poles	673818	Distribution Pole and Conductor Repair-San Juan Group 1	Jun-22 (Completed)	Nov-2021 (Started)
Distribution Poles	673838	Distribution Pole and Conductor Repair-San Juan Group 2	Jun-22 (Completed)	Jun-23
Streetlighting	660239	Streetlighting - Villalba (Distribution)	Jul-22 (Completed)	Oct-22 (Started)
Streetlighting	659715	Distribution Streetlighting - Aibonito (Distribution)	Jul-22 (Completed)	Nov-22 (Started)
Streetlighting	659623	Distribution Streetlighting - Cataño (Distribution)	Jul-22 (Completed)	Nov-22 (Started)
Distribution Poles	673771	Distribution Pole and Conductor Repair-Arecibo Group 1	Jul-22 (Completed)	Nov-2021 (Started)
Distribution Poles	673836	Distribution Pole and Conductor Repair-Bayamon Group 1	Jul-22 (Completed)	Mar-22 (Started)

Distribution Poles	673843	Distribution Pole and Conductor Repair-Bayamon Group 3	Jul-22 (Completed)	Feb-23 (Started)
Distribution Poles	674072	Distribution Pole and Conductor Repair-Caguas Group 1	Jul-22 (Completed)	Nov-22 (Started)
Distribution Poles	674083	Distribution Pole and Conductor Repair-Caguas Group 2	Jul-22 (Completed)	Apr-23 (Started)
Distribution Poles	674088	Distribution Pole and Conductor Repair-Caguas Group 3	Jul-22 (Completed)	Dec-21 (Started)
Distribution Poles	674096	Distribution Pole and Conductor Repair-Caguas Group 6	Jul-22 (Completed)	Feb-23 (Started)
Distribution Poles	673772	Distribution Pole and Conductor Repair-Mayaguez Group 2	Jul-22 (Completed)	Mar-23 (Started)
Distribution Poles	673775	Distribution Pole and Conductor Repair-Mayaguez Group 3	Jul-22 (Completed)	Dec-21 (Started)
Distribution Poles	673844	Distribution Pole and Conductor Repair-San Juan Group 3	Jul-22 (Completed)	Jun-23 (started)
Streetlighting	659625	Distribution Streetlighting - Dorado (Distribution)	Aug-22 (Completed)	Nov-22 (Started)
Streetlighting	660227	Hatillo Streetlight (Distribution)	Aug-22 (Completed)	Nov-22 (Started)
Streetlighting	660437	Manati Streetlight (Distribution)	Aug-22 (Completed)	Nov-22 (Started)
Distribution Poles	678985	Distribution Pole and Conductor Repair - Bayamon Group 4	Aug-22 (Completed)	Feb-23 (Started)
Distribution Poles	679025	Distribution Pole and Conductor Repair - San Juan Group 4	Aug-22 (Completed)	July-23

Distribution Poles	679033	Distribution Pole and Conductor Repair - Caguas Group 9	Aug-22 (Completed)	Apr-23 (Started)
Distribution Poles	679127	Distribution Pole and Conductor Repair - Arecibo Group 3	Aug-22 (Completed)	May-23 (started)
Distribution Poles	679149	Distribution Pole and Conductor Repair - Mayaguez Group 5	Aug-22 (Completed)	Jul-23
Distribution Poles	679457	Distribution Pole and Conductor Repair - Ponce Group 3	Aug-22 (Completed)	Aug-23
Distribution Poles	678988	Distribution Pole and Conductor Repair - Bayamon Group 5	Sep-22 (Completed)	Mar-23 (Started)
Distribution Poles	679026	Distribution Pole and Conductor Repair - San Juan Group 5	Sep-22 (Completed)	Jul-23
Distribution Poles	679133	Distribution Pole and Conductor Repair - Arecibo Group 4	Sep-22 (Completed)	Jun-23
Distribution Poles	679134	Distribution Pole and Conductor Repair - Caguas Group 10	Sep-22 (Completed)	May-23 (started)
Distribution Poles	679153	Distribution Pole and Conductor Repair - Mayaguez Group 6	Sep-22 (Completed)	May-23 (started)
Distribution Poles	679458	Distribution Pole and Conductor Repair - Ponce Group 4	Sep-22 (Completed)	Aug-23
Distribution Poles	685477	Distribution Pole and Conductor Repair - Arecibo Group 6	Nov-22 (Completed)	Jul-23
Distribution Poles	682910	Distribution Pole and Conductor Repair - Bayamon Group 7	Nov-22 (Completed)	Apr-23 (Started)
Distribution Poles	682890	Distribution Pole and Conductor Repair - Caguas Group 12	Nov-22 (Completed)	Apr-23 (Started)

Distribution Poles	685370	Distribution Pole and Conductor Repair - Mayaguez Group 8	Nov-22 (Completed)	Jun-23 (started)
Distribution Poles	685263	Distribution Pole and Conductor Repair - Ponce Group 6	Nov-22 (Completed)	Jun-23
Distribution Poles	682865	Distribution Pole and Conductor Repair - San Juan Group 7	Nov-22 (Completed)	Aug-23
Distribution Poles	682135	Distribution Pole and Conductor Repair - Bayamon Group 8	Nov-22 (Completed)	Feb-23 (Started)
Distribution Poles	682324	Distribution Pole and Conductor Repair - Caguas Group 13	Nov-22 (Completed)	Mar-23 (Started)
Distribution Poles	682870	Distribution Pole and Conductor Repair - San Juan Group 6	Nov-22 (Completed)	Aug-23
Distribution Poles	682882	Distribution Pole and Conductor Repair - Caguas Group 11	Nov-22 (Completed)	Apr-23 (started)
Distribution Poles	682898	Distribution Pole and Conductor Repair - Bayamon Group 6	Nov-22 (Completed)	Feb-23 (Started)
Distribution Poles	685943	Distribution Pole and Conductor Repair - Ponce Group 5	Nov-22 (Completed)	Apr-23 (Started)
Distribution Poles	686453	Distribution Pole and Conductor Repair - Mayaguez Group 7	Nov-22 (Completed)	Jul-23
Distribution Poles	686471	Distribution Pole and Conductor Repair - Arecibo Group 5	Nov-22 (Completed)	Jul-23
Distribution Feeders	165226	Vieques Feeders 2501-01, 2501-02, 2501-03 and Culebra Feeders 3801-01, 3801-02	Dec 2022 (Complete)	Oct-2023
Distribution Poles	682178	Distribution Pole and Conductor Repair - Arecibo Group 7	Dec-22 (Completed)	Jul-23

Distribution Poles	682210	Distribution Pole and Conductor Repair - Mayaguez Group 9	Dec-22 (Completed)	Apr-23 (Started)
Distribution Poles	686480	Distribution Pole and Conductor Repair - Ponce Group 7	Dec-22 (Completed)	May-23 (Started)
Distribution Poles	682028	Distribution Pole and Conductor Repair - San Juan Group 8	Dec-22 (Completed)	Aug-23
Distribution Poles	682172	Distribution Pole and Conductor Repair - Arecibo Group 8	Dec-22 (Completed)	May-23 (Started)
Distribution Poles	682136	Distribution Pole and Conductor Repair - Bayamon Group 9	Dec-22 (Completed)	Apr-23 (started)
Distribution Poles	682373	Distribution Pole and Conductor Repair - Caguas Group 14	Dec-22 (Completed)	Jul-23
Distribution Poles	682180	Distribution Pole and Conductor Repair - Mayaguez Group 10	Dec-22 (Completed)	Jul-23
Distribution Poles	682228	Distribution Pole and Conductor Repair - Ponce Group 8	Dec-22 (Completed)	Jun-23 (started)
Distribution Poles	682031	Distribution Pole and Conductor Repair - San Juan Group 9	Dec-22 (Completed)	Sept-23
Distribution Poles	688627	Distribution Pole and Conductor Repair - Arecibo Group 9	Dec-22 (Completed)	Jul-23
Distribution Poles	688096	Distribution Pole and Conductor Repair - Caguas Group 15	Dec-22 (Completed)	Jul-23
Distribution Poles	688472	Distribution Pole and Conductor Repair - Mayaguez Group 11	Dec-22 (Completed)	Apr-23 (Started)
Distribution Poles	688774	Distribution Pole and Conductor Repair - Ponce Group 9	Dec-22 (Completed)	Nov-2021 (Started)

Distribution Poles	691246	Distribution Pole and Conductor Repair - San Juan Group 10	Dec-22 (Completed)	Aug-23
Distribution Poles	688109	Distribution Pole and Conductor Repair - San Juan Group 11	Dec-22 (Completed)	Jul-23
Distribution Poles	688198	Distribution Pole and Conductor Repair - Arecibo Group 10	Dec-22 (Completed)	Jul-23
Distribution Poles	688625	Distribution Pole and Conductor Repair - Ponce Group 10	Dec-22 (Completed)	Apr-23 (Started)
Distribution Poles	688629	Distribution Pole and Conductor Repair - Mayaguez Group 13	Dec-22 (Completed)	May-23 (Started)
Distribution Poles	688630	Distribution Pole and Conductor Repair - Mayaguez Group 12	Dec-22 (Completed)	Jul-23
Distribution Poles	689071	Distribution Pole and Conductor Repair - Arecibo Group 11	Dec-22 (Completed)	Sep-23
Distribution Poles	701679	Distribution Pole and Conductor Repair - San Juan Group 12	Dec-22 (Completed)	Sep-23
Distribution Poles	701545	Distribution Pole and Conductor Repair - Ponce Group 11	Dec-22 (Completed)	May-23 (Started)
Distribution Poles	701555	Distribution Pole and Conductor Repair - Ponce Group 13	Jan-23 (Completed)	Oct-23
Distribution Poles	701552	Distribution Pole and Conductor Repair - Ponce Group 12	Jan-23 (Completed)	Apr-23 (Started)
Distribution Poles	701495	Distribution Pole and Conductor Repair - Mayaguez Group 14	Jan-23 (Completed)	Apr-23 (Started)
Distribution Poles	701504	Distribution Pole and Conductor Repair - Arecibo Group 12	Jan-23 (Completed)	Oct-23

