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

IN RE: REVIEW OF LUMA'S TERMS OF SERVICE (LIABILITY WAIVER)	**CASE NO. NEPR-MI-2021-0007** **SUBJECT: LUMA's Responses to Attachment A to May 4, 2021 Resolution and Order**

MOTION SUBMITTING RESPONSES TO ATTACHMENT A OF MAY 4TH RESOLUTION AND ORDER

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 May 4, 2021, this honorable Puerto Rico Energy Bureau ("Bureau") issued a Resolution and Order ("May 4th Order") that set a procedural calendar in this proceeding. Among others, the May 4th Order required LUMA to file responses to the requests for information included in Attachment A of the May 4th Order ("Attachment A") on or before May 10, 2021, at 12:00 p.m., ("Responses to Requests for Information").

2. On May 7, 2021, LUMA filed an *Urgent Request for Brief Extension of Time to File Responses to Attachment A to the May 4, 2021 Resolution and Order* ("Urgent Request for Extension of Time"). Particularly, LUMA requested until May 11, 2021 at 3:00 pm to file its Responses to Requests for Information. As of the filing of this motion, this honorable Bureau has not adjudicated LUMA's Urgent Request for Extension of Time.

3. In compliance with the May 4th Order and within the extended period that LUMA respectfully requested in the Urgent Request for Extension of Time, LUMA hereby submits its Responses to Requests for Information. *Exhibit 1*.

4. LUMA respectfully informs that on or before May 14th, 2021, the date set by this honorable Bureau to file a presentation for the technical conference scheduled in this proceeding, LUMA will submit the pre-filed testimony of its representative, Mr. Mario Hurtado, Vice President Regulatory, as well as the pre-filed testimony and expert report of an independent expert witness on Terms of Service, Mr. Branko Terzic. The filing of these testimonies is meant to assist the Bureau in its consideration and approval of the Terms of Service. LUMA will offer these testimonies in lieu of a Power Point presentation.

5. LUMA remains committed to comply with the orders issued by this honorable Bureau and to commence operations by June 1, 2021, to deliver safe, reliable, resilient, cost-efficient and customer-centric electric power services in Puerto Rico to benefit public interests and in compliance with energy public policy.

WHEREFORE, LUMA respectfully requests that this Bureau **take notice** of the aforementioned and **deem** that LUMA complied with that portion of the May 4th Order that requires LUMA to file Responses to the Requests for Information found in Attachment A to the May 4th Order.

RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 11th day of May 2021.

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

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Exhibit 1

LUMA's Terms of Service (Liability Waiver)
Docket ID: NEPR-MI-2021-0007

Information Response Round 1 to: PREB

Reference: RFI-LUMA-MI-21-0007-210504-PREB-001

Request:

Analyze and discuss any potential impact of the Liability Waiver on LUMA's proposed Initial Budgets, including, without limitation, the impact on the cost of the Required Insurances. Provide all workpapers and supporting materials used by LUMA for the analysis and discussion.

Response:

LUMA's proposed Initial Budgets assume that the Terms of Service are approved by the Puerto Rico Energy Bureau ("PREB" and/or "Bureau"). The proposed allocation of the cost of the required insurances also assumes that the Terms of Service are approved for the period covered by the Initial Budgets.

LUMA's proposed Initial Budgets allocate $56.7 million in FY 2022, for Property & Casualty Insurance. *See* Initial Budgets, Schedule 5.2, line 5 at page 66 of the February 24th Initial Budgets filing. LUMA will be included on all of PREPA's policies as a named insured going forward and LUMA will initially assume the same self-insured retention and occurrence Deductible structure. The Puerto Rico Electric Power Authority ("PREPA") does not currently have Terms of Service to limit economic liability. PREPA carries a $1,000,000 self-Insured retention for general liability insurance and has an occurrence deductible of $1,000,000 for each occurrence, for a $2,000,000 aggregate. *See* RFI-LUMA-MI-21-0007-210504-PREB-001-Att1 and RFI-LUMA-MI-21-0007-210504-PREB-001-Att2 for PREPA Insurance Program Structure.

The majority of PREPA's active claims since 2009 show that they are below the $1,000,000 retention threshold. This means that PREPA ultimately pays from its own budget compensations resulting from most of these claims. *See* RFI-LUMA-MI-21-0007-210504-PREB-001-Att3 (PREPA historical data and pending claims (pdf and excel file with claims paid from 2009 until present time)).

PREPA's inventory of active claims as of March 2021, also show a significant exposure for payment of claims below the $1,000,000 retention threshold whose costs would borne by customers. *See* RFI-LUMA-MI-21-0007-210504-PREB-001-Att4.

Below is an inventory prepared by LUMA of the liabilities for several categories of active and pending claims as of March 31, 2021.[1] It is based on the information provided by PREPA in RFI-LUMA-MI-21-0007-210504-PREB-001-Att4:

[1] These categories represent all the types of claims that are included in PREPA's data on claims at RFI-LUMA-MI-21-0007-210504-PREB-001-Att4.

PREPA ACTIVE AND PENDING CLAIMS AS OF MARCH 31, 2021, UNDER $1M			
Type of Claim	**Liability for All Claims**	**Liability for Claims below $1M**	**Difference**
Claims related to service suspension/disruption, or connection failure	$4,823,223.76	$1,623,223.76	$3,200,000.00
Claims related to accidents alleged to be caused due to lack of/inadequate public lighting	$13,739,940.00	$3,508,000.00	$10,231,940.00
Claims related to voltage issues and/or outages	$928,426.38	$928,426.38	N/A
Claims related to accidents involving contact with electrified objects	$135,394,265.62	$5,609,195.62	$129,785,069.00
Claims related to PREPA employee damages (ranging from workplace accidents to sexual harassment)	$47,007,964.00	$3,392,964.00	$43,615,000.00
Claims related to property damage and/or damage caused by PREPA property	$25,050,855.35	$19,530,371.30	$5,520,484.05
Injunctions	$5,322,032.99	$822,032.99	$4,500,000.00
Claims related to car accidents, falls and other general damages	$787,887,433.86	$16,077,357.07	$771,810,076.79
Other	$284,574,405.29	$7,432,428.52	$277,141,976.77
TOTAL	**$1,304,728,546.58**	**$58,923,999.64**	**$1,245,804,546.61**

Absent the Terms of Service, PREPA and LUMA, and ultimately the ratepayers, would bear the costs of payments of individual claims by customers, including the cost of defending claims that may be unfounded, frivolous or meritless. LUMA has an approximate legal budget of $3.7 million within support services which includes salaries and costs of outside counsel. LUMA is unable to isolate PREPA's current legal defense costs not covered by insurance. The available information indicates that PREPA handles claims internally and, as such, individuals do not allocate their time between claims and other work activities.

LUMA's Terms of Service (Liability Waiver)
Docket ID: NEPR-MI-2021-0007

Information Response Round 1 to: PREB

Reference: RFI-LUMA-MI-21-0007-210504-PREB-002

Request:

Analyze and discuss the legal and procedural implications of the Liability Waiver on the 2017 Final Rate Order. Provide all workpapers and supporting materials used by LUMA for the analysis and discussion.

Response:

The proposed Terms of Service do not have direct legal or procedural implications on the 2017 Final Rate Order issued in Case No. CEPR-2015-0001. There is no need to alter the 2017 Final Rate Order due to the Terms of Service.

The Terms of Service do not involve a request to change the base rate approved in the 2017 Rate Order nor do they require that the Bureau change the revenue allocation or rate design. This is a request to include a provision or rule in the tariff approved by the Bureau. If the Terms of Service are approved, an order to include them in PREPA's Book of Tariffs for all customer classes does not immediately require a reduction or an increase of the base rates. *See Bird v. Chesapeake & Potomac Tel. Co.*, 185 A.2d 917, 918 (D.C. 1962) (construing tariff provision approved by the Public Utilities Commission of the District of Columbia and holding that approval of limitation on the utility's liability did not involve a change in the base rate charged by the utility but was, instead, an approval of a proposed rule or regulation that indirectly affects the utility's financial operation). The potential impact of the Terms of Service in reducing reasonable costs will be shown in coming years. Immediately, pending claims will continue their course and some will be pending for longer because they have been stayed due to PREPA's Title III proceedings.

There is no need to review the base rate revenue requirement that was set following estimations of PREPA's expenses including administrative and general expenses. The Terms of Service are consistent with the Bureau's determinations in the 2017 Final Rate Order at page 168, paragraph 3, of the 2017 Final Rate Order, on the need to adopt mechanisms and issue determinations that ensure a safe and reliable electric service at reasonable prices.

In the 2017 Rate Order, as amended on March 8, 2017, the Bureau directed that PREPA should "propose alternative methods that confine PREPA's spending to levels approved by the [Bureau]." *See* Final Resolution, March 8, 2017 at page 25. The Terms of Service are a legal and regulatory mechanism widely-used by utility regulators in the United States and validated by courts in the United States. They will ensure that LUMA, as Operator of the Transmission and Distribution System ("T&D System"), is able to align its budget to the revenue requirement and to the spending levels approved by the Bureau as required by the 2017 Rate Order.

Because the amounts for compensation to be paid annually by the utility are difficult to reasonably predict, the Terms of Service, that include a waiver of liability from economic claims, will assist LUMA and this

Bureau in ensuring that annual spending levels are within the approved revenue requirement and reflect the reasonable costs that were considered in setting the revenue requirement.

LUMA's Terms of Service (Liability Waiver)
Docket ID: NEPR-MI-2021-0007

Information Response Round 1 to: PREB

Reference: RFI-LUMA-MI-21-0007-210504-PREB-003

Request:

Analyze and discuss the impact of the Liability Waiver on LUMA's proposed insurance cost and coverage regarding the operation of the T&D System. Provide all workpapers and supporting materials used by LUMA for the analysis and discussion.

Response:

The Terms of Service should eventually improve LUMA's insurance costs and coverage for the operation of the T&D System.

As the Financial Management Function Program of LUMA's proposed Initial Budgets describes, PREPA does not currently have a risk management information system in place to collect exposure values or to trend or track losses. *See* Initial Budgets (February 23, 2021), page 429. Losses are reviewed once a year at renewal and, since the claims function is largely handled by the Legal Department, there appears to be a disconnect between the department purchasing the insurance and the department handling the claims. *Id.* The lack of a fully functioning Enterprise Risk Management program leads to uninsured risks or the overpayment for certain risks. *Id.* Additionally, insurance carriers are less likely to provide their preferred rates if they know their client is not attempting to see into the future and maximizing efforts to control claims. *See Id.* at page 433.

