NEPR

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

IN RE: REVIEW OF LUMA'S INITIAL BUDGETS	**CASE NO. NEPR-MI-2021-0004** **SUBJECT: Submission of Additional Information Requested in Technical Conference, Supplemental Responses to Questions and Clarifications.**

MOTION IN COMPLIANCE WITH ORDER SUBMITTING ADDITIONAL INFORMATION AND SUPPLEMENTAL RESPONSES TO QUESTIONS POSED IN TECHNICAL CONFERENCE AND SUBMITTING CLARIFICATIONS

TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

COME NOW LUMA Energy, LLC ("ManagementCo"), and **LUMA Energy ServCo, LLC** ("ServCo"), (jointly referred to as "LUMA"), and respectfully state and request the following:

1. On April 20, 2021, this honorable Puerto Rico Energy Bureau ("Bureau") issued a Resolution and Order that set a procedural calendar in this proceeding and included a Technical Conference scheduled for May 3rd, 4th and 5th, 2021 ("April 20th Order").

2. The April 20th Order also directed that LUMA would have until May 7, 2021, to file additional information that the Bureau could require during the Technical Conference.

3. The Technical Conference was held on May 3rd, 4th and 5th, 2021. Throughout the three days of the Technical Conference, Commissioners and Bureau consultants issued requests for additional information. Similarly, LUMA representatives offered and requested leave to file additional information or responses with regards to several topics, and/or to provide written clarifications on several matters. The Bureau issued bench orders granting LUMA leave to provide additional information or supplemental written responses to certain questions and/or to submit clarifications, on or before May 7, 2021.

4. In compliance with the April 20th Order and with the bench orders issued during the Technical Conference, LUMA is hereby submitting the additional information requested by the Bureau and Bureau consultants, as well as additional responses and/or clarifications, as the Bureau authorized during the Technical Conference. The table below itemizes the additional information and documents that LUMA is submitting to this Honorable Energy Bureau. It also identifies the documents that contain confidential information and that are being submitted today under seal of confidentiality (Responses 10 and 13 and Attachment 1 to Response 13).

#	Response	Subject	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable
1.	TC-RFI-LUMA-MI-21-0004-210503-PREB-001	ERP	N/A	
2.	TC-RFI-LUMA-MI-21-0004-210503-PREB-002	PREPA Legacy	N/A	
3.	TC-RFI-LUMA-MI-21-0004-210503-PREB-002 **Attachment 1 excel**	PREPA Legacy Support	N/A	
4.	TC-RFI-LUMA-MI-21-0004-210503-PREB-003	Forecast Sales	N/A	
5.	TC-RFI-LUMA-MI-21-0004-210503-PREB-003 **Attachment 1 Excel**	Load Information	N/A	

#	Response	Subject	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable
6.	TC-RFI-LUMA-MI-21-0004-210503-PREB-004	Bad Debts	N/A	
7.	TC-RFI-LUMA-MI-21-0004-210503-PREB-004 **Attachment 1 excel**	Bad Debt Analysis	N/A	
8.	TC-RFI-LUMA-MI-21-0004-210503-PREB-005	Bankruptcy and Advisor Cost	N/A	
9.	TC-RFI-LUMA-MI-21-0004-210503-PREB-005 **Attachment 1 excel**	Bankruptcy and Advisor Cost	N/A	
10.	TC-RFI-LUMA-MI-21-0004-210503-PREB-006	O&M and Capital Expenditures	N/A	
11.	TC-RFI-LUMA-MI-21-0004-210503-PREB-007	Generation	N/A	
12.	TC-RFI-LUMA-MI-21-0004-210503-PREB-008	Generation	N/A	
13.	TC-RFI-LUMA-MI-21-0004-210503-PREB-009	Federal Funding	N/A	

#	Response	Subject	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable
14.	TC-RFI-LUMA-MI-21-0004-210503-PREB-009 **Attachment 1**	FEMA/PREPA Projects Listings	N/A	
15.	TC-RFI-LUMA-MI-21-0004-210503-PREB-010	IEM/LUMA Contract	See redacted sentence of the response with direct quotation to language of the IEM Contract	LUMA Proprietary Confidential Information and Sensitive Commercial Information Protected under Section 13.2 of the OMA, under Act 80-2011 and Article 4 of Act 122-2019.
16.	TC-RFI-LUMA-MI-21-0004-210503-PREB-011	Reliability Improvement Impacts & Damaged Poles	N/A	
17.	TC-RFI-LUMA-MI-21-0004-210503-PREB-011 **Attachment 1**	Reliability Analysis	N/A	
18.	TC-RFI-LUMA-MI-21-0004-210503-PREB-012	Lost Load-Qualification of Benefits	N/A	
19.	TC-RFI-LUMA-MI-21-0004-210503-PREB-013	PREPA Professional Services	See Redacted portions of the Response.	Sensitive Financial and Commercial Information Protected by Act 80-2011 and Article 4 of Act 122-2019.

#	Response	Subject	Pages in which Confidential Information is Found, if applicable	Summary of Legal Basis for Confidentiality Protection, if applicable
20.	TC-RFI-LUMA-MI-21-0004-210503-PREB-013 **Attachment 1 excel**	PREPA Professional & Technical Services	See redacted portions of the attachment	Sensitive Financial and Commercial Information Protected by Act 80-2011 and Article 4 of Act 122-2019.
21.	TC-RFI-LUMA-MI-21-0004-210503-PREB-014	FEMA Work Plan Requirements	N/A	
22.	TC-RFI-LUMA-MI-21-0004-210503-PREB-015	Inspections	N/A	
23.	TC-RFI-LUMA-MI-21-0004-210503-PREB-016	Meter Replacement Details for Generation Facilities	N/A	

5. Under separate cover and expediently, within the next ten days, as allowed by Section A.2 of the Energy Bureau's Policy on Management of Confidential Information," CEPR-MI-2016-0009, of August 31, 2016 as amended by the Resolution dated September 16, 2016, LUMA will be submitting a separate memorandum of law in support of its requests to file some of the aforementioned documents under seal of confidentiality.

WHEREFORE, LUMA respectfully requests that this Bureau **take notice** of the aforementioned and **deem** that LUMA complied with the portion of the April 20th Order that set a deadline to file additional information requested during the Technical Conference and with the

bench orders issued by the Energy Bureau in the Technical Conference held on May 3rd, May 4th and May 5th, 2021.

RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 7th day of May 2021.

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

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NEPR-MI-2021-0004

Initial Budgets Undertaking Response to May 3-5, 2021 Technical Conference

List of Response Attachments

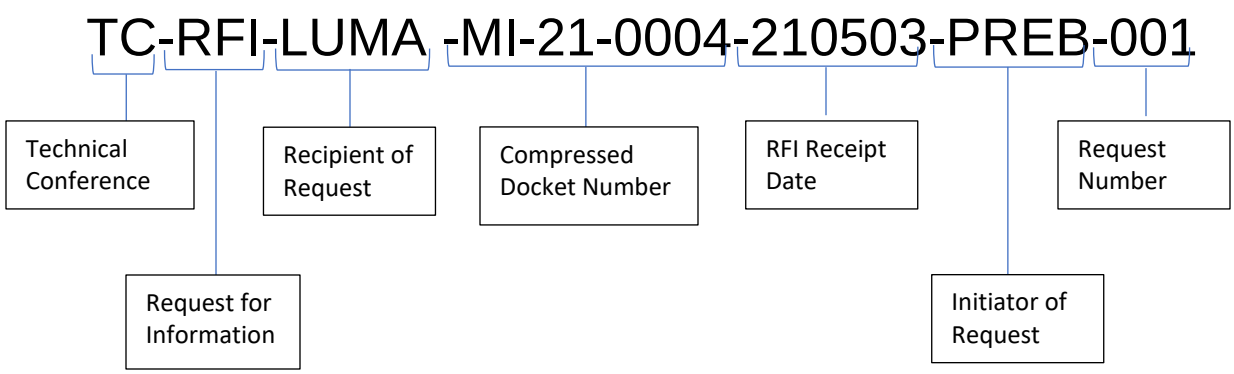
Response ID	Attachment Name	Description
TC-RFI-LUMA-MI-21-0004-210503-PREB-002	Attachment 1*	PREPA Legacy Support
TC-RFI-LUMA-MI-21-0004-210503-PREB-003	Attachment 1*	Load Information
TC-RFI-LUMA-MI-21-0004-210503-PREB-004	Attachment 1*	Bad Debt Analysis
TC-RFI-LUMA-MI-21-0004-210503-PREB-005	Attachment 1*	Title III Costs
TC-RFI-LUMA-MI-21-0004-210503-PREB-009	Attachment 1*	FEMA/PREPA Project Listing
TC-RFI-LUMA-MI-21-0004-210503-PREB-011	Attachment 1	Proposed Reliability Improvement Approach
TC-RFI-LUMA-MI-21-0004-210503-PREB-013	Attachment 1*	PREPA Professional & Technical Services

*Note: * Denotes attachments that have been provided in Microsoft Excel format.*

Request Naming Convention

Please note that LUMA proposes to use the following naming convention to categorize and reference any requests made in this process and future processes, related to technical sessions, conferences or hearings.

Example:



Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-001

Subject: Emergency Response

Request:

1. Mr. Schiffman - "We are aware that there needs to be investments in warehousing, spare parts, inventory and other capital investment to make sure that we are able to implement the emergency response."
2. To include further information on Mutual Aid Programs
3. Commissioner Mateo – "As we approach hurricane season, we want to know how the funding will enable you to respond to an emergency if all things are happening at the same time? Based on knowledge of the system at this point, do we think that is going to be enough?"