Streetlighting	673504	FAASt [Distribution Streetlighting - Gurabo] (Distribution)	Feb-23 (Completed)	Mar-23 (Started)
Streetlighting	690545	FAASt Aguadilla Streetlight (Distribution)	Feb-23 (Completed)	May-23 (Started)
Streetlighting	691702	FAASt Distribution Streetlighting - Trujillo Alto (Distribution)	Mar-23 (Completed)	Apr-23 (Started)
Streetlighting	698424	FAASt Streetlight Florida Distribution	Mar-23 (Completed)	Apr-23 (Started)
Streetlighting	679039	FAASt [Distribution Streetlighting - Caguas] (Distribution)	Mar-23 (Completed)	May-23 (Started)
Streetlighting	659968	FAASt [San Germán Streetlighting] (Distribution)	Mar-23 (Completed)	May-23 (Started)
Distribution Poles	704916	Distribution Pole and Conductor Repair - Arecibo Group 13-14-15-16	Mar-23 (Completed)	Nov-23
Distribution Poles	704750	Distribution Pole and Conductor Repair - Bayamon Group 10	Mar-23 (Completed)	Jul-23
Distribution Poles	704751	Distribution Pole and Conductor Repair - Bayamon Group 11	Mar-23 (Completed)	Aug-23
Distribution Poles	704755	Distribution Pole and Conductor Repair - Bayamon Group 12-13-14	Mar-23 (Completed)	Sep-23
Distribution Poles	704844	Distribution Pole and Conductor Repair - Caguas Group 16-17-18-19-20	Mar-23 (Completed)	Oct-23
Distribution Poles	705527	Distribution Pole and Conductor Repair - San Juan Group 17-18-19-20-21	Mar-23 (Completed)	Sep-23
Distribution Poles	705503	Distribution Pole and Conductor Repair - Mayaguez Group 15-16-17-18-19	Apr-23 (Completed)	Oct-23

Distribution Poles	705584	Distribution Pole and Conductor Repair - Ponce Group 14-15	Apr-23 (Completed)	Nov-23
Distribution Poles	704933	Distribution Pole and Conductor Repair - San Juan Group 13-14-15-16	Apr-23 (Completed)	Sep-23
Distribution Poles	708579	Distribution Pole and Conductor Repair - Ponce Group 16-17-18-19	Apr-23 (Completed)	Sep-23
Automation	688623	Transmission and Distribution Automation Program – Group 1	Apr-23 (Completed)	Jan-22
Distribution Feeder	334474	Distribution Feeder (Bayamón Short-Term Group 2)	Jun-23	Aug-24
Distribution Feeder	334191	Distribution Feeder (Mayagüez Short Term Group 3)	Jun-23	Aug-24
Distribution Feeder	334285	Distribution Feeder (Mayagüez Group 2)	Jun-23	Sep-24
Distribution Feeder	334293	Distribution Feeder (Mayagüez Short Term Group 4)	Jun-23	Aug-24
Distribution Feeder	334308	Distribution Feeder (Mayagüez Group 1)	Jun-23	Sep-24
Distribution Feeder	334452	Distribution Feeder (Caguas Group 3)	Jun-23	Sep-24
Distribution Feeder	334472	Distribution Feeder (San Juan Group 2)	Jun-23	Oct-24
Distribution Feeder	334475	Distribution Feeder (Bayamón Group 3)	Jun-23	Oct-24
Distribution Feeder	334477	Distribution Feeder (Carolina Group 3)	Jun-23	Oct-24

Distribution Feeder	334491	Distribution Feeder (Caguas Group 5)	Jun-23	Oct-24
Distribution Feeder	334497	Distribution Feeder (Caguas Group 6)	Jun-23	Oct-24
Distribution Feeder	334518	Distribution Feeder (Caguas Group 7)	Jun-23	Oct-24
Distribution Feeder	546374	Distribution Feeder (San Juan Group 3)	Jun-23	Oct-24
Distribution Feeder	334420	Distribution Feeder (Caguas Group 1)	Jul-23	Sep-24
Distribution Feeder	334443	Distribution Feeder (Caguas Group 2)	Jul-23	Sep-24
Distribution Feeder	334471	Distribution Feeder (San Juan Group 1)	Jul-23	Sep-24
Distribution Feeder	436616	Distribution Feeder (Arecibo Group 1)	Jul-23	Oct-24
Distribution Feeder	546386	Distribution Feeder (El Yunque Group)	Aug-23	Oct-24
Distribution Feeder	334473	Distribution Feeder (Bayamón Group 1)	Aug-23	Oct-24
Streetlighting	698522	Distribution Streetlighting - Vieques (Distribution)	Sept-23	Feb-24
Streetlighting	698432	Hormigueros Streetlight (Distribution)	Sept-23	Nov-23
Streetlighting	704679	Coamo Streetlight (Distribution)	Sept-23	Oct-23

Streetlighting	701473	Distribution Streetlighting - Canovanas	Sept-23	Nov-23
Distribution Poles	TBD	Bayamon Group 2 - Phase 2	Sept-23	Mar-24
Distribution Poles	TBD	Caguas Group 1 - Phase 2	Sept-23	Mar-24
Distribution Feeder	TBD	Distribution Feeder (Arecibo Group 2)	Sept-23	Nov-24
Distribution Feeder	334476	Distribution Feeder (Carolina Group 2)	Sept-23	Nov-24
Distribution Feeder	TBD	Distribution Feeder (Ponce Group 1)	Sept-23	Nov-24
Distribution Feeder	TBD	Distribution Feeder (Ponce Group 2)	Sept-23	Nov-24
Distribution Feeder	TBD	Distribution Feeder (Caguas Group 4)	Sept-23	Nov-24
Distribution Feeder	TBD	Distribution Feeder (Caguas Group 8)	Sept-23	Nov-24
Automation	706498	Transmission and Distribution Automation Program – Group 4	Sept-23	Nov-23
Automation	TBD	Area-Wide Distribution Automation, Group 1	Sept-23	Dec-24

IT & Telecom

FEMA Project #	Project Name	DSOW Submission Estimate	Construction Start
			Estimate
551925	SCADA Remote Access and RTU Replacements - Group 1	Jul-22 (completed)	Sep-23
675345	IT OT Technology Systems Repairs	Mar-23 (completed)	Sep-23
668665	Cybersecurity Program Implementation	Jun-23	Sep-23
657300	Energy Management System - Phase I	July-23	Dec-24 (Software implementation)
714654	Advanced Metering Infrastructure (AMI)	Jul-23	Jan-24
551963	Transport Network	Jul-23	Jan-24
551926	SCADA Remote Access and RTU Replacements - Group 2	Sep-23	Mar-24

Buildings and Systems

FEMA Project #	Project Name	DSOW Submission Estimate	Construction Start Date
57300	Energy Management System (EMS)	Jul-22 (completed)	Jul-2023
679006	Test and Technology Laboratory (equipment)	Jun-23	Sept-23

657300	Energy Management System - Phase II Primary Control Center (PCC)	Jun-23	Dec-24
679006	Test and Technology Laboratory (facilities)	Sept-23	May-24

Vegetation

FEMA Project #	Project Name	DSOW Submission Estimate	Construction Start Date
TBD	Island Wide Vegetation Clearing: San Juan Regional Project	Jun-23	Sept-23

IV. Self-Performing Work

LUMA will continue to execute self-performing work in the following categories:

- Pole/conductor replacements
- Structure replacements
- Hardware/insulator replacements
- Streetlights
- Substation, feeder, and line minor repairs
- Communication network and grid automation
- Equipment replacements
- Civil and low-voltage work to support projects

We will continue to refine this section in collaboration with P3 as we move forward.

Exhibit 2

Redline showing changes from March 2023 Update to PREPA-LUMA 90-Day Plan for T&D Projects to the June 2023 Update to PREPA-LUMA 90-Day Plan for T&D Projects



FEMA



90-Day Plan

March June 2023

LUMA 

June 2023

TABLE OF CONTENTS

I. Introduction.....	3
II. Overview of Focus Areas for the Next 90- Days.....	3
III. LUMA Estimated Schedule for Submission of Detailed SOWs <u>DSOWs</u>	7
<u>Substations</u>	<u>8</u>
<u>Transmission</u>	<u>10</u>
<u>Distribution</u>	<u>12</u>
<u>IT & Telecom</u>	<u>23</u>
<u>Buildings and Systems</u>	<u>23</u>
<u>Vegetation</u>	<u>24</u>
IV. <u>Self-Performing Work</u>	<u>24</u>

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~~ electric transmission and distribution grid.