By including the Terms of Service, in sync with Prudent Utility Practice, LUMA should be able to better negotiate insurance costs and coverage for the upcoming years and make the T&D System operation more efficient. This will help PREPA meet the Puerto Rico energy public policy goals under Act 17-2019 of guaranteeing affordable, just, reasonable, and non-discriminatory electric power service for all consumers in Puerto Rico. Act 17-2019, Section 1.5(1)(a). The inclusion of the Terms of Service that include waiver of economic liabilities, also promotes the public policy under Act 57-2014 that electricity rates be "consistent with sound fiscal and operational practices that provide for a reliable and adequate service at the lowest reasonable cost." *Id.*

Additionally, PREPA currently has an informal internal procedure to handle claims. PREPA pays the majority of the meritorious claims because most of them are below the $1,000,000 occurrence deductible. *See* RFI-LUMA-MI-21-0007-210504-PREB-001-Att 3 and 4. The Terms of Service would cover most of these claims and, therefore, ease the costs of compensations not covered by the current insurance. Furthermore, with the Terms of Service in place, LUMA would not be required to obtain additional insurance for those claims that fall below the current deductible and are currently assumed by PREPA and whose costs are borne by taxpayers through rates.

LUMA's Terms of Service (Liability Waiver)
Docket ID: NEPR-MI-2021-0007

Information Response Round 1 to: PREB

Reference: RFI-LUMA-MI-21-0007-210504-PREB-004

Request:

If available, provide any risk analysis related to the type(s) of liability(ies) that the proposed Liability Waiver seeks to waive.

Response:

LUMA's has considered the legal landscape and standard practice among utilities in the United States. Utilities in the United States include liability waivers in utility tariffs, since they are consistent with Prudent Utility Practice and advance important policies for the benefit of the wider public interest, including to protect electric utility customers from higher electric rates or increases in rates, ensure a fair and reasonable treatment of all customers, protect the utility from catastrophic losses and unbounded risks, and mitigate the necessary result of the provision of services to all customers, regardless of the risk profile of any one of them.

A catastrophic loss for class action or widespread claims is a risk that by its nature is extremely difficult to predict or quantify, and would easily overwhelm the limited protection afforded by insurance coverage. Mitigation of this risk is in accordance with practices in multiple other US utility jurisdictions.

Courts in various states have held that a utility's waiver of liability for gross negligence and willful misconduct (in addition to ordinary negligence) are reasonable and enforceable. *See Maryland Casualty Co. v. NSTAR Elec. Co.,* 471 Mass. 416, 422, 425, 429 (2015); *In re Illinois Bell Switching Station Litigation,* 234 Ill. App. 3d 457, 463-465 (1992) (enforcing "exculpatory language in the tariff" covering "gross negligence and willful misconduct"); *Stern v. General Telephone Co.,* 50 Cal. App. 3d 538, 542-543 (1975); *see also Zurich American Insurance Company v. Southern Conn. Gas Co.,* 442 F.Supp.3d 510 (D. Conn. 2020) (construing Connecticut law and applying the filed-rate doctrine to preclude insurer's negligence claims against utility and citing cases at note 4 on jurisdictions that follow the filed-rate doctrine as applied to several industries); *Alves v. Verizon,* No. 08-cv-3196, 2010 WL 2989988, at *4 (D.N.J. July 27, 2010) ("Verizon's potential liability is limited by the Schedules of Tariff that it filed, pursuant to regulatory mandate, with the New Jersey Board of Public Utility Commissioners.").

In relation to the inclusion of damages caused by gross negligence or willful misconduct, it should be noted that, in *Western Union Tel. Co. v. Priester,* 276 U.S. 252, 259-260 (1928), the U.S. Supreme Court concluded that the tariff system took the regulation of the telegraph industry out of the realm of contract law. Consequently, the Court stated that the general "public policy" that prevents an entity from contracting "away its liability for gross negligence" would not allow a plaintiff to escape the limitation of liability clause in a tariff simply by alleging "gross negligence" instead of ordinary negligence. *Id.* Other courts have followed this doctrine. In *Maryland Casualty*, the Court explained that a public policy that prevents parties from contractually limiting their liability "for gross negligence or willful and wanton misconduct" is inapplicable to public utility tariffs. 471 Mass. at 422. The Court held that the public policy prohibiting

contractual limits on liability for gross negligence and willful misconduct is inapplicable to utility tariffs because "the extensive legislative regulation of [an electric company's] rates and practices takes the furnishing of electricity out of the realm of contract law." *Id.* at 425 (bracketed text original). "Instead, 'the process of utility rate making by a public regulatory body is the exercise of a legislative function,'" whereby state legislatures delegate to public utility commissions "the responsibility for regulating [electric] company practices." *Id.* at 425-425 (bracketed text original).

Additionally, it should be noted that the Terms of Service, given the public interest they advance and the risks they prevent, may be applied broadly in relation to the types of liabilities covered. *See, for example*, *Houston Lighting & Power Co. v. Auchan USA, Inc.,* 995 S.W. 2d 668, 673 (Tex. 1999) (tariff limiting the utility's liability for damages resulting from negligence upheld in case where a supermarket claimed damages resulting from a power outage); *Landrum v. Florida Power & Light Co.,* 505 So. 2d 552, 554 (Fla. App. 3 Dist. 1987), *review denied*, 513 So. 2d 1061 (Fla. 1987) (enforceability of a limitation of liability in a utility tariff upheld in case of alleged damages resulting from a termination of electricity services).

LUMA's Terms of Service (Liability Waiver)
Docket ID: NEPR-MI-2021-0007

Information Response Round 1 to: PREB

Reference: RFI-LUMA-MI-21-0007-210504-PREB-005

Request:

Provide for the three (3) previous years data about the cost incurred by PREPA in connection with the liability that the proposed Liability Waiver seeks to waive. The requested cost data shall identify the amounts incurred by PREPA's insurance companies. Provide all workpapers and supporting materials used by LUMA for the analysis and discussion.

Response:

PREPA had once been considered a wealthy public corporation and, therefore, was susceptible to receiving numerous claims. This trend changed when PREPA started experiencing the financial crisis that has affected all of Puerto Rico public entities and that resulted in the Title III proceedings in July 2017. Therefore, in analyzing the costs incurred by PREPA in connection with the liability that the Terms of Service seeks to waive, the claims paid on years prior to commencement of Title III proceedings should be included to have a better understanding of the costs covered by the Terms of Service. This, given that LUMA will probably be perceived as a wealthy private entity, even though it will be acting as agent of PREPA, and, in consequence, it is reasonable to expect an increase in claims.

For PREPA's Historical Information of Claims paid since 2009, *see* RFI-LUMA-MI-21-0007-210504-PREB-001-Att3 (Excel table entitled "Casos Identificados como Reclamaciones Activas y Cerradas desde el 2009 and pdf file with same date).

For PREPA's information on property claims management, *see* RFI-LUMA-MI-21-0007-210504-PREB-005-Att1 (PREPA, Risk Management Office, Claims & Contracts Amounts Comparative Dashboard 2016- April 2021).

For a list of PREPA's pending and active claims, *see* RFI-LUMA-MI-21-0007-210504-PREB-001-Att4.

As explained in Response to Request for Information Number 1, PREPA carries a $1,000,000 Self-Insured Retention that has a $1,000,000 Occurrence Deductible, for a $2,000,000 Aggregate. Therefore, the insurance policies do not cover the bulk of the claims received.

LUMA's Terms of Service (Liability Waiver)
Docket ID: NEPR-MI-2021-0007

Information Response Round 1 to: PREB

Reference: RFI-LUMA-MI-21-0007-210504-PREB-006

Request:

Submit supporting materials documenting LUMA's internal controls, policies, procedures or other measures that protect consumers from the liability that the proposed Liability Waiver seeks to waive.

Response:

Many of the programs proposed in LUMA's Initial Budgets, some of which are also Programs within LUMA's System Remediation Plan, will establish internal controls, policies, procedures or other measures to protect customers from risks related to the T&D System operation and maintenance that could result in the potential liability that the Terms of Service seek to address. The following table describes several examples of these programs, the relevant objectives and benefits, and the type of potential liability, the likelihood of which it will help reduce.

Program & Description	Relevant Objectives and Benefits	Potential Liability
Distribution Streetlighting This program deals with upgrading and replacing distribution streetlights that are a physical safety hazard and are scheduled for repair or replacement based on their criticality. Along with increasing the number of distribution streetlights in service, this process will also include LED replacements and GIS data entry of all streetlights. **Also an SRP Program**	-Will improve public safety as failed lights can increase public safety and security risks.	Reduces the likelihood of claims for injury to persons or property associated with safety hazards created by insufficient public lighting.
AMI Implementation Program Implementation of the Advanced Metering Infrastructure (AMI) program establishes two-way remote meter reading reporting and	-Through the understanding of service status via communications from the meters, incorporation of meter status info in the Outage Management System (OMS) for improved equipment outage predictions and more accurate crew	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension,

Program & Description	Relevant Objectives and Benefits	Potential Liability
control capabilities. Such programs enable a broad range of capabilities that result in cost savings to the utility and customer satisfaction improvements. This is achieved by providing the ability to offer more granular consumption data, bi-direction metering, outage notifications, power quality measurements and remote connects / disconnects. For the utility, operational savings and revenue protection are critical drivers as well as OMS, DR, DA, load forecasting, load research, rate studies and many other critical modern utility functions. An AMI program is usually seen as a top priority foundational program due it its large number of related and dependent programs and the savings and customer benefits that are immediately available.	dispatching, service restoration speeds will be improved. -Integration of data with OMS will allow better equipment outage predictions. -Understanding of meter status will identify nested customer outages that could be missed without the technology, and the remote connect/disconnect capability saves truck rolls and potential negative customer interactions.	impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Critical Financial Controls The Critical Financial Controls program focuses on two key areas, internal control and internal audit. These two areas will build skills and capabilities in financial reporting and audit, and will update and enforce industry standard policies and procedures that comply with the latest laws and regulations. Internal Controls will address various internal control items, including obtaining and reviewing service organization controls for major vendors, the implementation of key transaction controls, reconciliations, validation, physical inspections, documentation evidencing	-Effective internal controls reduce the risk of asset loss, ensure that plan information is complete and provide for reliable and accurate financial statements. As such, more effective internal controls promote smooth project delivery in accordance with the provisions of applicable laws and regulations. -With the requisite training and capabilities support, employees will be able to display increasingly improved judgement in more complex cases. -Reviewing and providing guidance on key roles and responsibilities will better enable employees to identify deviations, assess the impact of those deviations and take appropriate actions.	Reduces the likelihood of claims for injury to persons or property resulting from system operations, maintenance or repair work.