Response:

LUMA has taken numerous steps to prepare for emergencies and be in position to restore service in a timely manner and efficiently. LUMA's approach to budgeting for outage response activities differs based on the type of event and the number of affected customers. There are fundamentally two funding streams:

1. An "Outage Event" as captured on page 22 of the OMA, Article 1, "Definitions; Interpretations" is one that affects at least 20,500 customers. These events would be deemed a major event and have been budgeted according to the OMA.
2. Day-to-day restoration activities for service interruptions impacting less than 20,500 customers. These events have been budgeted within the Operating budget of LUMA's Initial Budgets.

With respect to major events (item 1 above), utilities do not typically budget for such emergencies. As such, the OMA recognized that it would be prudent to have access to funds to address such emergencies. Accordingly under the OMA, the Outage Event Reserve Account was established to be utilized to respond to a storm or other emergency event with an outage larger than 20,500 customers (or at least 150 outage jobs for the T&D System logged within a 24-hour period) (OMA, Section 7.5(d)). The account is to be pre-funded with $30 million. The account will be replenished promptly following a withdrawal by LUMA in order to maintain an amount equal to $30 million in the account. This amount is viewed as a working capital account to allow for a timely response to an Outage Event. For example, if LUMA incurs Outage Event Costs of $100 million over an Outage Event, LUMA will withdraw from the Outage Event Reserve Account in increments of no larger than $30 million dollars, and the Owner will promptly replenish the Outage Event Reserve Account as to maintain an amount equal to $30 million. Given that the account is replenished promptly, LUMA will be able to withdraw multiple times from the Outage Event Reserve Account over an Outage Event to fund the $100 million Outage Event Costs.

During the Front-End Transition Period, LUMA has been preparing for potential emergencies by undertaking multiple activities, including the development and testing of the Emergency Response Plan and training of LUMA employees according to FEMA's National Incident Management System (NIMS) framework. Specifically, LUMA has developed the structure and assigned roles within LUMA's Emergency

Operations Center that would be deployed in an emergency. Post-commencement LUMA will commence training newly hired employees according to the NIMS framework.

Below are some of the additional preparations LUMA is making for the upcoming Atlantic Hurricane Season.

- LUMA has reviewed the material and equipment inventories and has confirmed that at commencement, LUMA will have enough in stock to support two months of operations and one category 2 hurricane. We plan to maintain this level of supply, while operating within the budgets proposed in the Initial Budgets Filing.
- For Fleet Operations, our current plans include 130 bucket and digger trucks to ensure enough equipment to not only perform daily work but to have safe and reliable equipment for storm restoration. We will also secure and keep full the bulk fuel tanks to ensure an adequate supply in the event of a storm. As a precautionary measure, we will arrange the ability to mobilize an additional 110 bucket and digger trucks should additional vehicles be required for response and restoration.
- With respect to Mutual Aid, there are two initiatives underway, both of which require cooperation and / or a degree of flexibility from all parties:
    - APPA Mutual Aid, designed for Government Utilities where there is an existing agreement between PREPA and APPA: LUMA is coordinating a meeting (which needs to include specific PREPA personnel as the Network Coordinator for the APPA Agreement) to leverage the current agreement to include LUMA, and
    - EEI Mutual Aid, intended for Investor-Owned Utilities - LUMA is in discussions with EEI. There appears to be a willingness to find a way to establish LUMA as a member despite it not being an IOU. This will bring an additional source of resources to Puerto Rico beyond only the APPA., although PREPA's non-payment to EEI members may be an impediment.
- LUMA has initiated a process with local contractors, to determine a call down list with established rates and agreements in place to call on these resources if needed.
- LUMA recognizes that even with agreements (i.e., Mutual Aid, MSAs) that provide some degree of assurance that resources would be made available to respond to a major storm, there is no guarantee that said resources will be available. In recognition of this, LUMA's parent companies will be available to further support should the need arise. Any engagement of LUMA's parent would be conducted in accordance with procurement procedures and mitigation of potential organizational conflict of interest.

Lastly, many of the Improvement Programs within the Initial Budgets directly or indirectly support and enhance LUMA's emergency response – including investment and improvement of the fleet, purchasing of tools, new PPE, improved materials management, establishment of standard operating procedures and training.

Our customer services team is upgrading the contact center platform with the ability to communicate to customers in real time via multiple platforms, and the ability to move agents to safe locations during storm events or emergency situations to continue customer communications. Further, dedicated customer services training that will include in emergency situations, joint process with operations to enable improved customer communication.

We have also planned within Initial Budgets the inspections of assets to improve our understanding of and the data associated with the system and assets. We are also investing across the asset base

including transmission, distribution, telecommunications, substation, facilities and control center and these repairs and restorations will improve resiliency of the system.

Preparing for an emergency is a long-term process. During the Front-End Transition LUMA has focused on foundational activities that will enable LUMA to respond to outage events and emergencies. LUMA will continue to improve our preparation post commencement and this is central to LUMA's operations.

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-002

Subject: Initial Budget Schedule 5.3 Other | PREPA Legacy Cost Estimate

Request:

Commissioner Rivera requested that LUMA provide breakdown/support for the PREPA Legacy costs.

Response:

Please refer to TC-RFI-LUMA-MI-21-0004-210503-PREB-002 Att1 for the calculation of the PREPA Legacy cost estimate. LUMA used PREPA's most recent Certified Budget cost estimates at PREPA's Directorate and Division subaccount details, to determine LUMA's estimates based on continuing functions / capabilities that will continue upon LUMA's commencement of GridCo Management functions.

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-003

Subject: Forecasted Sales

Request:

(a) Provide supporting information received for forecasted sales submitted in Schedule 5.6.

(b) Confirm use of Siemens model.

Response:

(a) Please refer to TC-RFI-LUMA-MI-21-0004-210503-PREB-003 Att1 for the information provided by PREPA for the forecast sales within Revised Schedule 5.6, as filed on April 6, 2021.

(b) LUMA relied on PREPA to provide updated forecast sales for the purposes of the Initial Budgets. PREPA and LUMA conducted several workshops to discuss and understand the forecast requirements of the Initial Budgets and the forecasting process undertaken by PREPA.

To prepare the forecast sales in November 2020, PREPA used the same macroeconomic assumptions within the certified PREPA 2020 Fiscal Plan as in effect and approved by the FOMB and AAFAF for the Commonwealth of Puerto Rico. The forecasted sales within Initial Budgets, as compared to the information provided within the 2020 PREPA Fiscal Plan, was updated for actuals/trends.

It is clarified that PREPA's prepared updated forecast sales is consistent with the methodologies used in the 2020 PREPA Fiscal Plan, which was prepared by PREPA Planning and Siemens using methodologies consistent with the IRP load forecast.

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-004

Subject: Bad Debts

Request:

Calculation supporting Bad Debts within Initial Budgets for fiscal years 2022 to 2024.

Response:

Please refer to TC-RFI-LUMA-MI-21-0004-210503-PREB-004 Attachment 1.

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-005

Subject: Bankruptcy and Advisor Costs

Request:

Provide supporting information related to Bankruptcy and Advisor Costs.

Response:

Please refer to TC-RFI-LUMA-MI-21-0004-210503-PREB-005 Att1.

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-006

Subject: O&M and Capital Expenditures

Request:

Subsequent to the lunch break on May 3, 2021 and prior to a continuation of the scheduled discussions, Commissioner Rivera made reference to discussions that occurred in the morning whereby LUMA pointed the Commissioner to the detailed cost breakdowns of the Capital and O&M costs as submitted by LUMA in RFI-LUMA-MI-21-0004-210405-PREB-009, Attachments 1 and Attachment 2. This was in relation to the PREB Information Requests for additional detail related to LUMA's Initial Budget filing Section 5.0 – Schedules 5.2 (Transmission and Distribution Operating Expenditures) and 5.5 (Improvement Portfolios – Total Capital Expenditures). Commissioner Rivera referred to the attachments as "output tabs."

Response:

LUMA has undertaken to submit additional clarification on the Attachments to IB Response to 0009 to highlight the following correlations:

- Schedule 5.5 correlation to IB Response 009 Attachment 1
- Schedule 5.2 correlation to IB Response 009 Attachment 2

Part I: Re: 009 Attachment 1 – Schedule 5.5 correlation to IB Response 009 Attachment 1

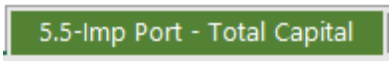
Schedule 5.5 from Initial Budgets filing is illustrated below.

5.5 Improvement Portfolios - Total Capital Expenditures
($ in 000s)

	1	2	3	4	5	6	7	8	9	10	11
1		Total			=	Fed Funded Contributions		+	Net Non Federally Funded		
2	**Improvement Portfolio**	**2022**	**2023**	**2024**		**2022**	**2023**	**2024**	**2022**	**2023**	**2024**
5	Customer Service	95,717	138,805	137,482		82,653	122,000	122,000	13,064	16,805	15,482
6	Distribution	234,534	349,047	515,160		199,224	311,237	477,350	35,310	37,810	37,810
8	Transmission	237,658	458,455	421,565		235,983	456,780	419,890	1,675	1,675	1,675
7	Substations	108,006	102,201	102,731		89,097	80,967	80,597	18,909	21,234	22,134
4	Control Center & Buildings	12,499	49,897	61,645		9,299	44,678	55,475	3,199	5,219	6,169
9	Enabling	58,312	32,112	40,332		17,036	2,165	1,703	41,275	29,947	38,629
10	Support Services	12,556	12,408	10,298		4,320	1,925	1,700	8,236	10,483	8,598
11	**Subtotal**	**759,281**	**1,142,926**	**1,289,212**		**637,613**	**1,019,752**	**1,158,715**	**121,668**	**123,173**	**130,497**
12	**Other**										
13	2% Reserve for Excess Expenditures	15,186	23,087	26,303		12,752	20,599	23,640	2,433	2,488	2,662
14	Inflation	-	11,429	25,913		-	10,198	23,290	-	1,232	2,623
15	**Total Capital Expenditures**	**774,467**	**1,177,442**	**1,341,428**		**650,365**	**1,050,549**	**1,205,645**	**124,101**	**126,893**	**135,783**

RFI-LUMA-MI-21-0004-0210405-PREB-009 Attachment 1 [CONFIDENTIAL] provides the data details and estimate basis linked to the specific Program source data that compose the Improvement Portfolios. Below is a road map to PREB-009 Attachment 1 to help point the Commission to where these estimates are further supported on the record.