On June 1, 2021, LUMA assumed overall responsibilities for the Puerto Rico Electric Power Authority's ("PREPA") Transmission and Distribution (T&D) System as outlined within the O&M Agreement (OMA) between PREPA, P3A, and LUMA. Upon ~~Commencement~~ 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 five areas:

1. ~~1)~~ PREPA-LUMA Coordination and Alignment;
2. ~~2)~~ Federal Grant Management;
3. ~~3)~~ Funding and Reporting;
4. ~~4)~~ Environmental and Historic Preservation; ~~and~~
5. ~~5)~~ Engineering Management.

1. PREPA-LUMA Coordination and Alignment

- PREPA and LUMA ~~Goals~~ goals for the ~~Next~~ next 90 days

- ○ PREPA and LUMA leadership are participating in regular weekly meetings with the Central Office for Recovery, Reconstruction and Resiliency (COR3) & FEMA to ensure visibility of progress of project ~~work,~~ ensure progress, 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 coordinate with PREPA to support successful operations under the T&D OMA.

2. Federal Grant Management

• LUMA ~~Goals~~goals for the ~~Next~~next 90 ~~Days~~days

- ~~Continue~~LUMA will continue working with COR3 and FEMA to obtain Project Obligations for the ~~37 Detailed SOWs~~project obligations for the 53 detailed statements of work (DSOW) submitted to date (i.e., 5 Substation Rebuild projects, 15 Transmission Line Rebuild projects, 3 Substation Minor Repair projects, 3 Substation Physical Security projects, 1 Transmission Pole Replacement projects, and 6 Distribution Pole and Conductor Replacement projects, 2 Streetlight projects, 1 SCADA Remote Access and RTU Replacements project and 1 IT and Telecommunications projects).
- ~~Continue~~LUMA will continue advancing work on Section 428 projects towards finalizing ~~Detailed SOWs~~DSOWs for submission to COR3 and FEMA. This effort includes the Section 406 ~~404~~ Hazard Mitigation and EHP work. Expect to submit ~~Detailed SOWs~~Grant Program (HMGP) and Environmental Planning and Historic Preservation (EHP) work. LUMA expects to submit DSOWs within the next 90-day period as per target schedule ~~in Section IV~~.
- ~~Continue refinement of~~LUMA will continue refining Section 406 Hazard Mitigation ~~Strategies for Distribution, Transmission, Substation and Streetlights and~~Grant Program strategies for distribution, transmission, substation, and streetlights. LUMA will conduct ongoing discussions with COR3 and FEMA for feedback and alignment.
- LUMA accounting will continue to develop distribution of feeder packages to submit work completed to FEMA.
- LUMA will continue providing the reconciliation costs to support submissions across all regions.
- LUMA expects to complete LEOC submissions for all six regions during the next period for a potential of \$116 million.
- LUMA will continue coordination with FEMA on the logistics of site visits to 315 locations based on the sampling methodology proposed by FEMA.
- While we have not received an ISOW for vegetation clearing, LUMA anticipates submitting DSOWs for high impact D and T lines.

• During the ~~Last~~last 90-~~Day Period~~day period, LUMA ~~Completed~~completed the ~~Following~~following:

- ~~Submitted 17 Detailed SOWs~~14 DSOWs to FEMA for approval representing \$~~37~~803.8 million in capital investments.

- Submitted an amendment obligation for additional \$600 million to support Architecture and Engineering (A&E) resources.
- ~~Obtained FEMA Authorization and Project Obligations on Detailed SOWs for 39 Detailed SOWs~~ authorization and project obligations on 10 DSOWs representing \$~~87~~127.7 million in capital investments.
- ~~Progressed construction activities on 29~~43 projects representing \$~~0.11 billion~~267.5 million.
- ~~Constructed and energized five projects to date.~~
- There has been a total of 13 projects formulated for total of \$13.5 million for Hurricane Fiona.

3. Funding and Reporting

Funding and Reporting

- LUMA ~~Goals~~goals for the ~~Next~~next 90 ~~Days~~days

- ~~Continue tracking~~LUMA will continue to track project actual costs in accordance with FEMA, HUD, and COR3 standards to support financial reporting requirements for federally funded projects.
- LUMA will continue executing self-performing work (see section IV in this plan).

• During the ~~Last~~last 90-~~Day Period~~day period, LUMA ~~Completed~~completed the ~~Following~~following:

- ~~Submitted~~LUMA submitted \$~~34.2~~55 million in requests for reimbursements (RFRs) to COR3 to date and has another \$~~35~~30 million in process to be submitted during the next 90-day period.
- ~~Continued~~LUMA continued the implementation of ~~Time Reporting and Enhancements~~time reporting and technology project to automate RFR process related to ~~Federally Funded Projects and accelerate~~federally funded projects with a focus on accelerating submissions to COR3 while ensuring federal compliance.
- ~~Incorporated~~LUMA 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~~LUMA engaged with our grid recovery partners on additional ~~Federal Funding~~federal funding opportunities to include:
 - U.S. Department of Energy electrical system improvement ~~Grants,~~
~~Grid Resiliency and Innovation Partnership (GRIP) grants, HUD and~~

~~PRDOH CDBG-DR Programs for Hazard mitigation, Grid Resilience and Cost Share as well as FEMA Section 406 Hazard Mitigation proposals in all major asset categories and projects.~~grants

- ~~○ Worked on additional initial proposals utilizing the FEMA/SHPO Section 404 Hazard Mitigation program with six key back-up projects proposed and developed, representing \$900 million, should additional Section 404 HMGP funds become available.~~
 - ~~○ Grid resiliency~~
 - ~~○ U.S. Department of Housing and Urban Development (HUD)~~
 - ~~○ Puerto Rico Department of Housing's Community Development Block Grant – Disaster Recovery (PRDOH CDBG-DR) Program for hazard mitigation~~
- LUMA worked on initial proposals for the FEMA Section 404 Hazard Mitigation Grant Program as well as received approval for one project.
- LUMA submitted four full applications for funding under the Infrastructure Investment and Jobs Act (IIJA), including a \$180 million proposal to harden a portion of the underground transmission loop in San Juan.

4. Environmental and Historic Preservation

~~•~~ LUMA ~~Goals~~goals for the ~~Next~~next 90 days

- LUMA will continue with FEMA meetings and consultations.
- ~~○ Continue to consult with FEMA and~~LUMA will outline an environmental compliance strategy for vegetation clearance in accordance with the U.S. Fish and Wildlife Service (FWS).
- ~~○ Review Vegetation Management Plan to comply with FWS requirements.~~
- ~~○ Review Luma~~LUMA will review HSE Environmental Policies-0315-Vegetation Management; 340-Stormwater & Erosion Control; 0335-Wildlife, Avian and Historical Resources Protection 0325-Working Near Waterbodies 0100 Incident Management; 0274 Asbestos; 0310 Spill Response; and 0315 Waste Management.
- ~~○ Develop underground injection control system closures template.~~
- LUMA will develop process for work in areas that require managing lead materials.
- LUMA will implement the first phase of the corporate recycling program.

- LUMA will install containers to store used transformers in the technical offices of Bayamon, Guayama, Caguas, and Aguadilla in compliance with the Clean Water Law and the spill prevention program.
- ~~During the Lastlast 90-Day Period~~ day period, LUMA ~~Completed~~ completed the ~~Following~~ following:
 - ~~Collaborated on streamlining consultation process with FEMA relating to environmental studies, pre-construction, and construction disturbances and vegetation management.~~
 - ~~Continue~~ LUMA continued to review initial FEMA Record of Environmental Considerations (RECs) for approved projects ~~to implement conditions for~~ integration into project scopes.
 - ~~Continue~~ LUMA continued to support ~~in pre-construction~~ preconstruction and construction inspections visits, aided with ~~the implementation of~~ implementing mitigation measures required by FEMA EHP and other agencies to meet environmental conditions, ~~and~~. We also provided supporting documents for ~~Class 3a~~ class-three estimate.
 - ~~Continued~~ LUMA continued notifying and requesting endorsements from government agencies for projects obligated by FEMA ~~(LUMA's Capital Programs and Permitting Office).~~
 - ~~Onboard an archaeologist resource to perform historical evaluation on projects.~~
 - ~~Contact ICP and SHPO leadership to introduce archaeologist and streamline process.~~
 - ~~Provide~~ LUMA continued environmental support for Fiona projects.
 - LUMA reviewed LUMA HSE Environmental Policies-0315-Vegetation Management; 0335-Wildlife, Avian and Historical Resources Protection 0325-Working Near Waterbodies. They will be loaded to library.
 - LUMA developed underground injection control system closures template.

