



LUMA Response to P3A RFI on FY 2022 Q2 Report

P3A-RFI-2022-0014

April 26, 2022

Requests for Information

QUESTION 1

LUMA reported that on average, each day 31 employees attended courses at the LUMA College during the second quarter. Please explain how this compares to the budget and number of FTEs in the plan to be trained.

RESPONSE

At commencement, LUMA assumed responsibility for a work force that required significant upskilling to qualify as journeymen. Not only was the planned annual safety training and apprenticeship provided, but significant skill and competency gaps were discovered. If those gaps were left unaddressed, it would have posed a significant safety risk and challenges in maintaining acceptable levels of productivity. Therefore, the number of personnel attending courses at the LUMA College during the second quarter exceeded the original plan by a factor of two.

QUESTION 2

The Report states there were more than 16,000 hours of skills training during the second quarter. Please explain how this compares to the budget and number of hours in the plan.

RESPONSE

Related to our response to question 1, LUMA had not anticipated the requirement to provide basic upskill training to purportedly qualified journeymen, at least to the extent discovered during the initial skills and competency assessments conducted at commencement. Of the 16,000 hours of skills training recorded in Q2, 2,400 hours were originally budgeted to address continuing education needs, the balance 13,600 hours addressed the reality of the workforce, unqualified to safely perform the high-risk tasks associated with maintaining an electric T&D System.

QUESTION 3

LUMA reported reducing the average speed of answer for customer calls from September to December by 95%. In December, customers who called LUMA experienced on average a less than 30 second wait time. Please explain the definition of wait time and confirm if the caller reached a live voice in all cases.

RESPONSE

Wait time is the average time that a customer would wait to speak to an advisor if they did not complete their request through the IVR system. If the customer requested to speak to a live agent during the period of December, their average wait time was in fact 23.9 seconds.

QUESTION 4

Please provide the detailed project and program list, including budget and timing by program, outlining the 46 projects.

RESPONSE

LUMA has submitted the available project information for all federally funded programs and projects to the Energy Bureau within Docket NEPR-MI-2021-0002 and these submissions can be found in the following location on the PREB's website: [NEPR-MI-2021-0002](https://www.preb.org/NEPR-MI-2021-0002)

Project or program submissions to the Energy Bureau include the initial Scope of Work (SOW) and the associated class 5 cost estimate. Once they are approved, LUMA submits them to FEMA to be assigned a FAAS number. The assignment of a FAAS number represents the beginning of the architecture, engineering and procurement phases for which more detailed project information is developed, including timing. As outlined in our quarterly report, it is important to note that the initial SOWs submitted can be divided into multiple projects and the total number of projects may increase over time. An example is the Streetlight Program initial SOW presented to PREB – the initial SOW was for the entirety of Puerto Rico; however, this Program will be divided into 78 projects for each municipality, and each will receive a FAAS number. This approach was taken to simplify the initiation of the work with PREB; and to expedite the approval and execution of the work with FEMA.

The most recent program/project listing provided to the PREB on January 24, 2022 can be found in the following location on the PREB's website: [NEPR-MI-2021-0002 Project List](#)

QUESTION 5

Please provide the detailed list, including budget and timing by program, outlining the 132 projects.

RESPONSE

Please refer to response number 4.

QUESTION 6

Please provide the detailed list, including budget and timing by program, outlining the 66 FAAS projects.

RESPONSE

Please refer to response number 4.

QUESTION 7

LUMA reported that FY2022 federally funded expenditures will be substantially lower than the original budget. Please quantify how much below budget LUMA anticipates, and whether there will be an impact on the programs overall (spend, timing, other). Also please provide an explanation of what LUMA is doing to remedy the situation.

RESPONSE

LUMA's budget as established in late 2020 for FEMA related expenditures for FY 2022 was \$650.4 million. Our forecast for FY 2022 is currently \$100.3 million. To reiterate, the reason for the variance (as noted in the Q2 report) was that spending will be lower than anticipated through Q2 and the remainder of FY 2022. Challenges that predate LUMA included:

1. PREPA did not advance approved projects as expected and outlined in PREPA's 10-Year Plan as filed within NEPR-MI-2021-0002 or contemplated under the T&D OMA prior to commencement
2. Setting up new processes and protocols with COR3 and FEMA;
3. LUMA was unable to work directly with FEMA prior to commencement; and
4. LUMA expected that as of commencement on June 1, 2021, PREPA would have made significantly more progress on the engineering of T&D capital projects

On June 1, 2021, LUMA found almost no progression with A&E firms had been completed. In fact, little advancement with FEMA had been established – a significant impact to overall schedule. The result is that projects are substantially behind what had been anticipated when the Initial Budgets were established in late 2020.