1. Please refer to worksheet “5.5 Imp Port – Total Capital”

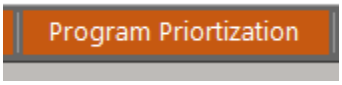


This referenced worksheet is a mirror copy of the Schedule 5.5 table that is featured in the Initial Budget filing.

5.5 Improvement Portfolios - Total Capital Expenditures
($ in 000s)

		Total			Fed Funded Contributions			Net Non Federal Funded		
	Improvement Portfolio	2022	2023	2024	2022	2023	2024	2022	2023	2024
	Customer Service	95,717,123	138,805,300	137,482,102	82,653,123	122,000,000	122,000,000	13,064,000	16,805,300	15,482,102
	Distribution	234,534,400	349,047,400	515,159,900	199,224,400	311,237,400	477,349,900	35,310,000	37,810,000	37,810,000
	Transmission	237,657,800	458,454,600	421,564,600	235,982,800	456,779,600	419,889,600	1,675,000	1,675,000	1,675,000
	Substations	108,005,833	102,201,333	102,731,333	89,097,333	80,967,333	80,597,333	18,908,500	21,234,000	22,134,000
	Control Center & Buildings	12,498,628	49,896,857	61,644,552	9,299,445	44,677,674	55,475,369	3,199,183	5,219,183	6,169,183
	Enabling	58,311,514	32,112,471	40,332,170	17,036,065	2,165,301	1,702,756	41,275,449	29,947,170	38,629,415
	Support Services	12,556,000	12,407,600	10,297,500	4,320,000	1,925,000	1,700,000	8,236,000	10,482,600	8,597,500
	Subtotal	**759,281,298**	**1,142,925,561**	**1,289,212,157**	**637,613,166**	**1,019,752,308**	**1,158,714,958**	**121,668,132**	**123,173,253**	**130,497,200**
	Other									
	2% Reserve for Excess Expenditures	15,185,626	22,858,740	25,784,761	12,752,263	20,395,250	23,174,765	2,433,363	2,463,490	2,609,996
	Inflation	-	11,429	25,913	-	10,198	23,290	-	1,232	2,623
	Total Capital Expenditures	**774,466,924**	**1,165,795,730**	**1,315,022,832**	**650,365,430**	**1,040,157,755**	**1,181,913,013**	**124,101,494**	**125,637,974**	**133,109,819**

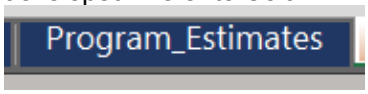
2. LUMA confirms that the green numbers in the above referenced worksheet links (via an excel formula) to the Program Prioritization worksheet.



3. The formulas in the above Table from the Program Prioritization worksheet are summing the total of Federal Funded Capital Expenditures & Non-Federal Capital Expenditures for each of the programs based on their Improvement Portfolio as labelled in column B of the Program Prioritization worksheet.

    a. The Program Prioritization worksheet lists each Program in Column D. Each of these Programs are described in detail in the Initial Budget Filing Appendix D.

    b. Furthermore, in RFI-LUMA-MI-21-0004-0210405-PREB-009 Attachment 1, LUMA included estimate methods and assumptions for how these program costs were developed. Refer to Column D of the Program Estimates worksheet.



Part 2: Re: 009 Attachment 2 – Schedule 5.5 correlation to IB Response 009 Attachment 1

Schedule 5.2 from the Initial Budgets filing

5.2 Transmission & Distribution Operating Expenditures

($ in 000s)

	1	2	3	4	5	6	11	17
				FY22				
		Customer Service	Operations	Utility Transformation	Support Services	2022	2023	2024
	Labor							
1	Salaries, Wages and Benefits	41,281	120,933	20,130	40,014	222,358	250,754	254,280
2	**Total Labor**	**41,281**	**120,933**	**20,130**	**40,014**	**222,358**	**250,754**	**254,280**
	Non-Labor							
3	Materials & Supplies	346	18,302	616	1,331	20,595	20,479	20,462
4	Transportation, Per Diem, and Mileage	701	18,093	1,865	1,930	22,588	34,633	28,759
5	Property & Casualty Insurance	-	-	-	56,743	56,743	57,310	57,884
6	Retiree Medical Benefits	-	-	-	-	-	-	-
7	Security	250	-	-	19,548	19,798	19,996	20,196
8	IT Service Agreements	-	3,211	-	34,785	37,996	41,698	40,808
9	Utilities & Rents	20	9,000	2	13,507	22,529	22,754	22,982
10	Legal Services	600	500	-	8,670	9,770	11,633	11,750
11	Communications Expenses	328	1,712	2	2,762	4,804	4,852	4,900
12	Professional & Technical Outsourced Services	23,695	22,596	6,813	35,804	88,908	87,353	86,560
13	Vegetation Management	-	51,301	-	-	51,301	51,814	52,332
14	Regulation and Environmental Inspection	-	-	-	4,000	4,000	4,040	4,080
15	Other Miscellaneous Expenses	1,055	12,742	760	14,800	29,357	31,105	31,265
16	Other Expenses				315	315	318	321
17	**Total Non-Labor / Other Operating Expense**	**26,995**	**137,457**	**10,057**	**194,195**	**368,704**	**387,985**	**382,298**
18	**Subtotal Labor and Non-Labor/Other Operating Expenses**	**68,276**	**258,389**	**30,187**	**234,209**	**591,062**	**638,739**	**636,579**
19	Shared Services Provided by LUMA to GenCo[1]					(76,561)	(77,326)	(78,100)
20	Future Efficiencies[2]					-	(59,409)	(110,557)
21	**Total Operating Expense**	**68,276**	**258,389**	**30,187**	**234,209**	**514,502**	**502,004**	**447,922**

RFI-LUMA-MI-21-004-210405-PREB-009 Attachment 2 [CONFIDENTIAL] provides the details and the basis of estimate of the Operating Expenditure costs linked directly to the Labor and Non-Labor expense data. Below is a road map to PREB-009 Attachment 2 to help point the Commission to where these estimates are supported on the record.

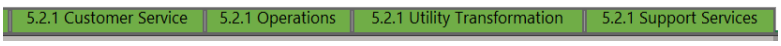
1. Worksheet 5.2.1 T&D OpEx provides the same detail as the official filed schedule above; however, formulas have been included from the supporting worksheets for each department – Customer Service, Operations, Utility Transformation & Support Services depicted by the numbers formatted in green.

5.2 Transmission & Distribution Operating Expenditures

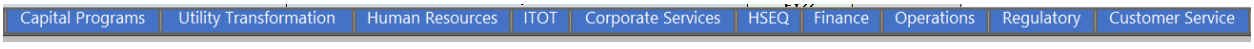
($ in 000s)

	1	2	3	4	5	6
				FY22		
		Customer Service	Operations	Utility Transformation	Support Services	2022
	Labor					
1	Salaries, Wages and Benefits	41,281	120,933	20,130	40,014	222,358
2	**Total Labor**	**41,281**	**120,933**	**20,130**	**40,014**	**222,358**
	Non-Labor					
3	Materials & Supplies	346	18,302	616	1,331	20,595
4	Transportation, Per Diem, and Mileage	701	18,093	1,865	1,930	22,588
5	Property & Casualty Insurance	-	-	-	56,743	56,743
6	Retiree Medical Benefits					-
7	Security	250	-	-	19,548	19,798
8	IT Service Agreements	-	3,211	-	34,785	37,996
9	Utilities & Rents	20	9,000	2	13,507	22,529
10	Legal Services	600	500	-	8,670	9,770
11	Communications Expenses	328	1,712	2	2,762	4,804
12	Professional & Technical Outsourced Services	23,695	22,596	6,813	35,804	88,908
13	Vegetation Management	-	51,301	-	-	51,301
14	Regulation and Environmental Inspection	-	-	-	4,000	4,000
15	Other Miscellaneous Expenses	1,055	12,742	760	14,800	29,357
16	Other Expenses	-	-	-	315	315
17	**Total Non-Labor / Other Operating Expense**	**26,995**	**137,457**	**10,057**	**194,195**	**368,704**
18	**Subtotal Labor and Non-Labor/Other Operating Expense**	**68,276**	**258,389**	**30,187**	**234,209**	**591,062**
19	Shared Services Provided by LUMA to GenCo[1]					(76,561)
20	Future Efficiencies[2]					-
21	**Total Operating Expense**	**68,276**	**258,389**	**30,187**	**234,209**	**514,502**

2. If you visit the four Green Department worksheets, you'll find the linked data for Schedule 5.2.1 including a basis for expense estimates in the Description column.



3. These figures are pulled from each Department's individual Budget Template summaries that are featured in the same attachment specifically in the blue labeled worksheets.



4. For additional detail on the activities of LUMA's departments, please visit Section 4.0 of the Initial Budgets filing for Activity Descriptions by Department.

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-007

Subject: Generation

Request:

How will LUMA improve if PREPA is in the same level of performance for Generation?