5. Engineering Management

- ~~LUMA Goals~~ goals for ~~Nextnext 90-Day Report~~ day report
 - ~~Continue with~~ preliminary engineering design work with existing A/E firms towards the development of ~~Detailed SOWs~~ DSOWs.
 - ~~Continue detailed~~ engineering on all projects with ~~FEMA-approved Detailed SOWs~~ FEMA-approved DSOWs.
 - ~~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.~~

- Submit DSOWs for critical projects, including vegetation clearing, three critical lines, and distribution feeder rebuild projects
- Issue RFPs to execute work, including to procure additional A&E support, for Construction Services (MSAs), and EPC services to deploy six new substations.
- ~~Continue evaluating and prioritizing the~~ to evaluate and prioritize existing FEMA 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 refining feeder technology requirements for the distribution feeder rebuild program.~~
- ~~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)~~ to enhance reliability.
 - ~~Continue area planning analysis on the T&D system with focus on critical areas including airport supplies, hard to reach outlying areas to provide back up during outages, and high load growth areas.~~

• During the ~~Last last~~ 90-Day Period ~~day period~~, LUMA ~~Completed~~ completed the ~~Following~~ following:

- ~~Assigned~~ LUMA assigned additional ~~Substation and Transmission Line~~ substation and transmission line rebuild project engineering packages to engineering firms to finalize engineering scope, budget, and schedule ~~and begin preliminary.~~ Preliminary engineering design to begin in October 2023.
- ~~Completed~~ LUMA completed the planning technical studies and functional specifications on ~~22~~ six transmission lines and ~~7~~ 12 substations for long-term transmission reliability solutions.
- ~~Completed~~ LUMA completed load interconnection reliability studies on ~~6~~ eight load interconnections.
- ~~Completed~~ LUMA completed line reliability recloser studies on twenty-two 38 kV transmission lines.
 - ~~Completed transmission line outage matrix studies on 15 transmission lines.~~
- ~~Completed 2022~~ LUMA completed 2023 day-peak and night-peak power flow model development.
- ~~Completed~~ LUMA completed planning and analysis on ~~98~~ 47 additional distribution feeders.

III. ~~3.~~ LUMA Estimated Schedule for Submission of ~~Detailed~~ ~~SOWs~~DSOWs

Over the next 90- days, LUMA will be focused on preparing ~~Detailed-SOW~~DSOWs and cost estimates for T&D projects that currently have both Puerto Rico Energy Bureau (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~~DSOWs 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~~Substations

FEMA Prj- <u>Project</u> #	Project Name	DSOW Submission Estimate	Construction Start <u>Date</u> Estimate
474422 <u>165225</u>	Cataño-Modernization & Hardening <u>Vieques Substation (Phase 2)</u>	Feb-23 Oct-2024 (Complete <u>Completed</u>)	Jun-2023 <u>Jan-25</u>
165209	Culebra 3801 -Substation (<u>Phase 2</u>)	Apr-2022 <u>Feb-23</u> (Complete <u>Completed</u>)	Nov-2023 <u>Jan-25</u>
465225 <u>682834</u>	Vieques-2504 -Costa Sur-TC – Phase II & III (Substation)	Mar-23 Apr-2022 (Complete <u>Completed</u>)	Nov-2023 <u>Jan-25</u>
479558 <u>169276</u>	Manati <u>Viaducto</u> TC BKR-T005 <u>1100</u>	Mar-23 May-2022 (Complete <u>Completed</u>)	Nov-2022 (Started) <u>Apr-24</u>
465268 <u>TBD</u>	Rio Grande Estates-CH-2306 <u>Sabana</u> <u>Llana TC</u>	May-23 May-2022 (Complete <u>Completed</u>)	Jul-2024 <u>Jan-25</u>
469495 <u>682121</u>	Tapia-GIS-1102 <u>Aguirre TC-Phase II</u> (Substation)	May-23 May-2022 (Complete <u>Completed</u>)	May-2024 <u>Jan-25</u>
469058 <u>TBD</u>	Llorens Torres-1106 - <u>Jobos TC</u>	May-2022-23 (Complete <u>Completed</u>)	May-2025 <u>Jan-25</u>
469266	Centro Medico-1327 & 1359-	May-2022 (Complete)	Jun-2024
469896 <u>TBD</u>	Costa-Sur <u>San Juan SP</u> TC	Jun-2022 <u>May-23</u> (Complete <u>Completed</u>)	Jan-2024 <u>25</u>
478258	Taft 1105-	Jun-2022 (Complete)	Nov-2026
469500	Bayamón TC-BKRS Y1-1711-	Jul-2022	Dec-2023

		(Complete)	
178503 <u>550950</u>	Aguirre TC - BKRS <u>Monacillos Substation</u>	May-23 Nov-2022 (Complete) <u>Completed</u>	Jan-2024 <u>25</u>
546370 <u>660422</u>	Substation Minor Repairs-Group A <u>Physical Security Group 4</u>	Jun-23 (Completed) Apr-2022 (Complete)	Oct-2023 <u>Apr-24</u>
542758	Substation Minor Repairs-Group B-	Jul-2022 (Complete)	May-2023
546371	Substation Minor Repairs-Group C-	Jun-2022 (Complete)	Jan-2024
549715	Substation Minor Repairs-Group D	Apr-2023 <u>Jun-23</u>	Apr-2024 <u>24</u>
549725	Substation Minor Repairs-Group E	Apr-2023 <u>Jun-23</u>	Apr-2024 <u>Apr-24</u>
550910	Physical Security Group 1-	Apr-2022 (Complete)	Apr-2023
549764	Physical Security Group 2-	Jul-2022 (Complete)	Sept-2023
551861	Physical Security Group 3-	Jun-2022 (Complete)	Nov-2023
660422	Physical Security Group 4-	Apr-2023	Apr-2024
684920	Substations HV Equipment Replacement Group 1	Apr-2023 <u>Jun-23</u>	Apr-2023 <u>23</u>
169276	Viaducto TC 1100-	Apr-2023	Apr-2024
550980	Parques y Recreos	May-2023 <u>Jun-23</u>	Dec-2024 <u>24</u>
547243	Egozcue	May-2023 <u>Jun-23</u>	Dec-2024 <u>24</u>
550986	Condado 1113	May-2023	Jun-2024
551918	Crematorio 1512	May-2023	Aug-2024
550099	Esc. Industrial Miguel Such 1423	May-2023 <u>Jun-23</u>	Nov-2024 <u>24</u>
<u>547241</u>	<u>Tallaboa 5402</u>	<u>Jun-23</u>	<u>Jan-25</u>
<u>550162</u>	<u>Berwind TC- Metalclad - 1336</u>	<u>Jun-23</u>	<u>Jun-25</u>
<u>551260</u>	<u>Guaynabo Pueblo Rebuild</u>	<u>Jun-23</u>	<u>Feb-25</u>
551912	Puerto Nuevo Metalclad 1520	May-2023 <u>Jun-23</u>	Dec-2024 <u>24</u>
547241 <u>550986</u>	Tallaboa 5402 <u>Condado 1113</u>	May-2023 <u>Jun-23</u>	Jan-2025 <u>Jun-24</u>
<u>551918</u>	<u>Crematorio 1512</u>	<u>Jun-23</u>	<u>Aug-24</u>

547344	Acacias TC Relocation	May-2023 <u>Jun-23</u>	Jun- 2025 <u>25</u>
550894	Baldrich 1422	May-2023 <u>Jun-23</u>	Jun- 2025 <u>25</u>
550462 <u>550106</u>	Berwind TC - Metalclad - 1336 <u>Conquistador - CH</u>	Jun- 2023 <u>23</u>	Jun-2025 <u>Mar-23</u>
178577	Cachete 1526	Jun- 2023 <u>23</u>	Sep- 2024 <u>24</u>
551200	Guaynabo Pueblo Rebuild	June-2023	Feb-2025
550106 <u>551914</u>	Conquistador - CH <u>Caparra 1911 & 1924</u>	Jun- 2023 <u>Aug-23</u>	Mar- 2023 <u>26</u>
TBD <u>547187</u>	Sabana Llana TC - Arcibo Pueblo 8002 <u>Relocation</u>	June-2023 <u>Aug-23</u>	Jan- 2025 <u>25</u>
TBD <u>547273</u>	Salinas Substation <u>Charco Hondo 8008</u> <u>Relocation</u>	June-2023 <u>Aug-23</u>	Jan-2025 <u>Jul-25</u>
TBD <u>550498</u>	Jobos TC <u>Pampanos Relocation</u>	June-2023 <u>Sept-23</u>	Jan-2025 <u>Jun-25</u>
TBD <u>682645</u>	San Juan SP TC <u>Substation Minor</u> <u>Repairs-Group F</u>	June-2023 <u>Sept-23</u>	Jan-2025 <u>Sept-24</u>
TBD <u>685869</u>	Guayanilla Substation <u>Minor</u> <u>Repairs-Group G</u>	June-2023 <u>Sept-23</u>	Jan-2025 <u>Sept-24</u>
TBD	Monacillos Substation <u>Substations HV</u> <u>Equipment Replacement Group 2</u>	June-2023 <u>Sept-23</u>	Jan-2025 <u>Dec-23</u>
TBD	Vieques Substation (Phase 2)	June-2023	Jan-2025
TBD	Culebra Substation (Phase 2)	June-2023	Jan-2025

TRANSMISSION*Transmission

FEMA Prj. <u>Project</u> #	Project Name	DSOW Submission Estimate	Construction Start <u>Date</u> Estimate
176971	8200 - San Juan SP - Cataño Sect.	<u>Jul-22</u> Jul-2022 (Complete <u>Completed</u>)	Oct- 2024 <u>24</u>
180052	Existing 38kV - Line 100, Line 200 Ponce TC to Jobos TC	<u>Aug-22</u> Aug-2022 (Complete <u>Completed</u>)	Nov- 2024 <u>24</u>
180326	Existing 115 kV - Line 36800 Palmer Fajardo o Sabana Llana	<u>Aug-22</u> Aug-2022 (Complete <u>Completed</u>)	Jun- 2024 <u>24</u>
166904	37800 - Caguas – Monacillo	<u>Aug-22</u> Aug-2022 (Complete <u>Completed</u>)	May- 2024 <u>24</u>