Program & Description	Relevant Objectives and Benefits	Potential Liability
performance of control tasks, disclosures, enforcement of applicable policies and procedures for employees to identify deviations, the establishment of a formal plan for communications with the audit committee and the revamp of the internal audit department. Internal Audit builds the foundation of the internal audit team as well as the development of the methodology and process, along with building and retaining the required skills and technology base. **Also an SRP Program**	-Proper controls are central to managing any organization effectively. They contribute to the ability to safeguard assets, use resources efficiently and produce accurate and reliable financial information.	
Critical Financial Systems This program covers the technology projects for Finance and Facilities, including financial management systems and technology, risk management systems and supply chain management technology. The initiatives cover areas within budgeting, reporting, consolidation, risk management, time tracking, employee expenses, fixed asset subledger, procurement, and a major life cycle upgrade for the Oracle E-Business Suite (EBS) system. These initiatives are required to maintain a supported version of the financial applications or to address gaps identified in the financial management area. **Also an SRP Program**	-Use of risk management software would ensure that enterprise risks are identified, exposure data is properly accumulated and tracked and that claims data is captured and monitored through to claim closure. This system would also be utilized by the Health, Safety and Environment (HSE) department to record near misses, analyze trends in claims and record other vital safety information. -Management of insurance claims will be captured in the software database.	Reduces the likelihood of claims for injury to persons or property resulting from system operations, maintenance or repair work. Also, helps in the management of liability risks in general.
Financial Management Functions This program addresses financial management functions including procurement and contracting, real estate, and risk and insurance. The program	-A well-trained risk and insurance team who are knowledgeable about both the current risks affecting the organization, as well as solutions available in the worldwide insurance market, including a fully functioning Enterprise Risk Management system.	Reduces the likelihood of claims for injury to persons or property resulting from system operations, maintenance or repair work. Also, helps in the management of liability risks in general.

Program & Description	Relevant Objectives and Benefits	Potential Liability
includes: (a) Procurement; setting up a strategic sourcing function for procurement, along with standard processes, procedures and accountabilities for procurement and contracts; (b) Real estate; defining processes to clarify accountabilities and approval limits, along with executing a contract with a third-party real estate advisory firm for assistance with property identification, disposition, acquisition and ongoing transaction support; and (c) Risk and Insurance; putting in place a risk and insurance team and fully functional Enterprise Risk Management (ERM) system.	-The capability to meet the needs of end users quickly and effectively with minimal non-strategic involvement from other teams, other than on an as needed basis. -Ability to make recommendations to end users based on exposures and loss analysis being completed thoroughly and regularly, alongside forecasts that are developed and maintained.	
Modernize Customer Service Technology The Modernize Customer Service Technology program is primarily focused on remediating the telephony technology through the development and implementation of a new cloud-based contact center platform. Contact center software allows for the management of a high volume of inbound and outbound customer communications across a range of channels. Modernizing contact center procedures will mitigate LUMA's risk of customers being unable to report emergency situations. The program will create real time dashboards and reporting to cover key performance indicators across all of Customer Service, including the contact center, district offices and billing services.	-Will provide a reliable supported platform to enable consistent customer communication (i.e., no phone system outages). -Will provide faster response time for customer calls (e.g., to report a dangerous situation). -Will provide flexible staffing/location options (e.g., work-from-home or re-location to other offices) to provide continuous support through storms or other emergencies. -Faster response to outage calls will result in faster restoration times.	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
Also an SRP Program		
Loss Recovery Program This program is targeted at reducing Non-Technical Losses (NTLs) by the application of advanced monitoring and software techniques coupled with a significant number of inspection teams in the field. Initiatives include AMI revenue protection software and modules that can identify anomalies in equipment and customer consumption, enhanced data analytics, field theft detection tools and widespread inspections, all supported by a team of new back office business and data analysts.	-Will reduce public exposure to an unsafe electrical system. -Meter tampering and electricity diversions generally involve illegal access to dangerous and live electrical equipment. By largely eliminating this tampering, the program helps to reduce safety incidents among members of the public who would otherwise be engaged in such activity.	Reduces the likelihood of claims for injury to persons or property resulting from safety hazards associated with the electrical system infrastructure.
Voice of the Customer Program This program focuses on customer service, providing customers with increased voice, and improving tracking of customer service interactions. Quality assurance mechanisms implemented under this program include customer surveys, welcome packs, customer center voice and screen recording and customer complaint tracking and case management. The program also includes process and communications improvements such as quantitative analysis of KPIs and other metrics to improve overall customer service, along with customer	-The Voice of the Customer (VoC) program will get directly to what customers are missing from a safety perspective - it will enable LUMA to find gaps in public safety communication. -The VoC report will enable LUMA identification of areas with reliability issues through recording and performing speech analytics on all outage and emergency calls	Reduces the likelihood of claims for injury to persons or property resulting from safety hazards associated with the electric system infrastructure. Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
experience training for employees.		
Streetlight Billing This program is an audit of streetlights and associated billing. PREPA has approximately 500,000 streetlights which should be audited on a regular cycle to be determined based on asset management procedures. This program will require LUMA to complete a physical audit of the streetlights, assigning each with a unique indicator/asset tag. Once this process is complete, updates will be made in the Customer Care and Billing (CC&B) system to ensure customers are being billed accurately for their lights. The program also includes communication with customers on corrections to the street lighting system. **Also an SRP Program**	-Will enable better streetlight management. Streetlights improve traffic safety, pedestrian safety and visibility and personal security by allowing pedestrians and motorists to see one another better. -Customers will be able to identify lights by their unique identifiers and be able to call to report outages.	Reduces the likelihood of claims for injury to persons or property associated with safety hazards created by insufficient public lighting.
Distribution Meter Replacement & Maintenance This program deals with correction, replacement and maintenance of distribution meters. In particular, the program will replace failed TWACS meters, along with maintenance items related to improving communications within the existing TWACS system.	-Will improve public safety as failed/damaged meters can represent a hazard to both customers and utility employees. Having customers with no electric knowledge exposed to energized electric meter services is a serious hazard. -Will increase service reliability as functioning meters can assist with locating customers suffering from outages.	Reduces the likelihood of claims for injury to persons or property resulting from safety hazards associated with the electric system infrastructure. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outage, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or

Program & Description	Relevant Objectives and Benefits	Potential Liability
		other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Distribution Line Rebuild This program replaces damaged or ineffective overhead and underground distribution lines, including the following initiatives -Perform distribution line upgrades to improve reliability and resiliency -Restore out of service circuits as deemed necessary -Complete unfinished circuit construction presently abandoned as deemed necessary -Perform circuit voltage conversions to improve distribution capacity -Improve voltage profile to customers and reduce distribution energy line losses -Build new distribution line extensions to connect new customers -Install underground cable and / or tree wiring to improve service reliability and resiliency to critical customers **Also an SRP Program**	-Will provide a safe workplace by repairing and/or replacing assets that are in poor or damaged condition and could present a safety risk to those working around them (e.g., arc flash) or to the public (e.g., downed infrastructure). -Will implement effective public safety practices by repairing and/or replacing assets in poor or damaged condition, such as damaged pole-top and pad-mounted transformers, that are located near customer facilities.	Reduces the likelihood of claims for injury to persons or property resulting from safety hazards associated with the electric system infrastructure or due to infrastructure that is in poor or damaged condition.

Program & Description	Relevant Objectives and Benefits	Potential Liability
Distribution Pole and Conductor Repair This program focuses on minimizing the safety hazard caused by distribution poles and conductors that need to be repaired or replaced. Major repairs and replacement will be based on the results of an inspection of the distribution system and an analysis by engineers to schedule the repair or replacement based on the criticality of the pole. Following this process, safety hazard and priority poles will be replaced, along with damaged conductor and hardware. **Also an SRP Program**	-Will increase field personnel and public safety by replacing poor condition poles and associated hardware and conductors that have a high risk of failure and/or are in a hazardous state of disrepair. -Will contribute to the safe operation of the grid by reducing potential pole, hardware, and conductor failures, addressing conductor clearance issues and reducing arc-flash risks. -Will improve reliability by reducing the number of outages that result from pole and associated hardware and conductor failures.	Reduces the likelihood of claims for injury to persons or property due to electrical infrastructure that is damaged or in poor or unsafe conditions. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Distribution Automation This program (Distribution Automation) is not part of the SRP but does focus on establishing equipment for distribution automation. This includes the installation of voltage and Volt-amps Reactive (VAR) controls on feeders to improve power quality and reduce losses, along with the installation of intelligent switches and reclosers on select feeders (including main line and feeder ties) to reduce the number of customer interruptions per outage occurrence.	-Will enable rapid isolation of system faults and isolation of customers not directly on the faulted section of line, thereby improving system reliability and customer experience. -Volt-VAR Regulation/Optimization (VVO) will reduce line losses, which reduces the cost of electricity	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
Distribution Line Inspection This program is targeted at the inspection, testing and studying of distribution lines, along with required spot repairs and replacements. Distribution line inspections will first be prioritized by worst performing feeder and highest criticality with the initial assessment focusing on the identification of SRP items. Because of the magnitude of the work, the SRP portion of the inspection program is anticipated to take four years to complete with the remainder of inspections to be completed after the SRP period. Its aim is to help to restore the system and improve reliability and resiliency in line with current codes and standards, including, but not limited to: -Inspecting and treating poles -Performing ground rod inspections and minor repairs / replacements -Inspecting and replacing anchors and guys -Inspecting conductor condition -Performing line clearance checks to ensure that distribution assets meet live line clearance requirements under the applicable codes and standards -Inspection of streetlight heads and poles -Identification of third-party attachments	-Will promote field personnel and public safety by identifying for mitigation potential safety hazards due to poor equipment conditions on both the overhead and underground systems. -Will improve service reliability by identifying damaged equipment requiring mitigation and identifying key locations that would benefit from segmentation/protective and other reliability improvement devices on both the overhead and underground feeders.	Reduces the likelihood of claims for injury to persons or property due to electrical infrastructure that is in poor or unsafe conditions. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
-Inspection of third-party attachments for applicable code violations as it pertains to the electrical system The identified major repairs and replacements will then be undertaken by a separate program. **Also an SRP Program**		
Distribution Technology This program (Distribution Technology) is focused on implementing distribution technology that enables distribution planning and protection studies to be completed, as well as the production of hosting capacity information for public and internal use. The program will also procure power quality monitoring equipment and meters for each district. Software procured and implemented under this program includes advanced planning tools that will: Identify reliability issues and assess appropriate actions; forecast load, distribution generation and technology impacts on grid performance, and provide updated hosting capacity maps	-Will allow the monitoring and remediation of power quality problems to residential, commercial, and industrial customers. -Will enable a more transparent, customer-centric output by allowing customers to self-serve on hosting capacity information.	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
IT OT Telecom Systems & Network This program includes IT and OT telecom investments to improve and revamp PREPA's mobile radio system, phone exchange and telephone	Allows employees to contact call centers, control centers, colleagues or customers when required. –-Will enable better communications during emergencies. -Effective public safety can be better implemented when proper	Reduces the likelihood of claims for injury to persons or property due to electrical infrastructure that is damaged or has failed or due to accidental contact with the infrastructure.