Response:

It has not been PREPA's practice to rigorously assess and document benefits and costs of proposed generation projects. As a result, information to quantify the expected benefits of proposed Generation Non-Federally Funded Capital projects is not available to be reviewed. However, the scope of most of the Generation Non-Federally Funded Capital projects was reviewed by LUMA and almost all are related to reliability and capacity. As a result, it is reasonable to expect some overall improvement in generation performance which could benefit LUMA's customers. This impact, however, cannot be quantified at this time.

The expected improvement in performance would come in two separate forms. First, and most significantly, the incidence of forced outages and reactive repair maintenance may be reduced as deferred maintenance is completed. This may decrease the number of load-shed events or customer outages caused by generator trips. The second benefit may be some improvement in overall thermal and economic efficiency which may contribute to lower fuel costs which would be directly passed on to customers.

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-008

Subject: Generation

Request:

Description on how LUMA determined the $210 million allocation of generation operating and capital expenditures, in Schedule 5.1, line 9.

Response:

LUMA undertook two different approaches in due diligence related to the Generation Budget. First, LUMA used a bottoms-up approach with detailed working sessions, involving site visits, review of historical data and planned operation and maintenance activities, as well as discussions with PREPA's generation team to review PREPA Generation operation and capital activities. LUMA's activities to receive the PREPA Generation Budget is described within response RFI-LUMA-MI-21-0004-210405-PREB-008.

Secondly, LUMA determined a top down approach to understand the historical ranges for which PREPA allocated Generation expenditures within rates as determined from the 2017 Rate Case. Please refer to RFI-LUMA-MI-21-0004-210405-PREB-001 Attachment 1 for information supporting LUMA's review of the 2017 Rate Case and historical allocation information for the Generation Budget. Specifically, at the time LUMA's Initial Budgets were determined, LUMA reviewed information available, contained within Microsoft Excel Sheet '01b-Hist Generation Allocation' to determine a historical range of 16.8 – 18.3%[1] of PREPA Generation expenditures compared to PREPA approved base rate revenue requirement for PREPA basic revenues.

Using both the top-down historical range and bottoms-up generation operation and capital activities approaches, LUMA's determined that $210 million was reasonable for the Generation Budget.

[1] Excludes 2018A and 2019A were excluded from the range. 2018A expenditures were a result of ongoing hurricane recovery. 2019A capital spending resulted from a mid-year reallocation of unspent T&D capital into generation.

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-009

Subject: Federal Funding

Request:

Provide a list of federally funded projects with status and how it relates to LUMA's Improvement Programs.

Response:

With respect to Transmission and Distribution, PREPA's short term list outlined in its 10-year plan (Docket ID: NEPR-MI-2021-0002) currently contains 132 projects. From this list, PREPA has advanced 51 projects through the initial FEMA phase of obtaining a FEMA Project Numbers. From these 51 projects, PREPA grouped some projects together for submission to FEMA such that a total of 37 FEMA Project Numbers were requested and obtained from FEMA. The remaining 81 projects (132 minus 51) are in earlier phases of development.

Please refer to TC-RFI-LUMA-MI-21-0004-210503-PREB-009 Att1 for a listing of the 132 FEMA/PREPA projects, the associated LUMA Improvement Program name (Column C), and the status of each project (Column G). Through continued collaborative efforts, PREPA and LUMA are aligned with the identification and prioritization of these 132 projects.

To be helpful, LUMA notes that overall PREPA has currently filed and received FEMA Project Numbers for Scope of Works (SOW), as described in the table below:

Item	Quantity
Generation / Hydro	6
Projects Moved Beyond Short-Term	1
Complete, Seeking Reimbursement	2
Transmission and Distribution (To be LUMA's responsibility)	**37**
Total FEMA Project Numbers:	**46**

The 46 SOWs were submitted to PREB in a motion filed by PREPA on April 14th within the PREPA 10-year plan. As described above, of these 46 FEMA Project Numbers, LUMA will assume 37 FEMA SOWs post-commencement as T&D Operator.

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

TC-RFI-LUMA-MI-21-0004-210503-PREB-010

Subject: IEM/LUMA Contract

Request:

Check the language in the contract between IEM & LUMA to see if it describes playing a role in procurement to avoid conflicts of interests.

Response:

The language of the contract between IEM & LUMA states the following [redacted]

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

RFI-LUMA-TC-MI-21-0004-210503-PREB-011

Subject: Reliability Improvement Impacts & Damaged Poles

Request:

a) Can you provide more information around the highest impact reliability improvement activities and whether you can summarize by geographic characteristics or voltage level?
b) Number of poles found damaged (Transmission/Distribution) after Hurricanes Maria & Irma

Response:

a) TC-RFI-LUMA-MI-21-0004-210503-PREB-011 Att1 is a presentation that shows Customers Interrupted (CI), Customer Minutes Interrupted (CMI) by feeder voltage and a map that shows geographic characteristics. Further, the presentation shows root cause analyses of CMI and CI.

b) The following text and tables outline the number of poles found damaged (Transmission/Distribution) after Hurricanes Maria and Irma.

Transmission Poles/Structures:

- Estimated total of 5,921 transmission poles/structures are disaster damaged.
- 38 kV system:
  - From sample inspections, it is estimated that there are 4,301 disaster damaged poles (9% of total 38 kV poles).
- 115 kV system:
  - 1,225 disaster damaged structures (22% of total 115 kV structures)
- 230 kV system:
  - 395 disaster damaged structures (16% of total 230 kV structures)
- In all 3 voltage levels, there are additional damaged poles/structures that are non-disaster damaged but functionally interdependent to the disaster damaged portion of the system, and hence also need to be rebuilt or hardened to bring the system up to acceptable industry codes and standards. A comprehensive inspection of the system is needed (and planned) to quantify these other functionally interdependent damages.
- Refer to Table 1.

Table 1: Transmission Poles/Structures

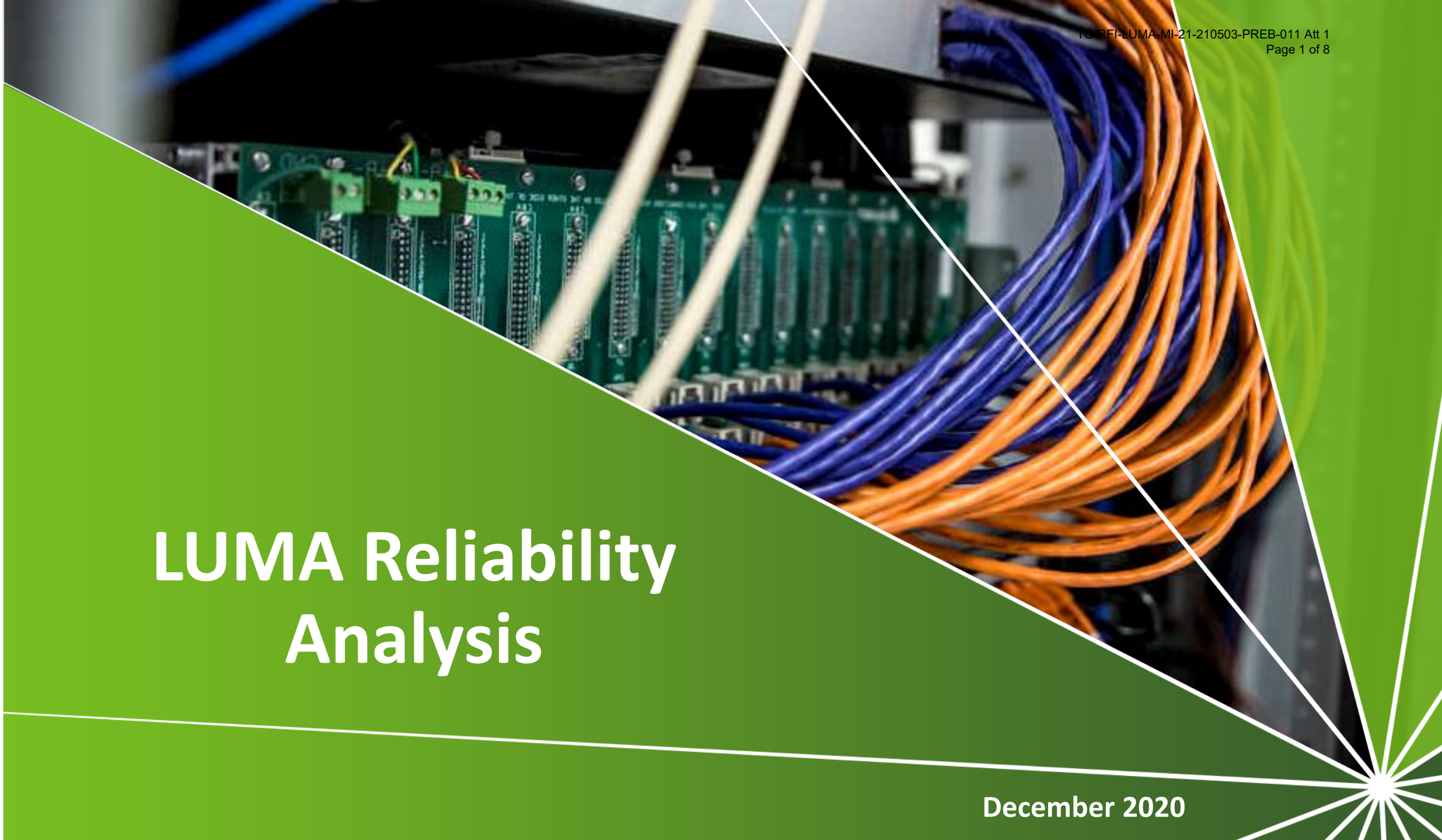
Voltage Level (kV)	Disaster Damaged Poles/Structures (Quantity)	Disaster Damaged Poles/Structures (% within Voltage Level)	Non-Disaster Damaged Poles/Structures
38	4,301	9%	Pending comprehensive inspection
115	1,225	22%	
230	395	16%	
Total	5,921	11%	

Distribution Poles/Structures:

- An estimated total of 198,921 poles/structures require replacement or repair.
  - 97,471 poles/structures were found to be disaster damaged.
  - 101,450 poles/structures were found to be non-disaster damaged but functionally interdependent to the disaster damaged portion of the system, and hence also need to be rebuilt or hardened to bring the system up to acceptable industry codes and standards. A comprehensive inspection of the system is needed (and planned) to further characterize these damages.
- Refer to Table 2.