167443	36200 - Monacillos - Juncos	Aug-22 Aug-2022 (Complete Completed)	Jun- 2027 - 27
176913	9500 - Palo Seco SP - Cantaño Sect	Aug-22 Aug-2022 (Complete Completed)	Jul- 2024 - 24
176954	1100 - Garzas 1 HP - Garzas 2 HP	Aug-22 Aug-2022 (Complete Completed)	Jul- 2024 - 24
168483	36400 - Dos Bocas - Ponce	Aug-22 Aug-2022 (Complete Completed)	May- 2025 - 25
166860	37800 - Jobos – Caguas	Aug-22 Aug-2022 (Complete Completed)	Dec- 2025 - 25
167168	37100 - Costa Sur - Acacias	Aug-22 Aug-2022 (Complete Completed)	Nov- 2024 - 24
177191	39000 - Aguas Buenas – Caguas	Sep-22 Sep-2022 (Complete Completed)	Dec- 2024 - 24
165213	Main Land Mainland 5400 - Rio Blanco HP - Dagua TC	Nov-22 Nov-2022 (Complete Completed)	Sep- 2024 - 24
167508	50100 - Cambalache - Manati	Nov-22 Nov-2022 (Complete Completed)	Aug- 2027 - 27
166707	51300 - Ponce - Costa Sur	Nov-22 Nov-2022 (Complete Completed)	Sep- 2024 - 24
177134	4100 - Guaraguo TC - Comerio TC	Nov-22 Nov-2022 (Complete Completed)	Aug- 2024 - 24
681672	FAAST Transmission Priority Pole Replacements –38kV Line 2300	Nov-22 Nov-2022 (Complete Completed)	Sept-2023 Feb-24
168226	FAAST San Juan 115kV Underground Transmission Loop	Mar- 2022 - 22 (Completed)	Aug-2023 - Jan-25
334468	FAAST Transmission Priority Pole Replacements – Line 2200	April-2022 Apr-22 (Completed)	May-2023 Aug-23
668592	FAAST Line 9800 Bayamón TC - Guaraguao Sect	Jun- 2022 - 22 (Completed)	Dec- 2023 - 23
550896	FAAST Transmission Priority Pole Replacements – Line 6700	Jun- 2022 - 22 (Completed)	April-2023 Jun-23
668583	FAAST Transmission Priority Pole Replacements – Line 13300	Jun- 2022 - 22 (Completed)	Oct- 2023 - 23
334470	3100 - Monacillo TC to Dagua TC	Jun-23	Feb-26
550019	600 - Caguas TC to Gautier Benitez Sect.	Jun-23	Feb-27
718955	TL-50200 - Costa Sur SP to Bayamon	Jul-23	Dec-28

	TC		
718971	TL-50300 - Costa Sur SP to Aguirre SP	Jul-23	Dec-28
718951	TL-51200- Costa Sur to Cambalache	Jul-23	Dec-28
167446	36100 - Dos Bocas – Monacillos	June-2023 Sep-23	Oct- 2024 24
334331	1900 - Dos Bocas to San Sebastian	Sep-23	Jun-25
334482	3000 - Monacillos TC to Martin Pena	Sep-23	Dec-25
435257	36200 - Fajardo to Rio Blanco (Evaluating for relocation)	June-2023 Sep-23	March-2028 Mar-28
334470 547251	3100 – Monacillo TC to Daguao TC 2400 - Dos Bocas to America Apparel	June-2023 Sep-23	February-2026 Jul-24
551911	9100 – Guaraguao TC to Bayamón Pueblo Sect.	June-2023	July-2025
547259	2700 - Victoria TC to Quebradillas Sect.	June-2023 Sep-23	April-2025 Apr-25
547269	2800 - Aguadilla Hospital Distrito Sect to T-Bone TO	June-2023 Sep-23	January-2027 Jan-27
334482	3000 – Monacillos TC to Martin Pena	June-2023	December-2025
547350	13300 - Bayamón Tc to Plaza del Sol	June-2023 Sep-23	June-2026 Sep-26
550049 551911	6009100 - Caguas Guaraguao TC to Gautier Benitez Bayamón Pueblo Sect.	June-2023 Sep-23	February-2027 Sep-26

Distribution

*Revised versions of some projects will be submitted to include Section 406 mitigation measures per FEMA Guidance June 2023.

DISTRIBUTION

Distribution Type	FEMA Prj Project #	Project Name	DSOW Submission Estimate	Construction Start Date Estimate
-----------------------------------	--	--------------	-----------------------------	--

Distribution Poles	334323	Distribution Pole and Conductor Repair-Ponce Group 1	Jan-22 Jan-2022 (Complete Completed)	Mar- 2022-22 (Started)
Distribution Poles	334329	Distribution Pole and Conductor Repair-Ponce Group 2	Jan-22 Jan-2022 (Complete Completed)	Jun-2023-Jul-23
Streetlighting	542690	Streetlighting— Maunabo Streetlighting (Distribution)	Feb-22 Feb-2022 (Complete Completed)	Jun- 2022-22 (Started)
Distribution Poles	542762	Distribution Pole and Conductor Repair-Arecibo Group 2	Feb-22 (Completed)	Mar-22 (Completed)
Distribution Poles	334488	Distribution Pole and Conductor Repair-Caguas Group 4	Feb-22 Feb-2022 (Complete Completed)	May-22 May-2022 (Started)
Distribution Poles	334527	Distribution Pole and Conductor Repair-Caguas Group 8	Feb-22 (Completed)	Sep-22 (Completed)
Streetlighting	542688	Streetlighting— Aguada Streetlighting (Distribution)	Mar-22 Mar-2022 (Complete Completed)	Jun- 2022-22 (Started)
Streetlighting	542756	Streetlighting - Guanica Guánica (Distribution)	Mar-22 Mar-2022 (Complete Completed)	Aug- 2022-22 (Started)
Streetlighting	542687	Streetlighting— Lajas Streetlighting (Distribution)	Mar-22 Mar-2022 (Complete Completed)	Jul- 2022-22 (Started)
Streetlighting	542517	Luquillo Distribution Streetlighting - Luquillo Distribution	Mar-22 Mar-2022 (Complete Completed)	Jun- 2022-22 (Started)
Distribution Poles	673839	Distribution Pole and Conductor Repair-Bayamon Group 2	Jun-22 (Completed)	Apr-22 (Completed)
Distribution Poles	674092	Distribution Pole and Conductor Repair-Caguas Group 5	Jun-22 Jun-2022 (Complete Completed)	Nov- 2022-22 (Started)
Distribution Poles	674098	Distribution Pole and Conductor Repair-Caguas Group 7	Jun-22 Jun-2022 (Complete Completed)	Feb- 2023-23 (Started Completed)
Distribution Poles	673847	Distribution Pole and Conductor Repair-Carolina Group 2	Jun-22 Jun-2022 (Complete Completed)	Mar- 2022-22 (Started)

Distribution Poles	673848	Distribution Pole and Conductor Repair-Carolina Group 3	Jun-22 Jun-2022 (Complete Completed)	Jan- 2022-22 (Started)
Distribution Poles	673774	Distribution Pole and Conductor Repair-Mayagüez Group Repair-Mayaguez Group 1	Jun-22 Jun-2022 (Complete Completed)	Mar- 2022-22 (Started)
Distribution Poles	673795	Distribution Pole and Conductor Repair- Mayagüez Mayaguez Group 4	Jun-22 Jun-2022 (Complete Completed)	Apr-23 Mar-2023 (Started)
Distribution Poles	673818	Distribution Pole and Conductor Repair-San Juan Group 1	Jun-22 Jun-2022 (Complete Completed)	Nov- 2021-2021 (Started)
Distribution Poles	673838	Distribution Pole and Conductor Repair-San Juan Group 2	Jun-22 Jun-2022 (Complete Completed)	May-2023 Jun-23
Streetlighting	660239	Streetlighting - Villalba (Distribution)	Jul-22 Jul-2022 (Complete Completed)	Oct- 2022-22 (Started)
Streetlighting	659715	Distribution Streetlighting - Aibonito (Distribution)	Jul-22 (Completed)	Nov-22 (Started)
Streetlighting	659623	Distribution Streetlighting - Cataño (Distribution)	Jul-22 (Completed)	Nov-22 (Started)
Distribution Poles	673771	Distribution Pole and Conductor Repair-Arecibo Group 1	Jul-22 Jul-2022 (Complete Completed)	Nov- 2021-2021 (Started)
Distribution Poles	673836	Distribution Pole and Conductor Repair-Bayamón Repair-Bayamon Group 1	Jul-22 Jul-2022 (Complete Completed)	Mar- 2022-22 (Started)
Distribution Poles	673843	Distribution Pole and Conductor Repair-Bayamón Repair-Bayamon Group 3	Jul-22 Jul-2022 (Complete Completed)	Feb- 2023-23 (Started)
Distribution Poles	674072	Distribution Pole and Conductor Repair-Caguas Group 1	Jul-22 Jul-2022 (Complete Completed)	Nov- 2022-22 (Started)
659715	Streetlighting - Aibonito	Jul-2022 (Complete)	Nov-2022 (Started)	
659623	Streetlighting - Cataño	Jul-2022 (Complete)	Nov-2022 (Started)	
Distribution Poles	674083	Distribution Pole and Conductor Repair-Caguas	Jul-22 Jul-2022 (Complete Completed)	Apr-23 Jun-2023 (Started)