Program & Description	Relevant Objectives and Benefits	Potential Liability
systems and fiber optic and microwave data radio systems. These systems are used to carry all PREPA IT and OT data. Capability enhancements will include improved first responder and emergency response communication, greater resilience of the internal telecommunications network, an enhanced microfiber network and network control center to improve centralized monitoring and control over facilities and IT traffic. **Also an SRP Program**	communications channels are available. -Employees can communicate with control centers to control power on the distribution network during emergency conditions like traffic accidents, equipment failures and severe weather conditions. -Reliability to customers will improve as the data networks and telecom systems are repaired. The networks will allow more accurate outage prediction, detection, and remediation as more smart meters are connected. It also allows for quicker, more robust gathering of generators and load while maintaining route diversity in case of failures. Improved connectivity on the networks will also result in better and more reliable telephone connectivity between the head office, customer service centers and call centers.	Also, reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Transmission Line Rebuild This program includes numerous 230kV, 115kV, and 38kV projects to harden and upgrade the transmission system. This includes rebuilding towers along with reinforcing and replacing anchors and guys as required over the course of the upgrade process. This program also incorporates an investigation to mitigate corrosion and restore line design capacity. In addition to the overhead transmission line upgrade work, this program includes the 115kV underground cable	-Rebuilt and replaced infrastructure will improve the system's ability to withstand the impact of transmission forced outages. -Additional line paths described in approved IRP allow for more efficient and reliable supply of electricity, helping to keep prices reasonable. -Improvement to anchors, insulators and conductors will harden the system to prevent failures and improve operating conditions for employees, allowing them to complete work without interruption. Improved resilience provides additional operational flexibility to the system, reducing the need for	Reduces the likelihood of power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages. Also reduces the likelihood of claims for injury to persons or property damage associated with damage to the electric

Program & Description	Relevant Objectives and Benefits	Potential Liability
replacement in the San Juan area. **Also an SRP Program**	non-routine operations to be run by employees. -Replacement of line elements will help to restore the grid's performance, as a whole, by providing functioning infrastructure. - Towers rebuilt to 150 mph standard will reduce tower failures. Given the climate in Puerto Rico, the strength of towers against high winds is of particular importance and a key vulnerability if not properly addressed. - Improved transmission (N-1 and N-1-1) capacity will reduce the impact of forced outages, improving overall system resilience.	system infrastructure related to storm events.
Transmission Priority Pole Replacements This program is to replace damaged overhead transmission poles and towers, along with associated hardware and conductors. Repairs under this program will be made based on results of an inspection conducted under a separate program. Major repairs and replacement will be based upon the results of an inspection of the transmission system and an analysis by engineers to schedule the repair or replacement based on the criticality of the pole or structure. Following this process, safety / hazard and priority poles and structures will be replaced, along with damaged conductor and hardware. This program is to replace damaged overhead	-Will repair and/or replace poor condition poles and associated hardware and conductors that have a high risk of failure. Those failures could otherwise present a safety risk to those working near them (e.g. arc flash) or to the public (e.g. downed infrastructure). -Will increase service continuity and reliability to customers by replacing and upgrading facilities that have poor reliability performance and by adding/completing facilities that allow for alternate feeds.	Reduces the likelihood of claims for injury to persons or property damage resulting from electric system infrastructure that is damaged or in poor condition. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
transmission poles and towers, along with associated hardware and conductors. Repairs under this program will be made based on results of an inspection conducted under a separate program. Major repairs and replacement will be based upon the results of an inspection of the transmission system and an analysis by engineers to schedule the repair or replacement based on the criticality of the pole or structure. Following this process, safety / hazard and priority poles and structures will be replaced, along with damaged conductor and hardware. **Also an SRP Programs**		
Inspection of Transmission Lines This program includes the inspection, data collection, testing of the Transmission Lines. Required repairs and replacements will be identified in order to restore the system and improve reliability and resiliency in line with current codes and standards. Inspections will include, but are not limited to, poles, towers and structures, ground rods, anchors and guys, conductor condition and line clearance checks. During this process, the program will also incorporate minor repairs, but major repairs will be undertaken by a separate program. **Also an SRP Program**	-Will promote field worker and public safety by addressing potential safety hazards such as poor grounding, loose anchors and guying, conductor condition and line clearance issues. -Indirectly will promote customer satisfaction by identifying repairs that will improve service reliability. -Indirectly will improve service reliability by identifying damaged poles, hardware, and conductors for follow up replacement, facilitating system rebuild and improved resiliency.	Reduces the likelihood of claims for injury to persons or property damage resulting from electric system infrastructure that is damaged, in poor condition or presents a safety hazard. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
Technology Monitoring Systems This program (Transmission Monitoring Systems) will improve the mechanisms to collect digital data Technology Monitoring Systems assess critical assets such as high voltage transformers and battery banks for the 230 kV and 115 kV electrical system backbones. The primary focus of the projects envisioned in this program is to deploy or implement new technologies to facilitate the Asset Management function and optimize equipment performance and maintenance. This includes deploying battery monitoring systems at critical substations, along with conducting remote asset condition assessments for high voltage transformers using DGA monitors to increase transformer performance, prepare timely maintenance plans, and prevent unexpected outages.	-Implementing an online transformer monitoring system will have multiple benefits including prevention of catastrophic transformer failures, which can be a public and employee safety risk. -Monitoring of substation batteries and transformer conditions helps identify trouble spots for preventive maintenance before a major failure occurs, increasing service reliability.	Reduces the likelihood of claims for injury to persons or property damage resulting from electric system infrastructure failure. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Transmission Substation Rebuilds This program covers required inspection, repair and rebuilding of damaged substations. This includes upgrades to the latest codes, industry standards and practices to improve long term reliability. The program also	-Will address critical substation issues including missing grounding components, bent structures, etc. that address safety needs for both employees and the public. The repairs under this program will also bring most substations up to optimum safety and reliability levels. - The program will also reduce hazards related to flooding of high voltage equipment.	Reduces the likelihood of claims for injury to persons or property damage resulting from electric system infrastructure that is damaged or in poor condition. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages,

Program & Description	Relevant Objectives and Benefits	Potential Liability
includes installation of gas insulated switchgear, and replacement of electromechanical and electronic relays, along with repairs and rebuilding of transmission and distribution substations impacted by flooding. **Also an SRP Program**	-Replacing damaged equipment, this program will allow for better reliability. In particular, the rebuilds, upgrades and GIS deployment will allow for faster restoration of the grid under failure conditions and will improve substations' ability to withstand major weather events. As a whole, the repairs under this program will also bring most substations up to optimum safety and reliability levels.	stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Distribution Substation Rebuilds This program focuses on improvements to distribution substations as a means to strengthen the distribution grid. This includes hardening and modernizing distribution substations, upgrades to the latest codes, industry standards and practices and the replacement of electromechanical and electronic relays. **Also an SRP Program**	-Will improve safety standards for both employees and the public by increasing the distribution grid's ability to withstand severe weather conditions. -Repairs under this program will also bring substations up to applicable safety codes and standards. -Will improve service reliability by increasing the distribution grid's ability to operate under severe weather conditions. -Repairs and upgrades put in place will enable faster electric grid restoration under fail conditions.	Reduces the likelihood of claims for injury to persons or property damage resulting from damage to the electric system due to severe weather conditions. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Transmission Substation Reliability Improvements This program (Transmission Substation Reliability Improvements) will reinforce and upgrade the existing and aging system infrastructure to improve system reliability. The	-Will facilitate safety improvement by replacing equipment prone to failure and enhancing protection system to properly de-energize failed equipment. This reduces safety risks for both employees and the public.	Reduces the likelihood of claims for injury to persons or property damage resulting from electric system infrastructure or equipment failure.