Table 2: Distribution Poles/Structures

Line Configuration	Damaged Poles/Structures (%)	Disaster Damaged Poles/Structures (Quantity)	Non-Disaster Damaged Poles/Structures (Quantity)	Total Damaged Poles/Structures (Quantity)
Three Phase	47.8%	46,591	48,494	95,085
Two Phase	21.0%	20,469	21,304	41,773
One Phase	31.2%	30,411	31,652	62,063
Total	100%	97,471	101,450	198,921



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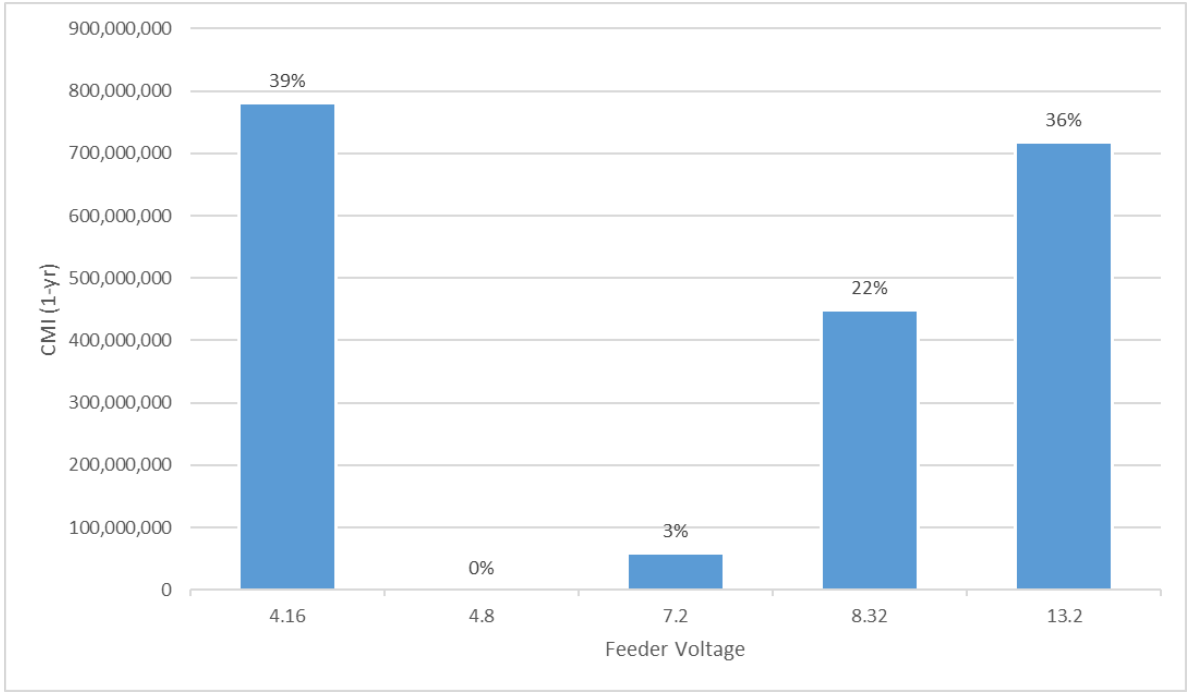
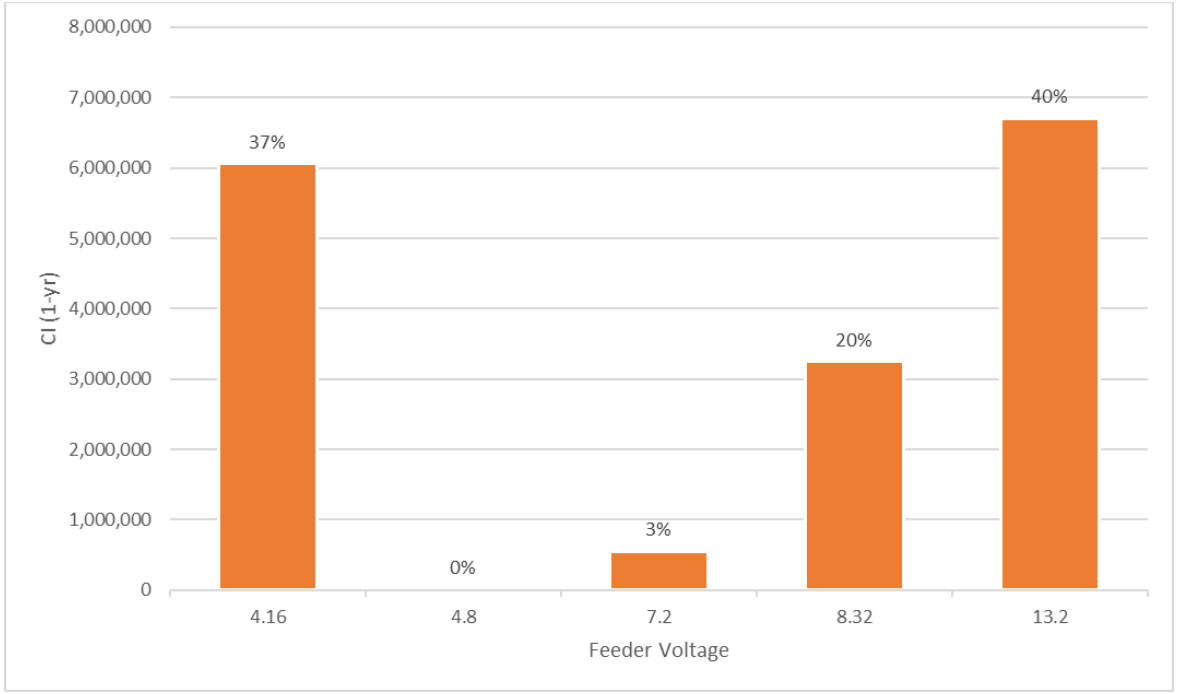
LUMA Reliability Analysis

December 2020

CMI and CI by Feeder Voltage Level





* In feeders with multiple voltage levels, total CMI and CI is assigned to the voltage level with most feeder miles.

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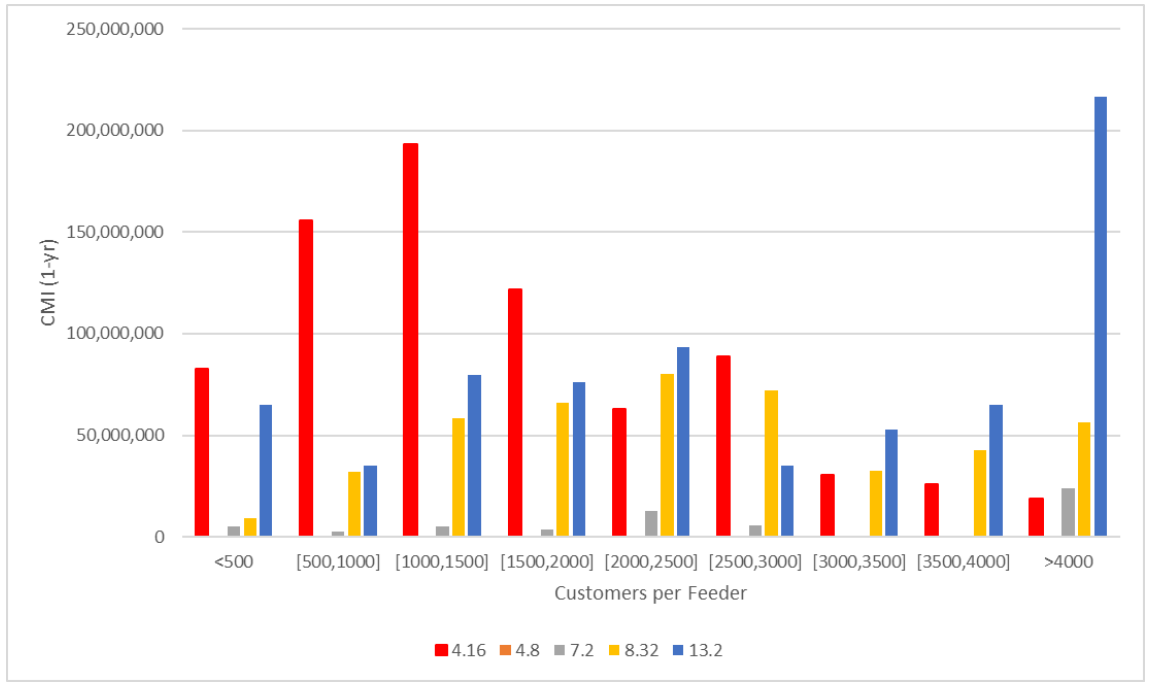
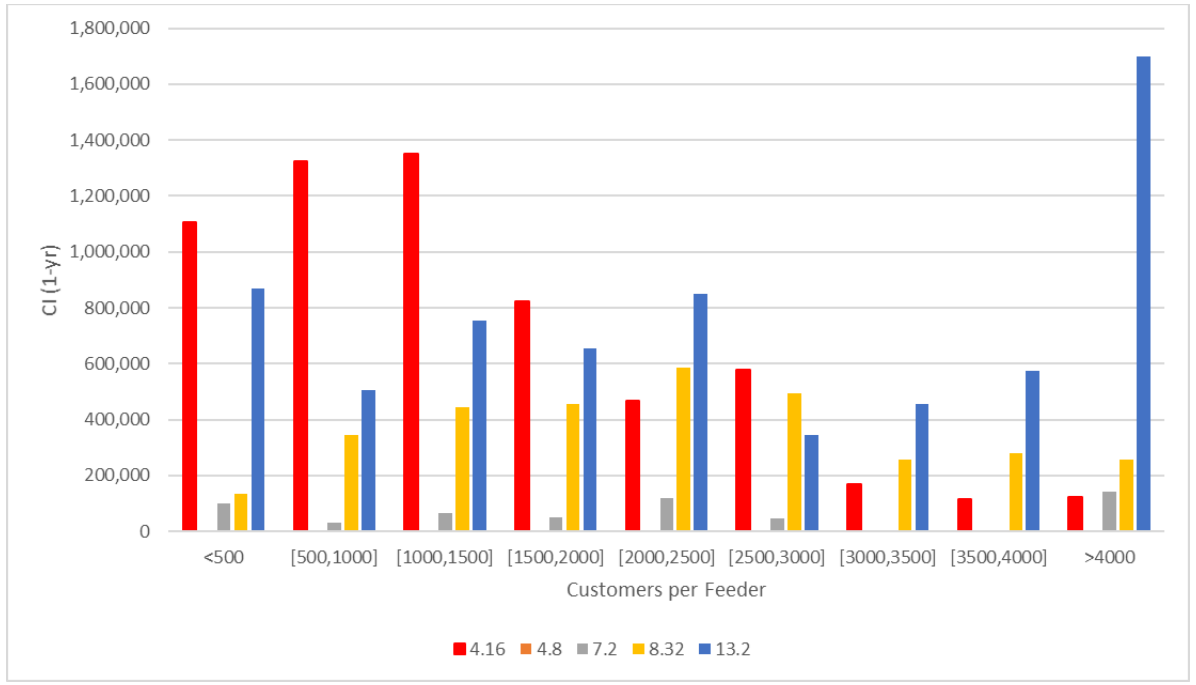
CMI and CI by Feeder Voltage Level and Number of Customers





