

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

**NEPR**

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IN RE: OPTIMIZATION PROCEEDING OF  
MINIGRID TRANSMISSION AND  
DISTRIBUTION INVESTMENTS

CASE NO.: NEPR-MI-2020-0016

**SUBJECT:** Motion to Submit LUMA's Streetlighting Manual in Attention to Energy Bureau's Resolution and Order of May 11, 2023, and Request for Energy Bureau Action Towards Repeal of Obsolete PREPA Regulations on the Subject

**MOTION TO SUBMIT LUMA STREETLIGHTING MANUAL IN ATTENTION TO  
ENERGY BUREAU'S RESOLUTION AND ORDER OF MAY 11, 2023, AND REQUEST  
FOR ENERGY BUREAU ACTION TOWARDS REPEAL OF OBSOLETE PREPA  
REGULATIONS ON THE SUBJECT**

**TO THE PUERTO RICO ENERGY BUREAU:**

**COME NOW, LUMA ENERGY, LLC and LUMA ENERGY SERVCO, LLC**

(collectively, "LUMA"), through the undersigned legal counsel and respectfully states and submits the following:

**I. Relevant Background**

1. On May 31, 2021, the Puerto Rico Electric Power Authority ("PREPA") submitted to this Honorable Puerto Rico Energy Bureau of the Public Service Regulatory Board ("Energy Bureau") a Streetlighting Manual ("PREPA Streetlighting Manual"). See *Motion to Submit Final Design Criteria Codes and Standards for Streetlighting, Substations, Transmission and Underground Distribution Construction* ("PREPA May 31<sup>st</sup> Motion"), Exhibit D.<sup>1</sup>

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<sup>1</sup> In their May 31<sup>st</sup> Motion, PREPA also submitted Transmission Design Criteria, Substation Design Criteria, Transmission Manual and Underground Distribution Manual. See, May 31<sup>st</sup> Motion, Exhibits A, B, C, and E, respectively.

2. On August 6, 2021, the Energy Bureau issued a Resolution and Order ordering PREPA “to amend the [PREPA] Streetlighting Manual to include only the essential physical and functional features and delete any specific reference to a brand.”

3. On May 11, 2023, the Energy Bureau issued a Resolution and Order requiring PREPA “to inform the status of the amendment to the Streetlighting Manual and submit it on or before May 18, 2023” (“May 11<sup>th</sup> Order”).

4. On May 18, 2023, LUMA informed this Energy Bureau that, as the operator of PREPA’s transmission and distribution system (“T&D System”),<sup>2</sup> LUMA is responsible for the technical design, engineering or construction criteria and standards of the T&D System and that LUMA was in the process of developing street lighting construction standards that would be compliant with the Energy Bureau’s requirements in the May 11<sup>th</sup> Order. LUMA also explained that these standards were being developed by LUMA in a new updated manual to substitute the existing technical documents developed by PREPA on the subject, including the PREPA Streetlighting Manual, and that LUMA would be submitting its updated manual to the Energy Bureau by August 2023.

## **II. Submittal and Request**

5. As per the May 18<sup>th</sup> Motion, LUMA submits herein its “Street Lighting System Design and Construction Manual”. *See* Exhibit 1 (the “LUMA Street Lighting Manual”). This document establishes the requirements and method for the public streetlighting system design and

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<sup>2</sup> Pursuant to the Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement executed among PREPA, LUMA, and the Puerto Rico Public-Private Partnerships Authority dated as of June 22, 2020 (“T&D OMA”), LUMA was engaged to provide management and operation services, among others, of the T&D System and (*see* T&D OMA, Section 5.1 and Annex I) and serves the role of T&D System operator (*see id.* Annex I, Section IC).

calculation prior to its installation or replacement and includes specific requirements for the system layout, geometry and mounting, based on the required road and zone illumination levels and luminaire characteristics, and provisions on the street lighting design approval process and requirements. *See* Exhibit 1, Section 1.3. The LUMA Street Lighting Manual applies principally to LUMA, its contractors and any third parties developing lighting infrastructure that will be transferred to PREPA. This document was developed by LUMA pursuant to its rights and responsibilities under the T&D OMA and in accordance with applicable laws, as discussed below.