		Group 2		
Distribution Poles	674088	Distribution Pole and Conductor Repair-Caguas Group 3	Jul-22 Jul-2022 (Complete Completed)	Dec- 2021-21 (Started)
Distribution Poles	674096	Distribution Pole and Conductor Repair-Caguas Group 6	Jul-22 Jul-2022 (Complete Completed)	Feb- 2023-23 (Started)
Distribution Poles	673772	Distribution Pole and Conductor Repair- Mayagüez Mayaguez Group 2	Jul-22 Jul-2022 (Complete Completed)	Mar- 2023-23 (Started)
Distribution Poles	673775	Distribution Pole and Conductor Repair- Mayagüez Mayaguez Group 3	Jul-22 Jul-2022 (Complete Completed)	Dec- 2021-21 (Started)
Distribution Poles	673844	Distribution Pole and Conductor Repair-San Juan Group 3	Jul-22 Jul-2022 (Complete Completed)	Jun-23 May-2023 (started)
Streetlighting	659625	Distribution Streetlighting - Dorado (Distribution)	Aug-22 Aug-2022 (Complete Completed)	Nov- 2022-22 (Started)
Streetlighting	660227	Streetlighting -Hatillo Streetlight (Distribution)	Aug-22 Aug-2022 (Complete Completed)	Nov- 2022-22 (Started)
Streetlighting	660437	Streetlighting -Manati Streetlight (Distribution)	Aug-22 Aug-2022 (Complete Completed)	Nov- 2022-22 (Started)
Distribution Poles	678985	Distribution Pole and Conductor Repair - Bayamón Bayamon Group 4	Aug-22 Aug-2022 (Complete Completed)	Feb- 2023-23 (Started)
Distribution Poles	679025	Distribution Pole and Conductor Repair - San Juan Group 4	Aug-22 Aug-2022 (Complete Completed)	May-2023 July-23
Distribution Poles	679033	Distribution Pole and Conductor Repair - Caguas Group 9	Aug-22 Aug-2022 (Complete Completed)	Apr-23 Jun-2023 (Started)
Distribution Poles	679127	Distribution Pole and Conductor Repair - Arecibo Group 3	Aug-22 Aug-2022 (Complete Completed)	May-23 Apr-2023 (started)
Distribution Poles	679149	Distribution Pole and Conductor Repair - Mayagüez Mayaguez Group 5	Aug-22 Aug-2022 (Complete Completed)	Jul-2023-23

Distribution Poles	679457	Distribution Pole and Conductor Repair - Ponce Group 3	Aug-22 Aug-2022 (Complete Completed)	Jun-2023 Aug-23
Distribution Poles	678988	Distribution Pole and Conductor Repair - Bayamón Bayamon Group 5	Sep-22 Sep-2022 (Complete Completed)	Mar-23 Jun-2023 (Started)
Distribution Poles	679026	Distribution Pole and Conductor Repair - San Juan Group 5	Sep-22 Sep-2022 (Complete Completed)	May-2023 Jul-23
Distribution Poles	679133	Distribution Pole and Conductor Repair - Arecibo Group 4	Sep-22 Sep-2022 (Complete Completed)	Apr-2023 Jun-23
Distribution Poles	679134	Distribution Pole and Conductor Repair - Caguas Group 10	Sep-22 Sep-2022 (Complete Completed)	May-23 Jun-2023 (started)
Distribution Poles	679153	Distribution Pole and Conductor Repair - Mayagüez Mayaguez Group 6	Sep-22 Sep-2022 (Complete Completed)	May-23 Jul-2023 (started)
Distribution Poles	679458	Distribution Pole and Conductor Repair - Ponce Group 4	Sep-22 Sep-2022 (Complete Completed)	Jun-2023 Aug-23
Distribution Poles	685477	Distribution Pole and Conductor Repair - Arecibo Group 6	Nov-22 Nov-2022 (Complete Completed)	Apr-2023 Jul-23
Distribution Poles	682910	Distribution Pole and Conductor Repair - Bayamón Bayamon Group 7	Nov-22 Nov-2022 (Complete Completed)	Apr-2023 -23 (Started)
Distribution Poles	682890	Distribution Pole and Conductor Repair - Caguas Group 12	Nov-22 Nov-2022 (Complete Completed)	Apr-2023 -23 (Started)
Distribution Poles	685370	Distribution Pole and Conductor Repair - Mayagüez Mayaguez Group 8	Nov-22 Nov-2022 (Complete Completed)	Jun-23 Mar-2023 (started)
Distribution Poles	685263	Distribution Pole and Conductor Repair - Ponce Group 6	Nov-22 Nov-2022 (Complete Completed)	Apr-2023 Jun-23
Distribution Poles	682865	Distribution Pole and Conductor Repair - San Juan Group 7	Nov-22 Nov-2022 (Complete Completed)	May-2023 Aug-23

Distribution Poles	682135	Distribution Pole and Conductor Repair - Bayamón Bayamon Group 8	Nov-22 Nov-2022 (Complete Completed)	Feb-23 May-2023 (Started)
Distribution Poles	682324	Distribution Pole and Conductor Repair - Caguas Group 13	Nov-22 Nov-2022 (Complete Completed)	Mar-23 May-2023 (Started)
Distribution Poles	682870	Distribution Pole and Conductor Repair - San Juan Group 6	Nov-22 Nov-2022 (Complete Completed)	Apr-2023 Aug-23
Distribution Poles	682882	Distribution Pole and Conductor Repair - Caguas Group 11	Nov-22 Nov-2022 (Complete Completed)	Apr-2023 -23 (started)
Distribution Poles	682898	Distribution Pole and Conductor Repair - Bayamón Bayamon Group 6	Nov-22 Nov-2022 (Complete Completed)	Feb-23 Apr-2023 (Started)
Distribution Poles	685943	Distribution Pole and Conductor Repair - Ponce Group 5	Nov-22 Nov-2022 (Complete Completed)	Apr-2023 -23 (Started)
Distribution Poles	686453	Distribution Pole and Conductor Repair - Mayagüez Mayaguez Group 7	Nov-22 Nov-2022 (Complete Completed)	Mar-2023 Jul-23
Distribution Poles	686471	Distribution Pole and Conductor Repair - Arecibo Group 5	Nov-22 Nov-2022 (Complete Completed)	Apr-2023 Jul-23
Distribution Feeders	165226	Vieques Feeders 2501-01, 2501-02, 2501-03 and Culebra Feeders 3801-01, 3801-02	Dec 2022 (Complete)	Oct-2023
Distribution Poles	682178	Distribution Pole and Conductor Repair - Arecibo Arecisbo Group 7	Dec-2022 -22 (Complete Completed)	May-2023 Jul-23
Distribution Poles	682210	Distribution Pole and Conductor Repair - Mayagüez Mayaguez Group 9	Dec-2022 -22 (Complete Completed)	Apr-23 May-2023 (Started)
Distribution Poles	686480	Distribution Pole and Conductor Repair - Ponce Group 7	Dec-2022 -22 (Complete Completed)	May-23 May-2023 (Started)
Distribution Poles	682028	Distribution Pole and Conductor Repair - San Juan Group 8	Dec-2022 -22 (Complete Completed)	May-2023 Aug-23

Distribution Poles	682172	Distribution Pole and Conductor Repair - Arecibo Group 8	Dec- 2022 -22 (Complete Completed)	May-23 May-2023 (Started)
Distribution Poles	682136	Distribution Pole and Conductor Repair - Bayamón Bayamon Group 9	Dec- 2022 -22 (Complete Completed)	Apr-23 May-2023 (started)
Distribution Poles	682373	Distribution Pole and Conductor Repair - Caguas Group 14	Dec- 2022 -22 (Complete Completed)	May-2023 Jul-23
Distribution Poles	682180	Distribution Pole and Conductor Repair - Mayagüez Mayaguez Group 10	Dec- 2022 -22 (Complete Completed)	May-2023 Jul-23
Distribution Poles	682228	Distribution Pole and Conductor Repair - Ponce Group 8	Dec- 2022 -22 (Complete Completed)	Jun-23 May-2023 (started)
Distribution Poles	682031	Distribution Pole and Conductor Repair - San Juan Group 9	Dec- 2022 -22 (Complete Completed)	May-2023 Sept-23
Distribution Poles	688627	Distribution Pole and Conductor Repair - Arecibo Group 9	Dec- 2022 -22 (Complete Completed)	May-2023 Jul-23
Distribution Poles	688096	Distribution Pole and Conductor Repair - Caguas Group 15	Dec- 2022 -22 (Complete Completed)	May-2023 Jul-23
Distribution Poles	688472	Distribution Pole and Conductor Repair - Mayagüez Mayaguez Group 11	Dec- 2022 -22 (Complete Completed)	Apr-23 May-2023 (Started)
Distribution Poles	688774	Distribution Pole and Conductor Repair - Ponce Group 9	Dec- 2022 -22 (Complete Completed)	Nov-2021 Jun-2023 (Started)
Distribution Poles	691246	Distribution Pole and Conductor Repair - San Juan Group 10	Dec- 2022 -22 (Complete Completed)	Jun-2023 Aug-23
Distribution Poles	688109	Distribution Pole and Conductor Repair - San Juan Group 11	Dec- 2022 -22 (Complete Completed)	Jun-2023 Jul-23
Distribution Poles	688198	Distribution Pole and Conductor Repair - Arecibo Group 10	Dec- 2022 -22 (Complete Completed)	Jun-2023 Jul-23