* In feeders with multiple voltage levels, total CMI and CI is assigned to the voltage level with most feeder miles.

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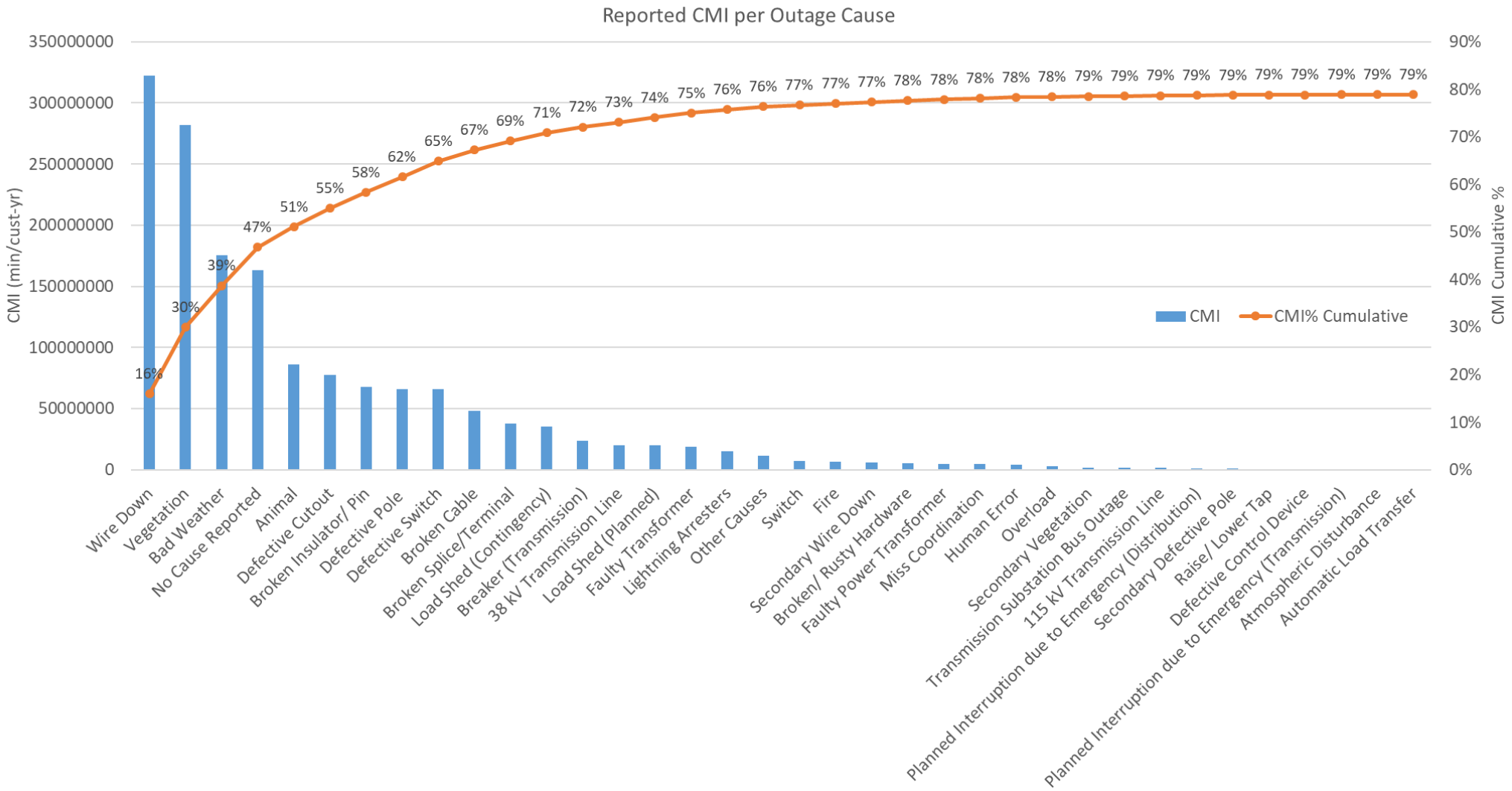
Preliminary Results have Highlighted Areas of Focus

Worst 10% Performing Feeders

District	Feeders		CMI	
	Worst 10%	(%) of worst 10%	Worst 10%	(%) of worst 10%
CAGUAS	13	12%	99,227,496	13%
MAYAGÜEZ	9	8%	79,015,907	10%
HUMACAO	9	8%	62,763,387	8%
RIO PIEDRAS	5	5%	49,522,679	6%
MONACILLOS	8	8%	49,415,748	6%
CANOVANAS	7	7%	48,047,285	6%
PONCE	7	7%	43,563,534	6%
SAN GERMAN	6	6%	40,206,665	5%
YAUCO	4	4%	38,999,005	5%
AGUADILLA	5	5%	37,657,918	5%
CAROLINA	5	5%	35,234,123	5%
BAYAMON	5	5%	34,942,603	5%
ARECIBO	3	3%	21,143,093	3%
BARRANQUITAS	4	4%	20,242,414	3%
PALO SECO	3	3%	18,937,731	2%
GUAYNABO	3	3%	17,571,944	2%
SAN SEBASTIAN	2	2%	16,574,914	2%
CAYEY	2	2%	12,595,817	2%
UTUADO	1	1%	11,533,349	2%
COROZAL	2	2%	10,879,887	1%
VEGA BAJA	1	1%	6,543,084	1%
QUEBRADILLAS	1	1%	6,030,962	1%
MANATI	1	1%	5,224,689	1%
Grand Total	106		765,874,234	