6. Also as discussed in more detail below, there are two old PREPA regulations on the same subject matter as the LUMA Street Lighting Manual, which were apparently not being applied by PREPA and had been turned obsolete by various manuals published by PREPA after the adoption of said regulations. These are Regulations 1876 and 3237, which are currently registered in the Puerto Rico Department of State (“DS”) and remain in effect. These regulations may present an impediment to LUMA’s responsibility under the T&D OMA of implementing the LUMA Street Lighting Manual- a manual that is more up to date with current codes and standards. To remove this impediment to LUMA’s exercise of its rights and responsibilities under the T&D OMA, as well as in furtherance of the public policies of the fastest and most efficient reconstruction of the electric system and its modernization, for the reasons set forth below, LUMA respectfully requests this honorable Energy Bureau to order PREPA to repeal Regulations 1876 and 3237 or take such other action it deems appropriate towards this objective.

### III. Discussion

#### A. LUMA's Rights and Responsibilities under the T&D OMA

7. Under the T&D OMA, LUMA is responsible for “(i) provid[ing] management, operation, maintenance, repair, restoration and replacement and other related services for the T&D System, in each case that are customary and appropriate for a utility transmission and distribution system service provider, [...] and (ii) establish[ing] policies, programs and procedures with respect thereto” (collectively, the “O&M Services”). *See* T&D OMA, Section 5.1. The O&M Services are to be provided in accordance with “Contract Standards”<sup>3</sup> (*see id.*), requiring compliance with Applicable Law<sup>4</sup>, Prudent Utility Practice, and other standards, terms, conditions, and requirements specified in the T&D OMA (*see id.* at page 9).<sup>5</sup> “Prudent Utility Practice” is defined, in pertinent part, as “at any particular time, the practices, methods, techniques, conduct and acts that—at the time they are employed—are generally recognized and accepted by companies operating in the United States electric transmission and distribution business as such practices, methods, techniques, conduct and acts appropriate to the operation, maintenance, repair and

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<sup>3</sup> “Contract Standards” is defined as “the terms, conditions, methods, techniques, practices and standards imposed or required by: (i) Applicable Law; (ii) Prudent Utility Practice; (iii) applicable equipment manufacturer’s specifications and reasonable recommendations; (iv) applicable insurance requirements under any insurance procured pursuant to [the T&D OMA]; (v) the Procurement Manuals, as applicable, and (vi) any other standard, term, condition or requirement specifically contracted in [the T&D OMA] to be observed by [LUMA]”. *Id.* Section 1.1 on page 9.

<sup>4</sup> “Applicable Law” is defined as including “any foreign, national, federal, state, Commonwealth, municipal or local law, constitution, treaty, convention, statute, ordinance, code, rule, regulation, common law, case law or other similar requirement enacted, adopted, promulgated or applied by any [governmental body] [ ...]” in each case applicable to the parties to the T&D OMA. *Id.* at page 3.

<sup>5</sup> These obligations are subject to the System Remediation Plan established to remediate, repair, replace and stabilize the T&D System to achieve Contract Standards pursuant to the T&D OMA. *See id.* Sections 4.1(d) and 5.1.

replacement of assets, facilities and properties of the type covered by the [T&D OMA] ...” *Id.* at page 26.