As for the impact on the programs, this has delayed near-term activity, however given the length and scope of the programs contemplated and other impacts to spending and timing, among others, it is difficult to provide a conclusive view. LUMA has filed updated budgets within [NEPR-MI-2021-0004](#) and to the P3A which includes updated Improvement Program spending and milestones.

LUMA continues to push on all fronts with COR3 and FEMA in order to progress the work, which includes reaching agreement on 428, 406 and EHP principles that will support a more expedited approach to project work in the future and should result in some acceleration of approvals.

QUESTION 8

LUMA reported that they responded to 11,470 outage events. Please explain how LUMA defines “outage event,” understanding that this count is significantly lower than the number of actual customer (meter) outages reported.

RESPONSE

LUMA defines an outage event according to the Institute of Electrical and Electronics Engineers (“IEEE”) Guide for Electric Power Distribution Reliability Indices IEEE Std. 1366™-2012 and its definition for interruption. The standard defines an interruption as the total loss of electric power on one or more normally energized conductors to one or more customers connected to the distribution portion of the system. One outage event can affect one or multiple customers at the same time.

QUESTION 9

LUMA outlined the number of assessments that were performed as 191 feeders, 116 transmission lines, and 103 substations. Please explain the scope of these assessments, what the results and planned actions will be, and for each group indicate the number of assessments that were planned vs. the 191, 116 and 103 actual completions. Please identify any subcontractors or consultants that assisted LUMA in this work.

RESPONSE

The assessments were planned for and performed by LUMA’s internal resources.

The below addresses the response by type of assessment: first by substation and then by transmission and distribution line.

The substation assessments performed were high-level visual appraisals that gathered information to determine equipment condition as well as identify deficiencies and included activities such as:

- Major equipment’s information being noted, and pictures taken (e.g., transformers, circuit breakers, batteries and chargers, other auxiliary equipment);
- Operations counters read;
- Oil and gas levels plus temperatures checked to identify any abnormal readings;
- Inspections for structural issues, cracks, paint condition, and leaks performed;

- Inspections of gravel and grading executed;
- Windows and doors condition observed;
- Fence condition examined; and
- Grounding connections noted.

The target for year one was 39 substation assessments and by the end of the Q2 103 had been performed.

The transmission and distribution line assessments were high-level visual appraisals performed to detect the condition of the lines with special attention given to lines with poor or very poor conditions since that result in a safety risk. The highest risk deficiencies were then categorized and are in the process of being/will be performed as SRP work. These assessments included identifying and surveying high-potential safety or imminent-failure issues that involve the poles/structure, conductors, insulators, grounding, anchors, guying, clearance, vegetation, crossarms, streetlights, and equipment.

Deficient assets may exhibit a high risk of failure, or have already failed and are likely to cause:

- A safety impact to the workers or the public;
- Failure to meet applicable legal requirements or policies, including the T&D OMA, Annex I, Act 17-2019, as amended (Act 17), and Act 57-2014, as amended (Act 57), which include requirements related to safe and reliable utility operations; and/or
- An outage that will be widespread, affecting critical customers, and with a long duration, such that it is likely to have follow-on safety effects.

Due to numerous deficiencies found resulting from the various assessments completed, remediation actions are being scoped and planned, which will be included as part of existing transmission and distribution line repair and pole-replacement projects. Urgent items, however, are being escalated for immediate attention and mitigation, which reflects LUMA's continued commitment to operational excellence of both its energy infrastructure and its focus on safety.

The target for year one was 26 transmission line assessments and 106 distribution feeder assessments. By the end of Q2, 116 transmission line assessments and 191 distribution feeder assessments had been performed.

QUESTION 10

The report states that LUMA replaced 861 poles in Q2. Please provide the number of poles that were planned to be replaced (vs. 861 actual) and confirm whether the 861 pole replacement costs were as budgeted.

RESPONSE

Of the 861 poles replaced by LUMA in FY 2022 Q2, 16 pole/structures were planned to be replaced via Work Order Packages (WOPs). The majority of the pole replacement work is budgeted within Capital - Federally Funded for FY 2022 and was adequately budgeted to support the replacement of 861 poles. At the time of Q2 reporting and given the progress made on federal funding as described within the Q1 and Q2 reports, and the urgent need for pole replacement in many cases, pole replacement costs in Q2 were

categorized within Capital – Federally Funded, Capital - Non-Federally Funded and Operation budgets. LUMA continues to work with FEMA for federal funding reimbursement of these costs.