X Most Impacted Districts

Root Causes in Distribution: CMI



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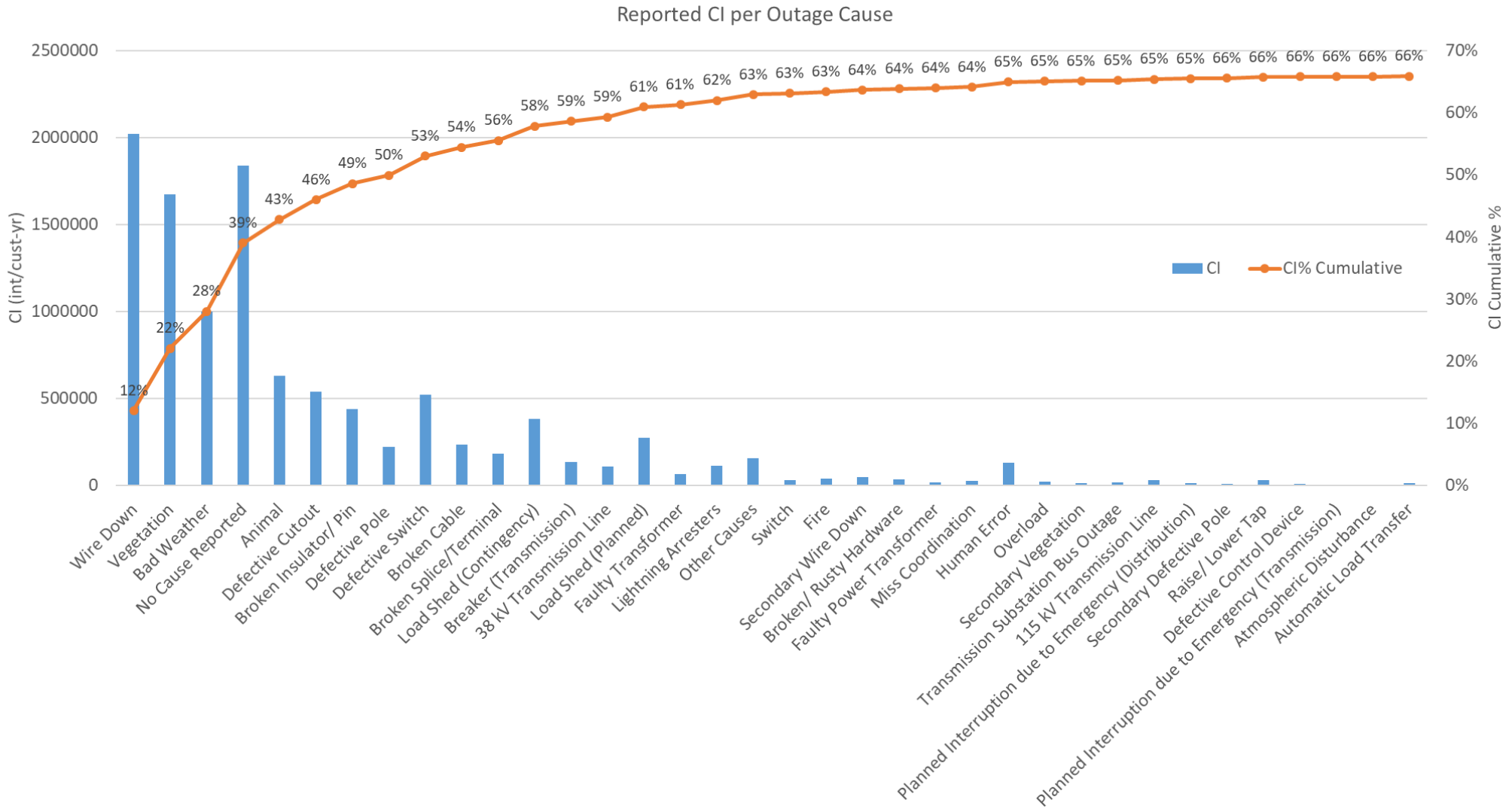
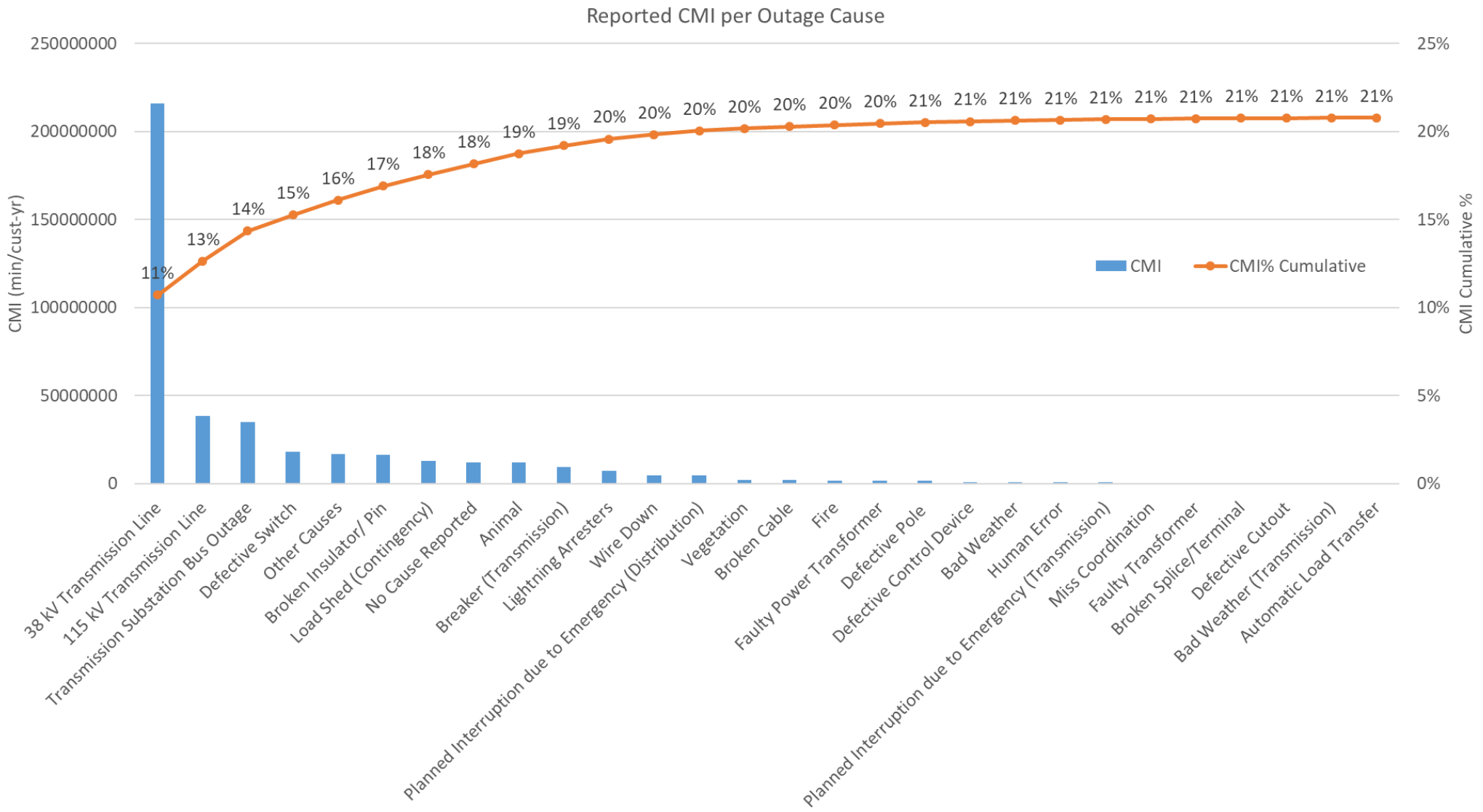
Root Causes in Distribution: CI



Root Causes in Transmission and Substation: CMI



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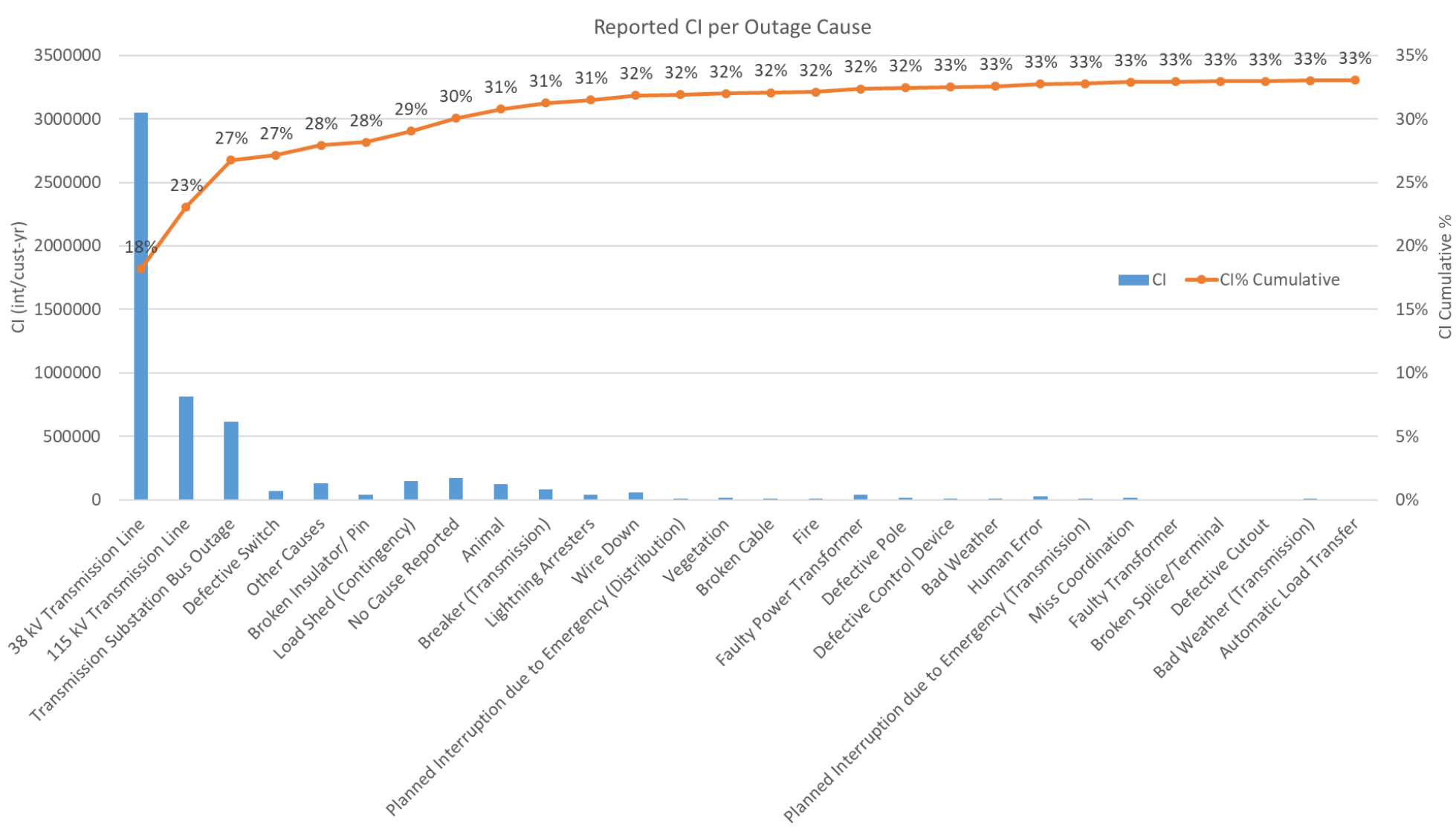
Root Causes in Transmission and Substation: CI



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Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-012

Subject: Lost Load – Qualification of Benefits

Request:

Estimated value of reducing the number of outages and outage time. Estimated value of overall load reductions using the formula that Siemens used in the IRP based on performance metrics targets.