Distribution Poles	688625	Distribution Pole and Conductor Repair - Ponce Group 10	Dec- 2022-22 (Complete Completed)	Apr-23 Jun-2023 (Started)
Distribution Poles	688629	Distribution Pole and Conductor Repair - Mayagüez Mayaguez Group 13	Dec- 2022-22 (Complete Completed)	May-23 Jun-2023 (Started)
Distribution Poles	688630	Distribution Pole and Conductor Repair - Mayagüez Mayaguez Group 12	Dec- 2022-22 (Complete Completed)	May-2023 Jul-23
Distribution Poles	689071	Distribution Pole and Conductor Repair - Arecibo Group 11	Dec- 2022-22 (Complete Completed)	Jun-2023 Sep-23
Distribution Poles	701679	Distribution Pole and Conductor Repair - San Juan Group 12	Dec- 2022-22 (Complete Completed)	Jun-2023 Sep-23
Distribution Poles	701545	Distribution Pole and Conductor Repair - Ponce Group 11	Dec- 2022-22 (Complete Completed)	May-23 Jun-2023 (Started)
Distribution Poles	701555	Distribution Pole and Conductor Repair - Ponce Group 13	Jan- 2023-23 (Complete Completed)	Jul-2023 Oct-23
Distribution Poles	701552	Distribution Pole and Conductor Repair - Ponce Group 12	Jan- 2023-23 (Complete Completed)	Apr-23 Jul-2023 (Started)
Distribution Poles	701495	Distribution Pole and Conductor Repair - Mayagüez Mayaguez Group 14	Jan- 2023-23 (Complete Completed)	Apr-23 Jul-2023 (Started)
Distribution Poles	701504	Distribution Pole and Conductor Repair - Arecibo Group 12	Jan- 2023-23 (Complete Completed)	Jul-2023 Oct-23
Streetlighting	704916 673504	FAAST [Distribution Pole and Conductor Repair—Arecibo Group 13 Streetlighting - Gurabo] (Distribution)	Feb- 2023-23 (Complete Completed)	Mar-23 Aug-2023 (Started)
Streetlighting	704750 690545	FAAST Aguadilla Streetlight (Distribution Pole and Conductor Repair— Bayamón Group 10)	Feb- 2023-23 (Complete Completed)	May-23 Aug-2023 (Started)
704916	Distribution Pole and Conductor Repair—Arecibo	Feb-2023 (Complete)	Aug-2023	

	Group 14			
Streetlighting	704751 691702	FAAST Distribution Pole and Conductor Repair—Bayamón Group 14 Streetlighting - Trujillo Alto (Distribution)	Feb-2023 Mar-23 (Complete) Completed	Apr-23 Aug-2023 (Started)
Streetlighting	659968 698424	Streetlighting—San German FAAST Streetlight Florida Distribution	Feb-2023 Mar-23 (Completed)	Apr-23 Jun-2023 (Started)
704916	Distribution Pole and Conductor Repair—Arecibo Group 15		Mar-2023 (Complete)	Sep-2023
Streetlighting	704916 679039	FAAST [Distribution Pole and Conductor Repair—Arecibo Group 16 Streetlighting - Caguas] (Distribution)	Mar-2023-23 (Completed)	May-23 Sep-2023 (Started)
Streetlighting	334474 659968	FAAST [San Germán Streetlighting] (Distribution-Feeder (Bayamón Short-Term Group 2)	Mar-23 Apr-2023 (Completed)	May-23 Aug-2024 (Started)
334194	Distribution Feeder (Mayagüez Short Term Group 3)		Apr-2023	Aug-2024
334293	Distribution Feeder(Maya güez-Short Term Group 4)		Apr-2023	Aug-2024
Distribution Poles	704844 704916	Distribution Pole and Conductor Repair - Caguas Arecibo Group 16 13-14-15-16	Mar-23 Apr-2023 (Completed)	Aug-2023 Nov-23
Distribution Poles	705503 704750	Distribution Pole and Conductor Repair - Mayagüez Bayamon Group 15-10	Mar-23 Apr-2023 (Completed)	Aug-2023 Jul-23
Distribution Poles	705584 704751	Distribution Pole and Conductor Repair - Ponce Bayamon Group 14-11	Mar-23 Apr-2023 (Completed)	Aug-2023 23
704933	Distribution Pole and Conductor Repair—San Juan-Group 13		Apr-2023	Aug-2023
704844	Distribution		Apr-2023	Aug-2023

	Pole and Conductor Repair—Caguas Group 17			
673504	Streetlighting-Gurabo	Apr-2023	Jun-2023	
666894	Streetlighting-San Juan	Apr-2023	Jul-2023	
671502	Streetlighting-Yabucoa	Apr-2023	Aug-2023	
671400	Streetlighting-Barceloneta	Apr-2023	Aug-2023	
671396	Streetlighting-Utuado	Apr-2023	Aug-2023	
Distribution Poles	704755	Distribution Pole and Conductor Repair - BayamónBayamon Group 42-12-13-14	Mar-23 Apr-2023(Completed)	Sep-2023-23
Distribution Poles	704844	Distribution Pole and Conductor Repair - Caguas Group 48 16-17-18-19-20	Mar-23 Apr-2023(Completed)	Sep-2023Oct-23
Distribution Poles	705503705527	Distribution Pole and Conductor Repair - MayagüezSan Juan Group 46 17-18-19-20-21	Mar-23 Apr-2023(Completed)	Sep-2023-23
Distribution Poles	705503	Distribution Pole and Conductor Repair - MayagüezMayaguez Group 47 15-16-17-18-19	Apr-2023-23 (Completed)	Sep-2023Oct-23
Distribution Poles	705584	Distribution Pole and Conductor Repair - Ponce Group 45 14-15	Apr-2023-23 (Completed)	Sep-2023Nov-23
708579	Distribution Pole and Conductor Repair—Ponce Group 46	Apr-2023	Sep-2023	
Distribution Poles	704933	Distribution Pole and Conductor Repair - San Juan Group 44 13-14-15-16	Apr-2023-23 (Completed)	Sep-2023-23
704933	Distribution Pole and Conductor Repair—San Juan Group 45	Apr-2023	Sep-2023	
Distribution Poles	704755708579	Distribution Pole and Conductor Repair - BayamónPonce	Apr-2023-23 (Completed)	Sep-2023-23

		Group 44 16-17-18-19		
704933	Distribution Pole and Conductor Repair—San Juan Group 46		Apr-2023	Sep-2023
Automation	TBD688623	Transmission and Distribution Pole and Conductor Repair—Caguas Automation Program – Group 491	Apr-2023-23 (Completed)	Sep-2023Jan-22
TBD	Distribution Pole and Conductor Repair—Caguas Group 20		Apr-2023	Sep-2023
Distribution Feeder	TBD334474	Distribution Pole and Conductor Repair—Caguas Feeder (Bayamón Short-Term Group 242)	Apr-2023Jun-23	Nov-2023Aug-24
TBD	Distribution Pole and Conductor Repair—Ponce Group 20		Apr-2023	Oct-2023
Distribution Feeder	TBD334191	Distribution Pole and Conductor Repair—Arecibo Feeder (Mayagüez Short Term Group 473)	April-2023Jun-23	Oct-2023Aug-24
TBD	Distribution Pole and Conductor Repair—Arecibo Group 18		April-2023	Oct-2023
TBD	Distribution Pole and Conductor Repair—Bayamón Group 15		April-2023	Oct-2023
Distribution Feeder	TBD334285	Distribution Pole and Conductor Repair—Bayamón Feeder (Mayagüez Group 462)	April-2023Jun-23	Oct-2023Sep-24
TBD	Distribution Pole and Conductor Repair—Bayamón		April-2023	Oct-2023

	Group 17			
Distribution Feeder	TBD334293	Distribution Pole and Conductor Repair— Bayamón Feeder (Mayagüez Short Term Group 484)	April 2023 Jun-23	Oct 2023 Aug-24
TBD	Distribution Pole and Conductor Repair— Bayamón Group 19	April 2023	Oct 2023	
TBD	Distribution Pole and Conductor Repair— Mayagüez Group 20	April 2023	Oct 2023	
Distribution Feeder	TBD334308	Distribution Pole and Conductor Repair— Feeder (Mayagüez Group 241)	April 2023 Jun-23	Oct 2023 Sep-24
TBD	Distribution Pole and Conductor Repair— Ponce Group 20	April 2023	Oct 2023	
TBD	Distribution Pole and Conductor Repair— Mayagüez Group 22	April 2023	Oct 2023	
Distribution Feeder	TBD334452	Distribution Pole and Conductor Repair— Mayagüez Feeder (Caguas Group 233)	April 2023 Jun-23	Oct 2023 Sep-24
TBD	Distribution Pole and Conductor Repair— Ponce Group 24	April 2023	Oct 2023	
TBD	Distribution Pole and Conductor Repair— Ponce Group 22	April 2023	Oct 2023	
TBD	Distribution Pole and Conductor Repair— Ponce Group 23	April 2023	Oct 2023	
705657	Transmission and	Apr 2023	May 2023	