QUESTION 11

The report mentioned “line worker overtime”. Please quantify the amount of overtime (hours) and the associated budget overage and explain LUMA’s process for authorizing overtime.

RESPONSE

LUMA originally budgeted 20 percent overtime for all Operations hourly positions. Operations hourly employee overtime for Q2 was in excess of 71,000 hours. This reflects an overtime rate of 57 percent for all Operations hourly positions.

Overtime requires approval of managers or supervisors prior to the actual performance of work, often initiated via the on-call schedules for lines and substation crews, premobilization of personnel in anticipation of an imminent weather event, or the requirement to provide 24/7 coverage in anticipation of unplanned outages.

QUESTION 12

The report states that over 83,000 service orders were completed from backlog. Please provide the current (end December 2021) remaining backlog, plans and timing to clear all outstanding backlog, and explain LUMA’s process for prioritizing backlog versus new requests.

RESPONSE

The remaining backlog of work to be done at this phase of the transformation of Puerto Rico’s electric grid is fewer than 6,200 service orders. The largest group represents investigations for energy irregularities or irregular energy consumption. LUMA employees were undergoing training for this type of specialized investigation in March 2022. The backlog of these 6,200 service orders is anticipated to be resolved by the end of June 2022.

The pending remaining service orders in backlog are being worked by field employees and are prioritized in real time with current service orders. This prioritization is based on the most urgent orders for customers, such as addressing net metering cases, and is in alignment with the prioritization of service orders established through Front End Transition planning.

QUESTION 13

The report highlighted eliminating 200,000 obsolete alerts/errors, billing 52,900 more service agreements in Q2 than in Q1, and reducing the unbilled accounts to 15,896. Please explain the remaining number of obsolete alerts/errors and unbilled accounts. Also, please provide the timeframe expected to eliminate these issues.

RESPONSE

The Customer Care & Billing system (Oracle CC&B) at commencement of LUMA operations on June 1, 2021, contained more approximately 2 million outstanding alerts/errors. Some of these alerts/errors are legitimate errors being worked with the team. Most of the alerts/errors are pending errors that exist in the billing system since CC&B was launched in 2012. LUMA is systematically working through these errors and is prioritizing the items that resolving immediate customer matters. For example, there were more

than 150,000 pending alerts regarding pending disconnections due to non-payment even though an Executive Order was in place prohibiting these types of activities.

LUMA is working diligently to reduce the monthly unbilled accounts. The Billing Accuracy and Back Office System Remediation Plan Improvement Program was designed to address several of the issues leading to errors and unbilled accounts. As the Improvement Program outlines, the program will resolve gaps over multiple years. The issues with unbilled accounts immediately experienced post-commencement have largely been resolved and unbilled account levels are at a stabilized level compared to PREPA. Improvements beyond those efforts will be achieved through additional SRP Program efforts.

QUESTION 14

During the second quarter LUMA reported the recordable injury rate of 2.23, a Days Away Restricted Duty (DART) rate of 0.85, and a Severity Rate of 2.67. Please explain how these results relate to targets.

RESPONSE

Safety performance targets are currently being considered in Docket [NEPR-AP-2020-0025](#). LUMA based the proposed baseline and target performance levels on the data available during the analysis. Since the analysis was developed in Fall 2020, baseline and targets were based on data before such date. The Target Performance Levels after three years included in Annex IX of the Operation and Maintenance Agreement are 4.20 for recordable injury rate, 3.29 for DART rate, and 35.64 for Severity Rate. LUMA anticipates updating baselines and targets to reflect current results once the adjudicative proceeding has been determined.

QUESTION 15

The Report outlines that LUMA started work on six of the 37 worst performing feeders. What is the scope of work for the six, timing for completion, and plans to initiate work on the remaining 31 feeders? Please provide the list of the 37 worst performing feeders.

RESPONSE

The scope includes replacing deficient poles, conductors, components, hardware, and/or equipment identified in the feeders' corresponding High-Level Assessments (HLAs).

The first six feeders' work has a current planned completion target of the end of June 2022. For the remaining 31 feeders, the HLAs have been completed, deficiencies identified, and are in the process of being scoped, planned, and will be scheduled for remediation in Fiscal Year 2023.

Below reflects a list of the worst-performing feeders in numerical order:

1. 1303-02
2. 1646-02
3. 1657-02
4. 1720-07
5. 2603-08
6. 3205-07
7. 3301-01
8. 3601-02
9. 3601-04

10. 5004-07
11. 5007-01
12. 5012-03
13. 5013-02
14. 5016-01
15. 5018-03
16. 5018-05
17. 5021-01
18. 5303-01
19. 5501-04
20. 5602-02
21. 5803-02
22. 5817-02
23. 5901-03
24. 6012-02
25. 6014-02
26. 6305-03
27. 6406-02
28. 6704-02
29. 6704-03
30. 6705-01
31. 7903-06
32. 8010-01
33. 8103-02
34. 8301-03
35. 8404-03
36. 9703-01
37. 9902-01.