8. As part of the O&M Services, LUMA is required to “perform and supervise Capital Improvements, including engineering and related design and construction management services”. *Id.* Section 5.5(a)(vi). LUMA is also responsible for the expansions and replacements of the T&D System to meet Contract Standards and “management and performance of construction of improvements thereto, including compliance with approved FEMA scopes of work for projects that are eligible for Federal Funding and required maintenance”. *See id.* Annex I, Section IA. In addition, LUMA is responsible for “all engineering activities related to the operation of the T&D System”, including, among others: “analyses related to, and maintenance of records and standards for design and engineering, design standards, construction standards, system mapping and related information, system performance, reliability, root cause analysis, equipment ratings, customer contact and needs assessment” and “expansions and replacements to meet the Contract Standards and [PREPA’s] then applicable Integrated Resource Plan ...”. *See id.* Annex I, Section ID. Furthermore, LUMA is responsible for “the improvement of existing, or development of additional/new, and the on-going maintenance of revisions to all T&D System drawings, specifications, construction manuals, equipment diagrams and other technical documentation”. *See id.* Annex I, Section IE.

9. It is important to note, with respect to these rights and responsibilities, that the T&D OMA provides that “except for the rights and responsibilities reserved to [PREPA] and Administrator as set forth in Article 6 ... [of the T&D OMA] or as may otherwise be expressly provided in [the T&D OMA], [LUMA] shall (A) be entitled to exercise all of the rights and perform

the responsibilities of [PREPA] in providing the O&M Services, and (B) have the autonomy and responsibility to operate and maintain the T&D System and establish the related plans, policies, procedures and programs with respect thereto as provided in [the T&D OMA]”. *Id.* Section 5.1. Therefore, LUMA is entitled to exercise the rights and perform the responsibilities of PREPA with respect to the maintenance and revision of design, engineering or construction specifications and manuals, among other technical documentation.

10. Conversely, PREPA has the obligation under the T&D OMA to “take all [...] actions, [...] reasonably required or reasonably requested by Operator to permit Operator to perform the O&M Services in compliance with the Contract Standards and the [T&D OMA]”. *See id.* Section 6.1(xi).

## **B. Applicable Law**

### **1. Public Policies for Grid Reconstruction and Modernization**

11. Act 120-2018, as amended, known as the “Puerto Rico Electric Power System Transformation Act”, seeks to advance the process of transforming the energy system in Puerto Rico to be “modern, sustainable, reliable, efficient, cost-effective, and resilient to the ravages of nature”. Act 120-2018, Statement of Motives.

12. Act 17-2019, known as the Puerto Rico Energy Public Policy Act (“Act 17”), in turn, states the need for a “reliable and accessible” electric system that “promote[s] industrial, commercial and community development, improve[s] quality of life at [a] just and reasonable cost, and promotes economic development ...”. *See* Act 17, Statement of Motives). Act 17 also recognizes that “Puerto Rico’s Electric Power System comprises the functions of electric power generation, transmission, distribution, and commercialization as well as system planning and

control” (*see* Act 17, Section 1.3) and that electric power service “is one of the basic and essential services that lay the foundation for the sustainable development of the people of Puerto Rico; therefore, all of the functions of the Electrical System are in the public interest and of strategic importance for private and government operations” (*see id.*).

13. In addition, Act 17 establishes among its initial objectives “the fastest and most efficient reconstruction and modernization and revamping of the transmission and distribution system for the purpose of developing a robust and flexible system that can integrate new technologies, distributed generation, renewable energy sources, and energy efficiency mechanisms as well as provide consumers with alternatives in the energy sector, thereby maximizing available state and federal resources”. *See* Act 17, Section 1.6(1).

14. Act 17 also establishes, as two of seven guiding principles for the Puerto Rico Electric System, the principles of quality, by virtue of which “electric power services must meet the technical requirements and the reliability and quality standards established therefor”, and adaptability, leading to the “incorporation of scientific and technological advances that improve the quality and efficiency of the service rendered at the lowest possible cost”. *See id.* Section 1.4 (ii) and (iv). Act 17 further declares as public policies relating to infrastructure design, resilience, maintenance and security:

(a) To ensure the security and reliability of our electric power infrastructure by **using modern technologies** that promote inexpensive and efficient operations and allow for the integration and dissemination of renewable sources;

(b) To design the infrastructure of the Electrical System to be **more robust and resistant to weather events and other disasters, so as to apply and adopt design codes that meet the National standards in effect, as well as security requirements** for the utility poles that carry power distribution lines and telecommunication lines, among others;

[...]