Program & Description	Relevant Objectives and Benefits	Potential Liability
program focuses on the 230 kV and 115 kV electrical system backbones and the 38 kV sub-transmission system. This includes the replacement of transformers, oil circuit breakers and other high voltage equipment, Alternating Current / Direct Current (AC/DC) systems and standby generators, along with protection and control upgrades.	-Will improve reliability indices by tackling and fixing potential points of failure. -Provides the means for employees to more quickly restore the system after failure or equipment damage by defining and acquiring the proper levels of spare parts. -Reduces major forced outage impacts due to aged equipment.	Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Compliance and Studies This program consists of three major workstreams: -Distribution Studies focused on eliminating major cascading outages caused by lack of proper coordination of protective devices and implementing new procedures and standards to ensure the distribution system complies with regulations and Prudent Utility Practice. - A group of different projects to ensure Distribution Substation Grounding Compliance to IEEE Std 80-IEEE Guide for Safety in AC Substation Grounding and National Electrical Safety Code (NESC). This includes safety and environmental projects including grounding, animal contact mitigation and civil site upgrades (including insulating gravel additions). -Studies, procedures and standards for Substations and	-Improved grounding and the addition of gravel will have a direct impact on the shock and electrocution risk caused by the present condition inside the substation. This program will also ensure that protection practices and settings are developed to maximize protection effectiveness, remove blind zones, and minimize incident energy (e.g., arc flash). -Will improve service reliability by reducing wildlife contact caused outages. With the implementation of new transmission standards, system reliability will improve over time as the standards are field implemented. This program will increase service reliability because it will help eliminate major cascading outages caused by lack of proper coordination of protective devices.	Reduces the likelihood of claims for injury to persons or property damage resulting from hazards associated with the electric system infrastructure. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
Transmission Compliance focused on: identify issues with current infrastructure, developing and implementing new procedures and standards to ensure that transmission lines and substations both comply with codes and regulations and can effectively and safely perform their requirements, field implementation of grounding compliance requirements to ensure the transmission and distribution substations meet proper grounding requirements for safety purposes, in accordance with IEEE Std 80-IEEE Guide for Safety in AC Substation Grounding and NESC. **Also an SRP Program**		
Distribution Substation Reliability Improvements. This program will reinforce and upgrade the existing and aging infrastructure associated with the distribution system to improve system reliability. This includes replacement of distribution circuit breakers and other high-voltage equipment, transformers, relays and RTU and auxiliary systems, along with procurement of emergency spares for the distribution system.	-Safety for employees and the public will be improved by replacing equipment prone to failure and enhancing protection systems to properly de-energize failed equipment. -Will tackle and fix potential points of failure. -Will provide the means for fast restoration of the system after failure or equipment damage by defining and acquiring the proper levels of spare parts. -Will reduce major forced outage impacts due to aged equipment.	Reduces the likelihood of claims for injury to persons or property damage resulting from electric system infrastructure or equipment failure. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
Critical Energy Management System Upgrades This program will replace an obsolete and unsupported EMS and add relevant technology to operate the electric system safely and reliably. This program will also implement an Advanced Distribution Management System (ADMS). The EMS is a computer-based system that is used by operators to monitor, control and optimize the performance on the generation, transmission and distribution system. **Also an SRP Program**	-Will enable systematic management of the business and employees to execute operations systematically by providing modern tools for better visibility of equipment operations, which will help to improve decision making. By modernizing the electric transmission and distribution systems, this program will improve overall resiliency of the T&D infrastructure. -The implementation of new digital technology into the T&D System supported by this program will allow the overall system to better adapt to new energy sources and energy storage systems. As such, this program will help to enable more efficient integration and management of new more sustainable energy sources.	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Critical System Operation Strategy & Processes This program will develop all the procedures and strategies necessary to operate the electrical system reliably and efficiently. This includes procedures and strategies associated with managing blackstarts, load shedding, outage management, transmission lines, substations, distribution and deployment of the Outage Management System. Procedures developed will be consistent with the System Operation Principles including the implementation of Estimated Times of Restoration for customers.	-Having procedures and following them in a difficult situation can help to avoid mistakes leading to service interruptions. Service reliability will benefit from this. -In the event of an approaching weather disturbance, having procedures in place will allow the operators to perform actions (re-route power, adjust dispatch configuration, take elements out of service, etc.) ahead of time and configure the system in a way that will minimize the impact of the storms, increasing system resiliency.	Reduces the likelihood of claims for injury to persons or property damage resulting from electric system infrastructure failure. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
Critical Energy Management and Load Generation Balancing This program will develop capabilities related to energy management and load / generation balancing. This includes development of strategies and mechanisms for energy balancing and the establishment and implementation of a strategy for operating reserves. Additionally, the program will address technology needs to efficiently manage renewable energy, battery storage and demand response programs, along with defining the role of microgrids within the electrical system as required by the IRP. **Also an SRP Program**	By developing a strategy for operating reserves, it will reduce the impact of system imbalances and avoid unnecessary load shedding during system events.	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Vegetation Management This program includes work to abate or mitigate immediate vegetation risk in the most critical locations, along with an ongoing program to clear and re-establish rights-of-way (ROWs) to standard widths. This includes an immediate response for the highest risk sites, along with reclaiming rights-of-way corridors (especially those impacting the transmission and distribution systems). The program will also use a field enabled IT tool to manage the vegetation management program, along with ongoing line clearance, pruning, tree removal, herbicides, etc. and vegetation	- Will reduce outages caused by vegetation causing line faults. This is a substantial contributor to the current poor reliability of the system. Improved reliability will improve customer experience. -Cleared ROWs will also make it easier to assess storm damage and access sites to make repairs, shortening the duration of outages. -Correcting the backlog of untrimmed trees will mitigate public safety risks due to power outages, fallen wires and people climbing onto energized lines.	Reduces the likelihood of claims for injury to persons or property damage resulting from damage to the electric system infrastructure due to fallen vegetation. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses

Program & Description	Relevant Objectives and Benefits	Potential Liability
management training. In addition, the program will evaluate and pilot an advanced artificial intelligence (AI) remote sensing project to improve vegetation management. **Also an SRP Program**		or damages, resulting from infrastructure damage caused by vegetation. .
T&D Fleet The T&D Fleet program includes a range of activities and investments to bring the current fleet up to industry standards including vehicles, aircraft, and equipment. Additionally, activities will be focused on initializing and improving processes for data collection, repair, and maintenance of these assets. **Also an SRP Program**	-Improved response time for customer service due to more efficient routing via telematics (e.g., routing of the closest available crew to address a customer outage). -Will reduce service restoration times, as measured by SAIDI (average customer minutes out of service) and improved fleet responsiveness, particularly during major events.	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Tools Repair & Management This program focuses on a personal protective equipment (PPE) and tooling plan to address safety needs along with putting in place a better system for managing PPE and tools. In addition to acquiring the needed PPE and tools, this program includes implementation of a centralized Tool and Equipment Crib system to improve inventory management, tool maintenance, tool supply and coordination and oversight of tool and equipment use. **Also an SRP Program**	- Appropriate PPE and tooling will allow employees to respond quickly and efficiently to downed lines, traffic accidents, etc. The correct PPE and tools will allow LUMA to be better prepared for a safer response to future emergencies or disasters. -The tool crib can dispatch required tools to personnel upon request, allowing them to complete jobs for customers faster. -Will reduce third-party damage due to climbing on customer's property. -Better tools lead to better, longer lasting repairs, reducing faults and contributing to service reliability. -Having the correct tools at the right time will allow employees to deal	Reduces the likelihood of claims for injury to persons or property damage resulting from electric system infrastructure damage. Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
	with situations such as outages much quicker. -In the event of an emergency, disaster or catastrophic event, correct tooling will aid the LUMA employees to be better prepared to respond to outages and make the necessary repairs to restore the customers quicker than past events.	Reduces the likelihood of claims for property damage resulting from system repair or maintenance work.
HSEQ and Technical Training This program provides health, safety, environment and quality (HSEQ) and technical training to field personnel. During the initial stage, basic technical training will be provided through the LUMA College and HSEQ training conducted by internal subject matter experts and external providers. Personnel will gain technical skills training for field employees to become fully qualified to complete their work safely and efficiently. Subsequent enhanced technical training will be provided through the LUMA College. Enhanced training modules will be developed and administered based on operational needs for the type of technology being implemented but could include areas such as operation of smart grids, work on energized lines (e.g., hot line and barehand programs), splicing of conductors and helicopter work for transmission repairs. This program will help to instill a new safety culture across the T&D System, thus reducing safety incidents, bringing the T&D System into compliance	- Will enable employees to respond to outages and customer needs more efficiently, delivering both better service and an improved customer experience. -Properly trained employees will be able to deliver higher quality project work in a more systematic manner. Better trained employees through this program will also reduce downtime and overtime requirements and increase employee productivity, along with reducing the amount of error and re-work. -Training programs will further help improve work quality which will translate into better project delivery. Increasing data tracking and reporting on HSEQ training will lead to increased accuracy of performance metrics. Clarifying training expectations and requirements will increase accountability and contribute to better causal analysis and follow-up. Improving workforce development will allow LUMA to comply with industry standards. -In the event of an emergency, correct training will allow LUMA employees to be better prepared to respond to outages and make the	Reduces the likelihood of claims for injury to persons or property damage resulting from electric system infrastructure damage or failure. Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
with Contract Standards, including but not limited to OSHA and broader industry standards and improving overall employee efficiency. **Also an SRP Program**	necessary repairs to restore service to customers quicker than in past events. Without this program, employees could remain underprepared for such an emergency.	
Asset Data Integrity This program is targeted at assuring the integrity of key asset data, with a focus on GIS and Computerized Maintenance Management System (CMMS). The program works with stakeholders to identify data requirements, determine process and templates for storing data and update asset data systems with data gathered from asset inspections. These systems and the integrity of their information are fundamental for accurate modeling, operations and planning of the T&D System. **Also an SRP Program**	-Will improve service reliability by accurately identifying assets that serve customers, thereby speeding up the service restoration process. -Accurate GIS data results in accurate system representations in the Energy Management System (EMS), the Outage Management System (OMS), the Advanced Distribution Management System (ADMS, as planned for the future) and in system planning models designed to improve the operation, service restoration, maintenance and planning processes. It also directly enhances operational excellence by allowing operations to be executed systematically. -The GIS connectivity model is a key input into employee applications, such as an up-to-date outage map. As such, this allows employees to execute operations more systematically. -Prevents continued use of non-supported software and methods which increases vulnerability to security breaches and prolonged system outages.	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Emergency Response Preparedness	-Will also enable LUMA to respond more quickly and efficiently to outages and emergencies such as	Reduces the likelihood of claims for injury to persons or property damage resulting from

Program & Description	Relevant Objectives and Benefits	Potential Liability
This program is focused on emergency response management. The program implements the ERP and establishes the OEMBC. Also included are establishment of a primary and alternate LUMA EOC, along with development and elaboration of plans, processes and procedures to be enacted in the event of an emergency. These will include measures to be put in place before, during and after a disaster. Additionally, the program supports acquisition of damage assessment software and accreditation from the EMAP.	downed lines and traffic accidents, thereby reducing public safety risks. -Employees will be able to respond to customer needs quicker, especially in the case of outages. -Increases satisfaction due to better communication on outages, including being able to reach the call center, automated messaging and up to date Estimated Time of Restoration (ETR). -Systematic processes and procedures reduce the probability for error and ensure employee resilience. In the event of an emergency, disaster or catastrophic event, this program will aid LUMA employees to be better prepared to respond to outages, restore damaged infrastructure and make the necessary repairs more efficiently and expediently. -A robust ERP, the Major Outage Restoration Annex, Business Continuity Plan, and highly trained and qualified employees promote resilience and ensure success of the system. This program will enable LUMA to follow best practices, comply with industry standards, and increase the reliability of response and recovery efforts across the organization.	electric system infrastructure damage or failure. Also reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Workflow Processes & Tracking This program includes several initiatives that address gaps between current state and standard industry methods, practices, and processes to manage, track, and report progress on the performance of	-Will reduce the risk of incidents and fatalities in the performance of work by building work plans that are interwoven with LUMA's emphasis on safety (including proper use of PPE), limiting injuries and avoiding fatalities. -Overall improved work methods and quality will create a better constructed and maintained system,	Reduces the likelihood of claims for injury to persons or property damage resulting from an electric system infrastructure that is in poor condition. Reduces the likelihood of claims from consumers for

Program & Description	Relevant Objectives and Benefits	Potential Liability
work in the field. Specific areas include: -Establishing proper and safe maintenance regimens (preventive, planned and unplanned corrective, and emergency repairs) -Adherence to design, maintenance, and construction standards, -Implementing proper inspection and testing procedures, -Key Performance Indicators (KPIs) / Metric performance management with a focus on measuring and driving improvements in work quality, effectiveness, and efficiency, and -Implementing technologies to reduce cycle time in identifying and remediating any performance anomalies while concurrently supporting the Asset Management function. This program includes several initiatives that address gaps between current state and standard industry methods, practices, and processes to manage, track, and report progress on the performance of work in the field. Specific areas include: -Establishing proper and safe maintenance regimens (preventive, planned and unplanned corrective, and emergency repairs)	which contributes to overall public safety. In essence, the public will be safer because the overall system operates as intended and any maintenance is planned to account for any interface with other facilities and the public at large. -A well-orchestrated work management process will alleviate several sources of customer-related issues: third-party damage, unplanned intrusions onto a customer's property, and rework resulting from poor quality. -Better maintained assets, including those that support fieldwork (e.g., fleet), and improved work planning and execution translate directly to shorter, less costly outages and an overall improved customer experience. -Improved work planning leads directly to availability of equipment and tools (including less downtime on material and fleet), thus improving efficiency / increasing effectiveness of field personnel in the normal performance of work. In doing so, the organization is also better able to respond to emergencies (including system outages), with reduced reliance on overtime. -Work methods, vehicles and equipment will be used to complete FEMA work more safely and efficiently, one of the outcomes of which is improved outage response and system restoration timelines. -Control of the workforce and efficient dispatch of available resources will assist LUMA in responding to outages quicker, thus reducing the time required to restore	losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages. Reduces the likelihood of claims for injury to persons or property resulting from system operations, maintenance or repair work.