QUESTION 16

The Report states that LUMA is working approximately 450 full time workers. Please explain how this number of FTEs compares to the budgeted plan and outline the improvements LUMA has introduced as differentiators compared with the prior PREPA approach.

RESPONSE

The actual full time equivalent employee staffing level for vegetation management / maintenance-related activities aligns with LUMA's original plan, one where industry leading practices such as the use of pre-emergent vegetation controls and products at substations to prevent the emergence of vegetation have already been implemented. In this example, LUMA has replaced PREPA's approach to only treat vegetation on a post-emergent basis which therefore allowed seed sources to persist and continue germinating in the soil. In effecting this change, LUMA has reduced the frequency of annual site visits from 4 or 8 (PREPA's approach) to 2 or 3. Other improvement actions include:

- Treating the stumps of removed vegetation with herbicides to prevent regeneration;
- Training individuals on proper safety and work methods including manually climbing trees; and

- Making available suitable and, from an industry perspective, frequently used forestry equipment (e.g., forestry bucket trucks, chippers, specialized mechanical equipment).

Despite these improvements and the attendant benefits of our Integrated Vegetation Management operating approach, the amount of reactive work resulting from unplanned outages and the High-Level Assessments, which identifies deficiencies that pose significant public safety or imminent failure risks, have in the near-term, offset any potential productivity benefits. For more information, please refer to our response to question 19.

QUESTION 17

The Report states that as of December 31, 2021, 974 items were identified as negatively impacting reliability under the umbrella of grid reinforcement initiatives and further states that 6% of this population was repaired / replaced. Please outline how this compares versus plan/budget.

RESPONSE

The grid reinforcement work did not formally begin until after LUMA's commencement on June 1, 2021 and there is not an explicit budget specifically for this initiative. Items identified, however, as part of the grid reinforcement work may be also associated with parts of other existing programs, projects, or work (e.g., Necessary Maintenance Expenditure (NME) rebuild projects, equipment replacement projects, and/or Operations and Maintenance replacement activities), and these items are executed as per those plans/budgets.

QUESTION 18

The Report states that 50 safety and technical training classes were completed and that 21 apprentice line workers graduated. Please explain how these accomplishments compare to plan.

RESPONSE

These accomplishments are in accordance to plans previously approved by the Puerto Rico Energy Bureau (PREB).

QUESTION 19

The Report states that spending variance is mainly due to more intensive, and an increased number of, rapid response activities to address unplanned outages versus originally contemplated. Please outline how many of these activities were planned versus actual.

RESPONSE

The original plan allowed for more costly responses to unplanned vegetation management caused outages during the first quarter, necessary activities that we thought would abate as we entered the second quarter and started the transition to more efficiently planned right-of-way reclamation activities. That transition did not occur as system and field conditions dictated the deployment of almost all available resources to respond to, and prevent future, vegetation caused outages. Actual expenditures reflect this fact as the original FY2022 budget allotted approximately 10 percent to rapid response and assumed that the balance of hours would be assigned to reclaiming the right-of-way and fully adopting the more effective and efficient integrated approach to managing and maintaining vegetation outlined in LUMA's Vegetation Management Plan.

QUESTION 20

The Report states that spend variance is mainly due to the procurement process taking longer than anticipated. Please explain why the process is taking longer than expected and when this will be addressed. Please explain whether systematic improvements have been made to avoid the same delays in the future.

RESPONSE

The procurement processes related to the T&D Fleet program have taken longer than expected for several reasons. First, it should be noted that the T&D O&M Agreement contemplated those non-federally funded procurements would be governed by a different procurement manual than federally funded procurements. This would have allowed for additional flexibility and efficiencies for non-federally funded procurements when compared to federally funded procurements. However, the Consolidated Procurement Manual introduced a mixture of federal and state requirements to all procurements, including non-federally funded procurements. These additional requirements include narrow exceptions for competitive and formal procurements, extensive documentation, analysis, and record-keeping (pre and post award), among others, which have resulted in lengthier and more complex procurement processes than some end users, including the T&D Fleet program as well as its vendors, originally anticipated.