Response:

LUMA proposes to calculate the overall load reductions related to outages, or unserved energy, by using the two Value of Lost Load (VOLL) blended costs per MWh as presented in the IRP, namely those resulting from a similar calculation (with other jurisdictions) and from the Interruption Cost Estimate (ICE) calculator. These were provided in the IRP as $31,897[1] per MWh (Method 1) and $57,940[2] per MWh (Method 2), respectively.

The following parameters were used:

- Total energy consumed in 2020: 16,004,000 MWh
- Total number of customers: 1,468,223
- SAIDI reduction as per LUMA's proposed performance metrics

The energy not served (ENS) is estimated by calculating the ratio of the SAIDI to total minutes in one year (SAIDI:mpr) and multiplying this ratio by the energy consumed in each year. Finally, a total cost estimate for the VOLL using both methods can be calculated, as presented in Table 1 below.

Table 1: VOLL Calculated Costs ($ in millions)

	1	2	3	4	5
	SAIDI	**Ratio SAIDI:mpr***	**ENS (MWh)**	**VOLL Cost (Method 1)**	**VOLL Cost (Method 2)**
Baseline	1,307	0.25%	39,797	$1,269.40	$2,305.84
After year 1	1,176	0.22%	35,808	$1,142.17	$2,074.72
After year 2	980	0.19%	29,840	$ 951.81	$1,728.93
After year 3	784	0.15%	23,872	$ 761.45	$1,383.14

**Rounded to 2 decimal points*

Savings in VOLL over Initial Budgets period are summarized in Table 2 below. The values are derived from Table 1 (Columns 4 and 5) in the following manner: Subtract Year 1 from Baseline, then subtract Year 2 from Year 1, and finally subtract Year 3 from Year 2.

[1] CEPR-AP-2018-0001 - Final Resolution and Order on the Puerto Rico Electric Power Authority's Integrated Resource Plan, Paragraph 694

[2] *Ibid,* Paragraph 695

Table 2: Projected Reduction in VOLL ($ in millions)

Savings	Method 1	Method 2
Year 1	$127.23	$231.11
Year 2	$190.36	$345.79
Year 3	$190.36	$345.79
Cumulative	**$507.95**	**$922.68**

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-013

Subject: PREPA Professional Services

Request:

On Tuesday May 4th, around 3:21PM, Mr. Camacho asked how Line 12 of LUMA's Initial Budget Schedule 5.2 - the $88.9 Million budgeted for FY2022 LUMA Professional & Outsourced Services - compares to PREPA.

Response:

LUMA has undertaken to respond by providing the following comparative data detail:

1. PREPA's FY2020-2021 Certified Budget of $67.1 Million in Professional & Technical Outsourced Services (*RFI-LUMA-21-0004-210405-PREB-003 Attachment 2*), and

2. LUMA's Initial Budget of $88.9 Million in Professional & Technical Outsourced Services (Initial Budget Filing Section 5.0, Schedule 5.2, Row 12).

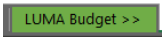
The data provided regarding PREPA's FY2021 Certified Budget - Professional & Technical Outsourced Services was provided by PREPA in response to an RFI from LUMA in 2020 to help reconcile the Fiscal Plan 2020 non-labor accounts. The attachment to this response includes the account reconciliation provided by PREPA.

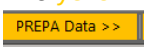
LUMA's Operation and Maintenance budget details are also included in the response attachment. This data is summarized from information LUMA has already filed on record within *RFI-LUMA-21-0004-210405-PREB-009 Attachment 2*.

LUMA notes that the comparison between LUMA's FY 2022 and PREPA's FY2021 Certified Budget - Professional & Technical Outsourced Services costs only further illustrates the differences in approach to the T&D system management. LUMA intends on pursuing our activities as described within our Initial Budgets filing. Please refer to Section 4 of our Initial Budget filing - Descriptions of Activities - to understand LUMA's Department-Level Operation and Maintenance activities.

TC-MI-21-0004-210503-PREB-013 Attachment 1 Walkthrough

Refer to *TC-MI-21-0004-210503-PREB-013 Attachment 1* for a comparison between LUMA's Initial Budgets filed Professional & Outsourced Services with that of PREPA's FY2020-2021 Certified Budget plan.

- The green worksheets depict LUMA's FY2022 budgetary support. 

- The yellow worksheets depict the FY2021 Certified Budget data PREPA provided in 2020. 

1. The “Prof & Tech Services Breakdown” worksheet provides a detailed build-up of LUMA and PREPA’s Professional & Technical Services

Professional & Technical Services Breakdown
($ in 000s)

		LUMA Initial Budgets FY22				
Description of Professional & Technical Outsourced Services	FY2021 PREPA	Customer Service	Operations	Utility Transformation	Support Services	LUMA TOTAL 2022
Public Lightning	15,000	[redacted]				
External Calling Center (Resp 675)	5,851					
External Printing Services (Resp 675)	3,500					
Substations Maintenance	4,500					
Auditing (Resp 614)	3,012					
Engineering Advisors (Resp 613)	16,280					
Professional Services Corporate (Resp 613 & 673)	1,000					
Technical Consulting Generation (GE-Alstom)	3,074					
Technical Services- Dam Studies	5,356					
Technical Advisory Services	3,626					
Electric Meter Reader & Service Representatives	1,600					
Call Center	-					
SCADA Consulting Support	2,175					
Equipment Lease	49					
External Printing Services	160					
Repair & Maintenance - Equipment	1,049					
Security & Surveillance	885					
Other Technical Services	-					
Other Category 1	-					
Training	-					
Customer Service - Technical & Software	-					
Capital Programs - Other Technical Services	-					
Utility Transformation - Other Technical Services	-					
Finance - Facility Maintenance	-					
Finance - Tenant Services, People Moves, Ergonomic assessments	-					
Operations - Fleet - 3rd Party Repair Shop Expenses	-					
Operations - Substations - Storm Response	-					
Regulatory - Land Procedures, Disputes & Pole Attachments	-					
Regulatory - Permits	-					
Total:	67,117	23,695	22,596	6,813	35,804	88,908

Columns E through I illustrate LUMA’s FY22 Professional & Technical Services. The cells colored in green are direct references to 4 departmental supporting worksheets (“5.2.1 Customer Service”, “5.2.1 Operations”, “5.2.1 Utility Transformation” & “5.2.1 Support Services”).

5.2.1 Customer Service	5.2.1 Operations	5.2.1 Utility Transformation	5.2.1 Support Services

2. Each departmental supporting worksheet provides additional detail for LUMA’s anticipated Professional & Technical Services. As an example, please refer to “5.2.1 Customer Service”:

Professional & Technical Outsourced Services

Professional & Technical Outsourced Services	Description	LUMA Budget FY22	Customer Service
External Calling Center (Resp 675)	[redacted]		
Auditing (Resp 614)			
External Printing Services			
Repair & Maintenance - Equipment			
Security & Surveillance			
Other Technical Services (KOE 550)			
Customer Service - Technical & Software			
Total in Schedule Pack			

Please Note: This information is also included in RFI-LUMA-MI-21-0004-210405-PREB-009 Attachment 2

3. PREPA’s FY21 Budget data shared during the RFI process is provided in the “Prof&Tech” worksheet.

Prof&Tech

4. This data is then linked (for comparison) in Column D of the “Prof & Tech Services Breakdown” worksheet.

A	B	C	D
	Professional & Technical Services Breakdown		
	($ in 000s)		
			FY2021 PREPA
	Description of Professional & Technical Outsourced Services		

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-014

Subject: FEMA Work Plan Requirements

Request:

LUMA seeks to provide a statement of clarification regarding FEMA's requirement for revision of work plans every 90 days.

Response:

In a FAAst Post-Obligation meeting on October 1, 2020 with FEMA, PREPA and COR3 representatives, the FEMA Infrastructure Branch Director, Andres Garcia, stated that a workplan is required 90 days after the obligation date. The intention of the work plan is to capture the Subrecipient's plan to submit SOW and cost estimates and should provide a detailed perspective to COR3 and FEMA Public Assistance of what is going on. The workplan is a living document and must be updated every 90-days. FEMA does not expect a fully formulated plan for the initial submission. The workplan will be used to measure progress and anticipate workload.

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Response: TC-RFI-LUMA-MI-21-0004-210503-PREB-015

Subject: Inspections

Request:

What percentage of feeders and substations did Sargent & Lundy complete the visual inspections on?

Response:

Sargent & Lundy performed visual inspections on:

- 22% of the substations
- 2% of the distribution feeders
- 12% of the 38 kV transmission lines
- 47% of the 115 kV transmission lines
- 80% of the 230 kV transmission lines

Initial Budgets – 2021-05-03 Technical Conference
Docket ID: NEPR-MI-2021-0004

Clarification: TC-RFI-LUMA-MI-21-0004-210503-PREB-016

Subject: Meter Replacement Details for Generation Facilities

Clarification:

LUMA seeks to provide a reference to the location of meter replacement details in the Initial Budgets filing.

Response:

At 2:26 PM on Wednesday, May 5, Mario Hurtado referenced meter replacement details for Generation Facilities. This information is located in the Initial Budgets filing, Appendix D, Page 253 - T&G Demarcation.