Program & Description	Relevant Objectives and Benefits	Potential Liability
-CriAdherence to design, maintenance, and construction standards, -Implementing proper inspection and testing procedures, -Key Performance Indicators (KPIs) / Metric performance management with a focus on measuring and driving improvements in work quality, effectiveness, and efficiency, and -Implementing technologies to reduce cycle time in identifying and remediating any performance anomalies while concurrently supporting the Asset Management function. **Also an SRP Program**	damaged infrastructure and, as a result, service (as measured by SAIDI or CAIDI). -In the event of an emergency, disaster or catastrophic event, control of the workforce (planning and dispatch) and proper fleet and equipment (the result of effective preventative and corrective maintenance practices and enabling software), will aid LUMA employees in being better prepared to respond to outages and effect repairs to restore power quicker than previously experienced.	
Operator Training This program will provide all necessary requirements to support new and existing system operator training along with operator competency assessments. As such, the program will address the need to improve current operator training and allow for new cohort(s) of operators to support the system. This will also improve operator response during an emergency situation. **Also an SRP Program**	Well trained and competent employees will make better decisions and will be able to solve problems more effectively, which can translate to faster service restoration.	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, or other losses or damages. Reduces the likelihood of claims for injury to persons or property resulting from system operations, maintenance or repair work.

Program & Description	Relevant Objectives and Benefits	Potential Liability
HR Programs This Program Brief covers four separate programs to support the LUMA Human Resources (HR) department. This includes the following programs: -**Employee benefits**. LUMA will implement industry competitive benefits programs for its employees such as an Employee Assistance Program (EAP), Long term Disability (LTD), Short term Disability (STD), Life Insurance, and a defined contribution plan (401(k)). -**Employee engagement**. LUMA will launch an employee engagement strategy to ensure all employees feel part of the new LUMA family, and they feel engaged with decision making and their long-term career progression. The comprehensive employee engagement strategy includes employee activities, regular employee surveys, volunteerism, town halls, career growth opportunities and spaces where employees can express their feedback. -**Training**. LUMA will implement core compliance training programs to ensure employee understanding and compliance with all Corporate policies and procedures, State Laws and Regulations, to prevent any inappropriate conduct. In addition, all functions in LUMA will implement a training program	-Better engaged employees will be indirectly incentivized to provide better service to customers and improve service reliability. Trained employees will directly impact service to customers by providing excellent customer service skills acquired through LUMA's training program -Well-trained employees will directly impact delivery and execution of services by applying learned skills. -Well-trained employees will be able to restore and improve resiliency of the grid infrastructure by applying specialized learned skills.	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, or other losses or damages. Reduces the likelihood of claims for injury to persons or property resulting from system operations, maintenance or repair work.

Program & Description	Relevant Objectives and Benefits	Potential Liability
inclusive of at least the minimum requirements necessary to improve employee skill sets to bring performance to Contract Standards. This comprehensive functional training program will be applied across all functions in LUMA. -**Support software**. The scope of the General Technology Human Capital Management program is to introduce standardized processes for management of employee data, employee performance management, talent management, succession planning, recruitment on-boarding and off-boarding management, learning management and compensation management. It will also provide employee and manager self-service capabilities. **Also and SRP Program**		
IT OT Asset Management LUMA will introduce industry standard IT OT asset management procedures and provide the necessary system upgrades to ensure secure business operation and continuity, as well as improved customer responsiveness. The scope of the program includes assessing PREPA's application and infrastructure portfolio and beginning a series of software and infrastructure upgrades that drive toward a transition to cloud-based technology. IT OT resilience in this program also extends to the establishment of	-Will ensure customers have access to accurate and timely information provided by secure and reliable applications and infrastructure. -Replacement of end-of-life software, databases and other IT OT infrastructure assets will allow for better performance and monitoring of the O&M contract, improving reliability. -The use of more secure and reliable enterprise and operational applications and their supporting infrastructure will enable more systematic management of the business. These will also help	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, or other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
a new backup data center to ensure reliability and resilience of technology systems. **Also an SRP Program**	employees to operate systems more efficiently and effectively. -Will reduce the risk of prolonged outages of critical business applications by maintaining the systems and infrastructure at vendor supported levels. The program provides the necessary system upgrades to ensure secure business operation and continuity of the T&D system, as well as improved customer responsiveness. (Not proceeding with this program will lead to an increased risk of prolonged system outages and the need to invoke emergency and manual processes as defined in the LUMA Business Continuity Plan. These manual processes will negatively affect performance levels and increase the risk of human error.)	
IT OT Cybersecurity Program The program centers on enabling the business and protecting key organizational assets, including people, resources and technology to ensure that cyber risk, internal and external threats, vulnerabilities, and natural disasters are identified and mitigated based on risk and readiness factors. Improving cybersecurity is a critical part of hardening the Transmission and Distribution (T&D) system and ensuring business continuity. Cyber risks could severely impact T&D operations to the extent of widespread failure.	-Will ensure customers have access to accurate and timely information provided by secure and reliable applications and infrastructure. -Service reliability will improve with improved and resilient technology systems that enable the O&M Services. -Will identify and mitigate risk across the T&D System -Will ensure secure and reliable applications that support the T&D System.	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, or other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
This program will design and implement the people, processes, and technologies essential for effective cybersecurity governance, cybersecurity operations and monitoring, vulnerability identification and management, and cloud security. **Also an SRP Program**		
IT OT Enablement Program This program will implement capabilities to deliver and maintain IT OT services and systems enabling LUMA operations through the implementation of industry best practices and standardized processes and tools. Fit for purpose devices will be deployed to carry out business operations enabling near real-time access to electric network data providing a safer work environment. Industry best practices for Information Technology Service Management (ITSM) will be implemented so that technology assets are managed, provisioned and maintained securely. Processes will be implemented to establish end user device standards along with mobile application management (MAM) to control how end user devices are used. Enterprise Architecture (EA) and project management frameworks will be implemented to ensure software and infrastructure assets are implemented, maintained and disposed of in accordance with vendor	-Will enable the field workforce access to the electrical network and customer request data. -Will eliminate manual work orders reducing the time to respond to network outages.	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
support requirements including patching and upgrades. This will mitigate the risk of prolonged system outages on non-vendor supported software and infrastructure. By the end of the program LUMA will have developed and executed an operational data strategy, developed foundational enterprise architecture guidance and outlined a cloud strategy. LUMA's IT and OT organization will be able to design, plan, deliver, operate and control the lifecycle of IT OT services, projects and assets. An IT service management tool will ensure that technology is managed, provisioned and maintained securely to reduce risk to the organization and enable users. **Also an SRP Program**		
Resource Planning and Processes to Improve Resource Adequacy and Cost Tracking This program focuses on planning studies for dispatch of existing thermal units, along with new processes to audit costs included in the purchased power and fuel cost adjustment mechanism tariffs administered by LUMA in accordance with Section 5.6 of the OMA. The program includes creation and implementation of reasonable prudent administrative procedures for reporting of those related fuel and other generation costs as described in the OMA and being able to accurately present these costs	-Will help to improve power plant dispatch and resource adequacy, thus lowering total cost to customers and improving overall service reliability across the system. -By improving the review and prioritization of maintenance and other generation investments, this program will improve resource adequacy and resiliency of the existing PREPA generation fleet and utilization of the existing fleet of peakers. By prioritizing Necessary Maintenance Expenditures (NMEs) investments, the cost of forced outages can be avoided.	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.

Program & Description	Relevant Objectives and Benefits	Potential Liability
to the PREB. The program does not include the management or oversight of fuel purchasing or of any Genco functions. Improved information on fuel costs, inventory, and availability will support resource planning as well as the more efficient and reliable dispatch of peaking power plants and other thermal plants. The program aims to improve resource adequacy and lower energy supply costs. **Also an SRP Program**		
Improvements to Systems Dispatch for Increased Reliability and Resiliency This program deals with the repair of non-functioning equipment and processes to allow for the System Operator to have data to carry out economic dispatch of generation assets, in accordance with the System Operation Principles and applicable procedures, and to allow for the safe and reliable operation of the system. **Also an SRP Program**	-Will improve service reliability by providing real-time monitoring and situation awareness, along with implementing automatic corrections remotely before system failures occur. -By adding automated response capability, this program will allow adjustments to be made to the system to avoid larger problems and load shedding events, thus improving overall resilience.	Reduces the likelihood of claims from consumers for losses or damages related to power failure, outages, stoppage, interruption, variation, change, fluctuations, irregularity, suspension, impairment, diminution, change in characteristics, or other quality issues, including claims for business interruption, equipment damage, among other losses or damages.
Public Safety LUMA will introduce an organizational strategy to engage and educate the public on safety around electric equipment and installations, thereby reducing public safety incidents. The program will include the procurement of public safety related materials	Educating the public on powerline safety will increase awareness and reduce public incident contacts and litigation claims.	Reduces the likelihood of claims for injury to persons or property damage resulting from hazards associated with the electric system infrastructure.

Program & Description	Relevant Objectives and Benefits	Potential Liability
for training awareness and public outreach, the development and complete roll out of a communications plan and a continuing maintenance plan for the program. **Also an SRP Program**		
Safety Equipment LUMA will procure critical safety equipment and associated supplies such as automated external defibrillators (AEDs), portable eye wash, lone worker/confined space entry monitors and audiometric testing equipment. These items critically improve employees' current state of work-related injuries and illnesses as per OSHA requirements/recommendation. **Also an SRP Program**	Lifesaving equipment will be available for members of the public should an emergency arise. Proper maintenance of equipment purchased will contribute to desired results associated with capital expenditure. The workforce will have the supplies to complete work more efficiently and safely.	Reduces the likelihood of claims for injury to persons or property damage resulting from hazards associated with the electric system infrastructure. Reduces the likelihood of claims for injury to persons or property resulting from system operations, maintenance or repair work.

LUMA's Terms of Service (Liability Waiver)
Docket ID: NEPR-MI-2021-0007

Information Response Round 1 to: PREB

Reference: RFI-LUMA-MI-21-0007-210504-PREB-007

Request:

Analyze and discuss the potential positive and negative considerations regarding limiting the Liability Waiver among PREPA's customer classes. Provide all workpapers and supporting materials used by LUMA for the analysis and discussion.