Additionally, applicable government and T&D O&M Agreement contracting requirements have resulted in prolonged vendor registration and contract negotiations, with some key vendors resisting or declining to provide the necessary documentation to complete the vendor registration process or to accept mandatory contractual provisions. Similarly, PREPA's ongoing restructuring proceedings and prior experiences involving delayed payments with other government entities have led some vendors to request onerous and, at times, unacceptable, contractual provisions, which further delayed the execution of some contracts. Moreover, some of the T&D Fleet program's procurements have included certain specifications and conditions which have been difficult to find in the current marketplace, causing some procurements to be cancelled, modified, or postponed.

To expedite the T&D Fleet program's procurement processes, several initiatives have been implemented. First, additional resources have been assigned by the T&D Fleet team to assist with procurements. The Procurement & Contracts team has also prioritized and allocated additional resources to the T&D Fleet team's procurements. Additionally, the Procurement & Contracts team has been proactive in educating and strengthening communication with end-users to allow for more efficient and effective compliance with business needs as well as with applicable procurement and contracting requirements. Moreover, additional systematic improvements have been implemented designed to reduce the time between initiation of a procurement process and execution of a contract or purchase order, including automating certain internal procedures, streamlining the vendor registration process, and providing clearer tender documents. To date, several of the procurement processes that were pending during Q2 have been completed or are close to completion. However, these improvements to the procurement processes do not fully make up for time that the additional government and Consolidated Procurement Manual requirements impose on the procurement processes. As such, LUMA expects procurement to take longer than originally planned.

QUESTION 21

Performance on a number of metrics is mentioned throughout the report. Please include a metrics table listing the metrics, the internal baseline (which may be PREPA's past performance), what was achieved and any additional commentary.

RESPONSE

LUMA currently files a variety of statistics in docket number [NEPR-MI-2019-0007](#) for the following categories:

- Safety
- Human Resources
- Overall System
- Generation
- Transmission and Distribution
- Customer Service
- Finance
- Operations (Warehousing, Fleet and Fuel)
- Renewable Energy and Demand Side Management

The months of December, January, February were filed at the Puerto Rico Energy Bureau on March 21, 2022. This Quarterly Performance Metrics submission was notified to P3A on March 24, 2022, through transmittal #LUMA-P3A-T-00297.

Quarterly Schedules

P3A Req. #	Issue or Clarification Request	Response
1	Please provide more specific & detailed variance for each line item over \$500,000.00 in a comments section next to each table, including actual vs. planned factors. For example: Labor Spend should detail the variance of actual v. planned: (i) number of FTEs; (ii) salaries and wages; etc. Transportation Spend should detail the variance of actual v. planned: (i) number of fleet vehicles utilized; (ii) mileage; (iii) fuel costs; etc. Vegetation Management Spend should detail the variance of actual v. planned: (i) number of areas cleared; (ii) crew counts; etc.	As required within Annex I Section VI(B)(5) of the T&D OMA, LUMA is submitting Monthly Budget to Actuals which includes an explanation of variances for items when over \$0.5M and 10%. LUMA's Quarterly report supports requirements within Annex I, Section VI.B.4. Detail provided is in line with interim financial reporting. Statistics regarding the T&D System are included within LUMA's filings in NEPR-MI-2019-0007 .

<p>2</p>	<p>Please provide a quarterly, YTD and forecast for the year.</p>	<p>LUMA's Quarterly report supports requirements within Annex I, Section VI.B.4 until such time that PREPA has exited bankruptcy and has audited financial statements. Detail provided is in line with interim financial reporting. Quarterly reports present historical information and do not include forecasts. LUMA notes that year to date data can be achieved by adding quarterly data together.</p> <p>LUMA's forecasts are included in our annual filings, most recently submitted within LUMA's Annual Budgets FY23-FY25 submitted on April 2, 2022 to the P3A within transmittal LUMA-P3A-T-00299.</p>
<p>3</p>	<p>Please provide a headcount chart by department and include subcontractors supporting each department.</p>	<p>Statistics regarding LUMA's current employee headcount is provided within docket NEPR-MI-2019-0007. LUMA is unaware of a performance requirement under the T&D OMA related to headcount by department.</p>
<p>4</p>	<p>Please include a table similar to the PREB table on the federally funded projects by category. Include what projects, how much was approved, how much was spent and how much cash was received.</p>	<p>Within LUMA's Quarterly Report, LUMA provides tables 4.1 and 4.2, detailing our quarterly federally funded activities. LUMA provides the P3A on a simultaneous and monthly basis, withdrawal notices on federal funded activities, in compliance with Section 7.5(b)(v) of the T&D OMA. For further information on federally funded activities, please refer to Federal Funded Docket NEPR-MI-2021-0002.</p>