	Distribution Automation Program—Group 3		
TBD	Distribution Pole and Conductor Repair—Caguas Group 22	May-2023	Nov-2023
TBD	Distribution Pole and Conductor Repair—Caguas Group 23	May-2023	Nov-2023
TBD	Distribution Pole and Conductor Repair—Mayagüez Group 18	May-2023	Sep-2023
TBD	Distribution Pole and Conductor Repair—Mayagüez Group 19	May-2023	Sep-2023
Distribution Feeder	TBD334472	Distribution Pole and Conductor Repair—Feeder (San Juan Group 172)	May-2023Jun-23Sep-2023Oct-24
Distribution Feeder	TBD334475	Distribution Pole and Conductor Repair—San Juan Feeder (Bayamón Group 483)	May-2023Jun-23Sep-2023Oct-24
TBD	Distribution Pole and Conductor Repair—San Juan Group 49	May-2023	Sep-2023
Distribution Feeder	TBD334477	Distribution Pole and Conductor Repair—San Juan Feeder (Carolina Group 203)	May-2023Jun-23Sep-2023Oct-24
TBD	Distribution Pole and Conductor Repair—San Juan Group 24	May-2023	Sep-2023
Distribution Feeder	TBD334491	Distribution Pole and Conductor Repair—Ponce Feeder (Caguas Group 175)	May-2023Jun-23Sep-2023Oct-24

TBD	Distribution Pole and Conductor Repair—Ponce Group 48	May-2023	Sep-2023
Distribution Feeder	TBD334497	Distribution Pole and Conductor Repair—Ponce Feeder (Caguas Group 496)	May-2023Jun-23 Sep-2023Oct-24
706498	Transmission and Distribution Automation Program—Group 4	May-2023	July-2023
Distribution Feeder	TBD334518	Distribution Pole and Conductor Repair—Ponce Feeder (Caguas Group 247)	May-2023Jun-23 Nov-2023Oct-24
TBD	Distribution Pole and Conductor Repair—San Juan Group 22	May-2023	Nov-2023
Distribution Feeder	TBD546374	Distribution Pole and Conductor Repair—Feeder (San Juan Group 233)	May-2023Jun-23 Nov-2023Oct-24
TBD	Distribution Pole and Conductor Repair—San Juan Group 24	May-2023	Nov-2023
TBD	Distribution Pole and Conductor Repair—San Juan Group 25	May-2023	Nov-2023
TBD	Distribution Pole and Conductor Repair—San Juan Group 26	May-2023	Nov-2023
TBD	Distribution Pole and Conductor Repair—San Juan Group 27	May-2023	Nov-2023
TBD	Distribution Pole and Conductor	May-2023	Nov-2023

	Repair—San Juan Group 28			
Distribution Feeder	334420	Distribution Feeder (Caguas Group 1)	May-2023 Jul-23	Sep- 2024 24
Distribution Feeder	334443	Distribution Feeder (Caguas Group 2)	May-2023 Jul-23	Sep- 2024 24
Distribution Feeder	334452 334471	Distribution Feeder (Caguas San Juan Group 31)	May-2023 Jul-23	Sep- 2024 24
334308	Distribution Feeder (Mayagüez Group 1)	May-2023		Sep-2024
Distribution Feeder	334285 436616	Distribution Feeder (Mayagüez Arecibo Group 21)	May-2023 Jul-23	Sep-2024 Oct-24
334474	Distribution Feeder (San Juan Group 1)	May-2023		Sep-2024
Distribution Feeder	TBD 546386	Distribution Pole and Conductor Repair—San Juan Feeder (El Yunque Group 29)	Jun-2023 Aug-23	Dec-2023 Oct-24
TBD	Distribution Pole and Conductor Repair—San Juan Group 30	Jun-2023		Dec-2023
Distribution Feeder	TBD 334473	Distribution Pole and Conductor Repair—San Juan Feeder (Bayamón Group 31)	Jun-2023 Aug-23	Dec-2023 Oct-24
Streetlighting	TBD 698522	Distribution Pole and Conductor Repair—San Juan Group 32 Streetlighting - Vieques (Distribution)	Jun-2023 Sept-23	Dec-2023 Feb-24
Streetlighting	698432	Hormigueros Streetlight (Distribution)	Sept-23	Nov-23
Streetlighting	TBD 704679	Coamo Streetlight (Distribution) Pole and Conductor Repair—San Juan Group 33	Jun-2023 Sept-23	Dec-2023 Oct-23
Streetlighting	TBD 701473	Distribution Pole and Conductor Repair—	Jun-2023 Sept-23	Dec-2023 Nov-23

		San Juan Group 34 Streetlighting - Canovanas		
Distribution Poles	TBD	Distribution Pole and Conductor Repair - San Juan Bayamon Group 35 2 - Phase 2	Jun-2023 Sept-23	Dec-2023 Mar-24
Distribution Poles	TBD	Distribution Pole and Conductor Repair - San Juan Caguas Group 36 1 - Phase 2	Jun-2023 Sept-23	Dec-2023 Mar-24
Distribution Feeder	334494 TBD	Distribution Feeder (Caguas Arecibo Group 5 2)	Jun-2023 Sept-23	Oct-2024 Nov-24
334497	Distribution Feeder (Caguas Group 6)	Jun-2023		Oct-2024
334518	Distribution Feeder (Caguas Group 7)	Jun-2023		Oct-2024
Distribution Feeder	334477 33447 6	Distribution Feeder (Carolina Group 3 2)	Jun-2023 Sept-23	Oct-2024 Nov-24
Distribution Feeder	546386 TBD	Distribution Feeder (El Yunque Ponce Group 1 1)	Jun-2023 Sept-23	Oct-2024 Nov-24
Distribution Feeder	334472 TBD	Distribution Feeder (San Juan Ponce Group 2)	Jun-2023 Sept-23	Oct-2024 Nov-24
Distribution Feeder	546374 TBD	Distribution Feeder (San Juan Caguas Group 34 4)	Jun-2023 Sept-23	Oct-2024 Nov-24
Distribution Feeder	436646 TBD	Distribution Feeder (Arecibo Caguas Group 48 8)	Jun-2023 Sept-23	Oct-2024 Nov-24
334473	Distribution Feeder (Bayamón Group 1)	Jun-2023		Oct-2024
Automation	706498	Transmission and Distribution Automation Program – Group 4	Sept-23	Nov-23
Automation	334475 TBD	Area-Wide Distribution Feeder (Bayamón Automati on , Group 3 1)	Jun-2023 Sept-23	Oct-2024 Dec-24

IT & ~~TELECOM~~Telecom

FEMA Prj. Project #	Project Name	DSOW Submission Estimate	Construction Start Estimate
657300	Energy Management System (EMS) (Obligated)	Jul-2022 (Complete)	Nov-2023 <u>Estimate</u>
551925	SCADA Remote Access and RTU Replacements - Group 1	Jul-2022-22 (Complete) <u>completed</u>	May-2023 <u>Sep-23</u>
675345	IT OT Technology Systems Reparatrions	Mar-2023-23 (completed)	Jun-2023 <u>Sep-23</u>
668665	Cybersecurity Program Implementation	Mar-2023 <u>Jun-23</u>	Jun-2021 (started) <u>Sep-23</u>
551926 <u>657300</u>	SCADA Remote Access and RTU Replacements - Group 2 <u>Energy Management System - Phase I</u>	Apr-2023 <u>July-23</u>	Nov-2023 (Software implementation) <u>Dec-24</u>
<u>714654</u>	<u>Advanced Metering Infrastructure (AMI)</u>	<u>Jul-23</u>	<u>Jan-24</u>
<u>551963</u>	<u>Transport Network</u>	<u>Jul-23</u>	<u>Jan-24</u>
554927 <u>551926</u>	SCADA Remote Access and RTU Replacements - Group 3 <u>2</u>	May-2023 <u>Sep-23</u>	Jan-2024 <u>Mar-24</u>

BUILDINGS

Buildings and Systems

FEMA Prj. Project #	Project Name	DSOW Submission Estimate	Construction Start <u>Date</u> Estimate
--------------------------------	--------------	--------------------------	--

<u>57300</u>	<u>Energy Management System (EMS)</u>	<u>Jul-22</u> <u>(completed)</u>	<u>Jul-2023</u>
679006	Test and Technology Laboratory <u>(equipment)</u>	Nov-2022 (Complete) <u>Jun-23</u>	Jul-2024 <u>Sept-23</u>
<u>657300</u>	<u>Energy Management System - Phase II</u> <u>Primary Control Center (PCC)</u>	<u>Jun-23</u>	<u>Dec-24</u>
<u>679006</u>	<u>Test and Technology Laboratory</u> <u>(facilities)</u>	<u>Sept-23</u>	<u>May-24</u>

Vegetation

<u>FEMA Project #</u>	<u>Project Name</u>	<u>DSOW Submission</u> <u>Estimate</u>	<u>Construction Start</u> <u>Date</u>
<u>TBD</u>	<u>Island Wide Vegetation Clearing: San</u> <u>Juan Regional Project</u>	<u>Jun-23</u>	<u>Sept-23</u>

IV. Self-Performing Work

LUMA will continue to execute self-performing work in the following categories:

- [Pole/conductor replacements](#)
- [Structure replacements](#)
- [Hardware/insulator replacements](#)
- [Streetlights](#)
- [Substation, feeder, and line minor repairs](#)
- [Communication network and grid automation](#)

- Equipment replacements
- Civil and low-voltage work to support projects

We will continue to refine this section in collaboration with P3 as we move forward.