Response:

Limiting the Terms of Service among PREPA's customer classes may lead to claims for non-compliance with energy public policy due to "discrimination" or lack of "impartiality."

The inclusion of the Terms of Service and the limitation on economic liability in the tariff is a standard approach for most utilities and is more just for the ratepayers as they are not expected to absorb consequential and other losses for which PREPA clients may have their own insurance. Terms of Service with liability waivers, as courts in the United States have recognized, help prevent or avoid increases in utility costs, ensure a fair and reasonable treatment of all customers, protect the utility from catastrophic losses, and mitigate the risks to the utility resulting from the obligation to provide services to all customers, regardless of the potential liability these may pose.

The relationship of an electric utility with its customers is not governed by the general principles of free negotiation and contracting that would apply between other parties. Rather, substantial contractual freedoms are curtailed. An electrical utility cannot select its customers. Once customers are eligible according to rules sanctioned by the regulator, the utility must provide service to all regardless of the potential liability that would be associated with each potential customer. A customer cannot be denied service because it would constitute a monetary risk to provide the service to them in case of damages.

PREPA is required by law to provide services, indiscriminately, to all customers, regardless of the potential risks to PREPA that the connection of these customers to the electrical system may pose. Specifically, under Act 17-2019, PREPA, or its successor in interest, is charged with the "primary responsibility for acting as provider of last resort (POLR) for any of the generation, transmission, distribution, commercialization, and operating functions of [Puerto Rico's electrical System]…." Act 17-2019, Section 1.7. Accordingly, Act 17-2019 establishes as a guiding principle of the Puerto Rico electrical system that the activities and functions related to it be governed by the principle of "impartiality"- that is, that "under the same conditions, consumers are treated equally regardless of their social condition and purchasing power, or the technical conditions or characteristics of the service rendered." Id., Section 1.4(v) (emphasis added). Similarly, Act 17-2019 provides that the Puerto Rico electrical system is to be operated "openly rather than in a discriminatory manner and be subject to the regulations of [PREB]." Id., Section 1.3.

LUMA, as the entity to whom the services, functions and facility operations related to PREPA's T&D System have been delegated, will also be acting as a POLR, subject to the principle of impartiality and required to

accept and provide services to all customers without discrimination. LUMA will not be able to pick and choose its customers to eliminate potential risks. LUMA's provision of service under the OMA is expressly conditioned on the recognition that "[PREPA's] provision of the Power and Electricity requirements of the Commonwealth constitutes an essential public service." See OMA, Section 3.7. The proposed Terms of Service would, therefore, serve the important function of mitigating this risk, thereby supporting PREPA's and LUMA's ability to provide impartial and non-discriminatory services as required under Act 17.

Additionally, the amount of the claim will not necessarily depend on the customer class of a claimant but on the type of claim. For example, a claim for physical damages caused by contact with an electrified object may be far greater than damages caused to a business customer for spoilage of goods due to an interruption of service. The regulator lacks a normative or regulatory principle to differentiate among customer classes in approving the Terms of Service. Legally, contractually, and reasonably, the Terms of Service apply to and protect all customer classes.

The cost of third-party claims and suits against the utility service provider can be a major cost to be borne by customers. Increased costs due to litigation may ultimately increase rates paid by customers. The well-settled practice among utilities, as confirmed in robust case law in the United States, is to recognize a regulator's authority to approve and incorporate in tariffs these type of terms to release liability, thus protecting all customers from potential increases in rates borne out of civil liability.

PUERTO RICO ELECTRICAL POWER AUTHORITY
Insurance Program Structure
2018-2019

Disclaimer: This information is for reference only, please refer to insurance policies for further details.

Insurance Type	Insurance Cost			Items Coverage	Limits	Deductible
Property Damage and Business Interruption/Extra Expense Combined Per Occurrence	$30,621,561.00	5/31/2018	5/31/2019	Direct damage from all perils(excluding overhead transmission and distribution lines) except windstorm, earthquake and flood	$300,000,000	$2,000,000 All Risks
				Direct damage from windstrom, earthquake	$300,000,000	$25,000,000 Machinery Breakdown (PD only)
Boiler & Machinery	$3,098,750.00	5/15/2018	5/15/2019	Limit per accident	$200,000,000	$15,000,000 30 days BI
				Repair and/or replacement	included	
				Debris Removal	$10,000,000	
				Additional Expediting expenses	$5,000,000	
				Comprehensive for covering boilers, pressure vessels, electrical machines including Air conditioning, refrigeration equipment, electrical apparatus and electronic data processing equipment including production machines.		
Extension	$648,278.00	5/15/2018	5/31/2019			
Property Damage and Boiler & Machinery, Terrorism, Pollution (OIL)	$341,792.43	1/1/2018	12/31/2018	Direct damage from all perils(excluding Business Interruption)	$250,000,000	$300,000,000 Underlying Limit excess of Deductibles
PROPERTY TOTAL	**$34,710,381.43**					
General Liability	$1,554,754.00	7/30/2018	7/30/2019	Primary Layer: CGL Auto Liability (any auto) Employers stop Gap & uninsured motorist	$10,000,000 XS SIR 1,000,000	Self Retention $1,000,000 .deductible $1MM each & every loss / $2MM aggregate.
		7/30/2018	7/30/2019	Excess Layer : Limit of insurance in excss of $10,000,000 qhich in turn is excess of $1MM self retention.	Each Occurrence $40,000,000 , General policy Aggregate $40,000,000	
		7/30/2018	7/30/2019	Second Excess Layer: Limit of insurance in excess of $40,000,000 which in turn is excess of $10,MM in excess of self retention.	each occurrence $25,000,000 . General policy aggregate $25,000,000	
CGL TOTAL	**$1,554,754.00**					

PUERTO RICO ELECTRICAL POWER AUTHORITY
Insurance Program Structure
2018-2019

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Insurance Type	Insurance Cost			Items Coverage	Limits	Deductible
Aviation Liability	$315,361.00	12/21/2018	12/21/2019	Schedule aircrafts worldwide	Scheduled Aircraft $100,000,000 each occurrence, each non-crew member passenger $250,000; $250,000 each crew member each occurrence	
Aviation - Physical Damage		12/21/2018	12/21/2019	Automatic Insurance for increased value of Scheduled Aircraft or Spare Engines and spare parts.	Not exceeding 25% of the insured amount applicable to such aircraft in the declarations before modifications subjests to a maximmum insured amount of $7,500,000 which ever is less.	
				Physical damage to spare engines, spare parts not attached to or forming a part of any aircraft and being property of others for which the named insured is legally liable.	2.2 millions	$1,000 each & every loss
				Temporary replacement parts rental expense (incurred in excess of 5 calendar days installation period)	50,000 each loss	
TOTAL AVIATION	**$315,361.00**					
Directors & Officers	$805,000.00	7/30/2018	7/30/2019	Directors and Officers, Errors and Omissions, Wrongful Acts	Max. limit $65,000,000	$125,000.00
Crime	$760,960.00	4/30/2018	4/30/2019	Employee Dishonesty	$10,000,000	$75,000
				Forgery or Alteration	$10,000,000	$75,000
				A	$10,000,000	$75,000
				in transit	$10,000,000	$75,000
				money orders, conunterfeit paper, currency fraud	$10,000,000	$75,000
				Computer Fraud Fund Transfer Fraud	$10,000,000	$75,000
				Client property Coverage	$10,000,000	$75,000
				Credit Card Coverage	$10,000,000	$75,000
				Expense coverage aggreagate	$250,000	No deductible
Employment Practice Liability (EPL) & Fiduciary Liability		5/15/2018	5/15/2019	PREPA and or any subsidisries, affiliated …etc. Fiduciary Responsibility	$5,000,000	Fiduciary $250,000
						EPL 250,000

PUERTO RICO ELECTRICAL POWER AUTHORITY
Insurance Program Structure
2018-2019

Disclaimer: This information is for reference only, please refer to insurance policies for further details.

Insurance Type	Insurance Cost			Items Coverage	Limits	Deductible
						PR Court
						EPL 500,000
						Multiple Claimant
						Political Discrimination
					$5,000,000	n/a
Extension	$5,830.00	4/30/2018	5/15/2018			
TOTAL EPL, FIDU,CRIME	**$766,790.00**					
Business Travel Accident	$2,356.00	12/21/2018	12/21/2019	Personal accidents during travel while on business pursuit, max. 20 employees at any one time during the policy year.	$150,000 Accidental death, $3,000,000 aggreate limit.	
					$150,000 dismemberment	
					$150,000 total incapacitation and permanent	
					$10,000 Accidental Medical expense	$100
					$25,000 repatriation	
					$250 Loss or delay luggage	
					Included Worldwide Assistance service	
TOTAL BUS. TRAVEL	**$2,356.00**					
Employee Automobile Liability	$210,296.00	10/1/2018	10/1/2019	Named Insured, Subsitute Auto, Individual named Insured, Newly Acquired vehicles	$400,000 each accident	
				Medical Payments	5,000	
TOTAL EMPL. AUTO	**$210,296.00**					
Commercial Auto (PD Only)	$200,602.00	1/1/2018	1/1/2019	All persons assigned owned vehicles and or owning vehicles. Drive other car coverage (Liability, medical payments and physical damage	$15,000 each accident	
TOTAL COMM. AUTO	**$200,602.00**					

PUERTO RICO ELECTRICAL POWER AUTHORITY
Insurance Program Structure
2019-2020

Disclaimer: This information is for reference only, please refer to insurance policies for further details.

Insurance Type	Insurance Cost			Items Coverage	Limits	Deductible
Property Damage and Business Interruption/Extra Expense Combined Per Occurrence	$32,578,568	5/31/2019	5/31/2020	Direct damage from all perils(excluding overhead transmission and distribution lines) except windstorm, earthquake and flood	$300,000,000	$2,000,000 All Risks
				Direct damage from windstrom, earthquake	$300,000,000	$25,000,000 Machinery Breakdown (PD only)
Boiler & Machinery	$3,283,750.00	5/31/2019	5/31/2020	Limit per accident	$200,000,000	$15,000,000 30 days BI
				Repair and/or replacement	included	
				Debris Removal	$10,000,000	
				Additional Expediting expenses	$5,000,000	
				Comprehensive for covering boilers, pressure vessels, electrical machines including Air conditioning, refrigeration equipment, electrical apparatus and electronic data processing equipment including production machines.		
Property Damage and Boiler & Machinery, Terrorism, Pollution (OIL)	$298,885.00	1/1/2019	12/31/2019	Direct damage from all perils(excluding Business Interruption)	$250,000,000	$300,000,000 Underlying Limit excess of Deductibles
General Liability	$1,457,500.00	7/30/2019	7/30/2020	Primary Layer: CGL Auto Liability (any auto) Employers stop Gap & uninsured motorist	$10,000,000 XS SIR 1,000,000	Self Retention $1,000,000 .deductible $1MM each & every loss / $2MM aggregate.
		7/30/2019	7/30/2020	Excess Layer : Limit of insurance in excss of $10,000,000 qhich in turn is excess of $1MM self retention.	Each Occurrence $40,000,000 , General policy Aggregate $40,000,000	
		7/30/2019	7/30/2020	Second Excess Layer: Limit of insurance in excess of $40,000,000 which in turn is excess of $10,MM in excess of self retention.	each occurrence $25,000,000 . General policy aggregate $25,000,000	

PUERTO RICO ELECTRICAL POWER AUTHORITY
Insurance Program Structure
2019-2020

Disclaimer: This information is for reference only, please refer to insurance policies for further details.

Insurance Type	Insurance Cost			Items Coverage	Limits	Deductible
Aviation Liability	$615,000.00	1/20/2020	1/20/2021	Schedule aircrafts worldwide	Scheduled Aircraft $100,000,000 each occurrence, each non-crew member passenger $250,000; $250,000 each crew member each occurrence	
Aviation - Physical Damage				Automatic Insurance for increased value of Scheduled Aircraft or Spare Engines and spare parts.	Not exceeding 25% of the insured amount applicable to such aircraft in the declarations before modifications subjests to a maximmum insured amount of $7,500,000 which ever is less.	
				Physical damage to spare engines, spare parts not attached to or forming a part of any aircraft and being property of others for which the named insured is legally liable.	2.2 millions	$1,000 each & every loss
				Temporary replacement parts rental expense (incurred in excess of 5 calendar days installation period)	50,000 each loss	
Extension	$25,860.00	12/21/2019	1/20/2020			
Directors & Officers	$1,032,100.00	7/30/2019	7/30/2020	Directors and Officers, Errors and Omissions, Wrongful Acts	Max. limit $65,000,000	$125,000.00
Crime	$120,000.00	4/30/2019	4/30/2020	Employee Dishonesty	$10,000,000	$75,000
				Forgery or Alteration	$10,000,000	$75,000
				A	$10,000,000	$75,000
				in transit	$10,000,000	$75,000
				money orders, counterfeit paper, currency fraud	$10,000,000	$75,000
				Computer Fraud Fund Transfer Fraud	$10,000,000	$75,000
				Client property Coverage	$10,000,000	$75,000
				Credit Card Coverage	$10,000,000	$75,000
				Expense coverage aggreagate	$250,000	No deductible
Employment Practice Liability (EPL) & Fiduciary Liability	$640,000.00	5/15/2019	5/15/2020	PREPA and or any subsidisries, affiliated …etc. Fiduciary Responsibility	$5,000,000	Fiduciary $250,000

PUERTO RICO ELECTRICAL POWER AUTHORITY
Insurance Program Structure
2019-2020

Disclaimer: This information is for reference only, please refer to insurance policies for further details.

Insurance Type	Insurance Cost			Items Coverage	Limits	Deductible
						EPL 250,000
						PR Court
						EPL 500,000
						Multiple Claimant
						Political Discrimination
					$5,000,000	n/a
Business Travel Accident	$2,500.00	1/29/2020	1/29/2021	Personal accidents during travel while on business pursuit, max. 20 employees at any one time during the policy year.	$150,000 Accidental death, $3,000,000 aggreate limit.	
					$150,000 dismemberment	
					$150,000 total incapacitation and permanent	
					$10,000 Accidental Medical expense	$100
					$25,000 repatriation	
					$250 Loss or delay luggage	
					Included Worldwide Assistance service	
Employee Automobile Liability	$159,123.00	10/1/2019	10/1/2020	Named Insured, Subsitute Auto, Individual named Insured, Newly Acquired vehicles	$400,000 each accident	
				Medical Payments	5,000	
Commercial Auto (PD Only)	$205,028.00	1/1/2019	1/1/2020	All persons assigned owned vehicles and or owning vehicles. Drive other car coverage (Liability, medical payments and physical damage	$15,000 each accident	

V3.1 Last update Jun-18-2019

PUERTO RICO ELECTRIC POWER AUTHORITY

RISK MANAGEMENT OFFICE

CLAIMS & CONTRACTS AMOUNT COMPARATIVE DASHBOARD FOR FISCAL PERIODS 2016-2017, 2017-2018, 2018-2019, 2019-2020 & JUL-2020 TO APR 30, 2021

CLAIMS
FISCAL PERIOD JUL 1, 2016 TO JUN30, 2017

PROPERTY DAMAGES <$10K	QUANTITY	CLAIMED	PAID
ASSIGNED	0		
CANCELED	9		
COMMITEE	1		
DENIED	305		
RETURNED	9		
IN PROCESS	21		
CLAIMS PAID	148	164,396.11	73,311.69
PENDING	65		
PRESCRIBED	3		
TREASURY	2	1,144.30	
TOTALS	563	$ 165,540.41	$ 73,311.69

PREPA FLEET	QUANTITY
ASSIGNED	0
RETURNED TO TECHNICAL OFFICE	1
PENDING	1
REFERED TO INSURANCE	127
TOTALS	129

LEGAL	QUANTITY
REFERED TO LEGAL	9
PHYSICAL DAMAGES	1
TOTALS	10

EMPLOYEE CAR ACCIDENTS	QUANTITY
REFERED TO INSURANCE	45
TOTALS	45

CLAIMS
FISCAL PERIOD JUL 1, 2017 TO JUN 30, 2018

PROPERTY DAMAGES <$10K	QUANTITY	CLAIMED	PAID
ASSIGNED	0		
CANCELED	2		
COMMITEE	0		
DENIED	95		
RETURNED	0		
IN PROCESS	3		
CLAIMS PAID	62	71,343.09	41,296.41
PENDING	57		
PRESCRIBED	24		
TREASURY	6	7,409.10	2,060.87
TOTALS	249	$ 78,752.19	$ 43,357.28

PREPA FLEET	QUANTITY
ASSIGNED	2
RETURNED TO TECHNICAL OFFICE	4
PENDING	0
REFERED TO INSURANCE	150
TOTALS	156

LEGAL	QUANTITY
REFERED TO LEGAL	14
PHYSICAL DAMAGES	2
TOTALS	16

EMPLOYEE CAR ACCIDENTS	QUANTITY
REFERED TO INSURANCE	50
TOTALS	50

CLAIMS
FROM JUL 1, 2018 TO JUN 30, 2019

PROPERTY DAMAGES<$10K	QUANTITY	CLAIMED	PAID
ASSIGNED	26	9,900.29	
CANCELED	1		
COMMITEE	18	40,511.03	15,231.10
DENIED	150	16,840.95	
RETURNED	0		
IN PROCESS	150	8,327.06	
CLAIMS PAID	28	24,452.08	13,896.13
PENDING	18		
PRESCRIBED	1		
TREASURY	6	8,752.54	3,684.80
TOTALS	398	$ 108,783.95	$ 32,812.03

PREPA FLEET	QUANTITY
ASSIGNED	0
RETURNED TO TECHNICAL OFFICE	4
PENDING	0
REFERED TO INSURANCE	148
TOTALS	152

LEGAL	QUANTITY
REFERED TO LEGAL	14
PHYSICAL DAMAGES	2
TOTALS	16

EMPLOYEE CAR ACCIDENTS	QUANTITY
REFERED TO INSURANCE	37
TOTALS	37

CLAIMS
FROM JUL 1, 2019 TO JUN 30, 2020

PROPERTY DAMAGES <$10K	QUANTITY	CLAIMED	PAID
ASSIGNED	6		
CANCELED	3		
COMMITEE	7	8,579.11	4,650.64
DENIED	76	61,688.64	
RETURNED			
IN PROCESS	51	71,135.50	
CLAIMS PAID	28	22,242.14	15,564.89
PENDING**	52	85,761.95	
PRESCRIBED			
TREASURY	4	7,131.03	3,849.61
TOTALS	227	$256,538.37	$24,065.14

PREPA FLEET	QUANTITY
ASSIGNED	99
RETURNED TO TECHNICAL OFFICE	0
PENDING	0
REFERED TO INSURANCE	99
TOTALS	99

LEGAL	QUANTITY
REFERED TO LEGAL	8
PHYSICAL DAMAGES	4
TOTALS	12

EMPLOYEE CAR ACCIDENTS	QUANTITY
REFERED TO INSURANCE	23
TOTALS	23

CLAIMS
FROM JUL 1, 2020 TO APR 30, 2021

PROPERTY DAMAGES <$10K	QUANTITY	CLAIMED	PAID
ASSIGNED	15		
CANCELED	3		
COMMITEE	13	$25,749.78	$5,899.06
DENIED	67	70,077.89	-
RETURNED			
IN PROCESS	3	73.59	
CLAIMS PAID	11	15,434.02	9,612.38
PENDING			
PENDING INVESTIGATION REPORT (REQUESTED)	47	67,127.00	
AWAITING CLIENT ANSWER	22	23,956.72	1,341.35
ADDITIONAL DOCUMENTATION (REQUESTED)	1	450.00	
PRESCRIBED			
TREASURY			
TOTALS	182	$202,869.00	$16,852.79

PREPA FLEET	QUANTITY
ASSIGNED	65
RETURNED TO TECHNICAL OFFICE	3
PENDING	0
REFERED TO INSURANCE	62
TOTALS	65

LEGAL	QUANTITY
REFERED TO LEGAL	9
PHYSICAL DAMAGES	0
TOTALS	9

EMPLOYEE CAR ACCIDENTS	QUANTITY
REFERED TO INSURANCE	17
TOTALS	17

* Distributed Generation Systems

** Awaiting Invetigation Report + Customer Feedback

Glossary of Terms

ASSIGNED: Case Received, and logged into our system.
CANCELED: Case is duplicated.
CLAIMS PAID: Total cases or amount paid under the concept.
COMMITTEE: After case-analysis and recommendations, case is reviewed by other analyst, all analysts must agree on the recommendation prior any payment offer determination, then case is revised by a supervisor.
DENIED: Case alegations can not be sustained or not caused by PREPA.
IN PROCESS: Case is under analyst evaluation.
PENDING: Awaiting documentation,technical analysis, recommendation or claimant response.
PRESCRIBED: Case have 1 year period without claimant response.
RETURNED: Case or investiagtion report is returned to Technical Office,Insurance Company or other for reinvestigation.
TREASURY: Payment have been requested to Treasury Division.
REFERED TO INSURANCE: Case referred to Insurance Co. for evaluation and payment.
REFERED TO LEGAL: Cases that exceeds $10,000 or claims body injury are referred to PREPA Legal.

As of MAY-4-2021