(d) To conduct the appropriate planning studies on the operating voltages of the transmission and distribution system in order to ensure the reliable operation thereof; specify and keep an inventory of the **Electrical System components that meet the standards in effect of the continental United States electric power industry**, which facilitates the replacement of such components as part of the regular maintenance or as a result of damage caused by force majeure, such as storms and hurricanes; provided, that this shall not exclude the possible use of Volt-Var Optimization as an efficiency technology;

[...]

(f) To ensure continuous improvements for the electric power grid, in order to promote its resilience and diversification, by combining the generation capacity with the demand by region, thus facilitating the **effective transition to new technologies and renewable energy sources**;

(g) To provide incentives for **grid modernization incorporating technology as appropriate to attain the transformation goals** without entailing excessive spending;

[...]

*Id.* Section 1.5(9). (Emphasis added).

15. As per the T&D OMA, LUMA has the responsibility of conducting the O&M Services, including the development and management of technical documentation, in accordance with the energy public policies discussed above, including, seeking the fastest and most efficient reconstruction and revamping of the transmission and distribution system, taking into account modern technologies, grid modernization, and current industry standards, among others.

## **2. Energy Bureau Authority**

16. Act 57-2014, known as the Puerto Rico Energy Transformation and RELIEF Act, gives the Energy Bureau authority to “[o]versee and ensure the execution and implementation of the public policy on the electric power service of the Commonwealth of Puerto Rico”; “[e]stablish



by regulations the public policy rules regarding electric power service companies, as well as any transaction, action or omission in connection with the electric power grid and the electric power infrastructure of Puerto Rico, and implement such public policy rules”; “[o]versee the quality, efficiency, and reliability of the electric power services provided by any electric power company certified in Puerto Rico to ensure a robust network that addresses the needs of the Island”; “[a]dopt the rules, orders, and regulations needed to carry out its duties, issue orders, and impose fines to comply with the powers granted by law to [it], as well as for the implementation of [Act 57]”; and “[f]ile recourses, issue orders, and seek and grant any legal remedies that may be necessary to enforce the provisions of [Act 57], as well as its rules, regulations, orders, and determinations” including “to direct that all actions shall be taken in compliance with the provisions of [Act 57], the regulations of the [the Energy Bureau], or any other legal provision whose interpretation and compliance is under the jurisdiction of the [Energy Bureau]”. *See Act 57, Sections 6.3(a), (b), (d), (oo) and (pp).*

#### **B. LUMA’s Review of Design, Engineering and Construction Technical Documents**

17. Since it commenced operating the T&D System and pursuant to the provisions of the T&D OMA discussed above, LUMA has been responsible for the maintenance and revisions of the design, engineering or construction codes, standards, criteria, or manuals (collectively, “Technical Manuals”) for T&D System assets such as streetlights, substations, transmission, and underground distribution construction, among others. As part of its responsibilities under the T&D OMA, LUMA commenced an extensive review of existing Technical Manuals, particularly as applicable to T&D System reconstruction, repair or new construction activities, to evaluate the

need to update or substitute these to ensure compliance with Contract Standards, including Prudent Utility Practice and Applicable Law, as well as, in many cases, FEMA requirements.

18. Among the Technical Manuals reviewed by LUMA were PREPA's manuals relating to streetlighting design or construction. LUMA found that PREPA had prepared or issued the following manuals and related documents on this subject:

- Two public lighting manuals prepared by PREPA filed as regulations at the DS: the Public Lighting Standards Manual (“Manual de Normas de Alumbrado Público”), effective January 31, 1974, Regulation 1876, and the Requirements and Standards for the Construction of Public Lighting System (“Reglamento Estableciendo los Requisitos y Normas para la Construcción del Sistema de Alumbrado Público”), effective August 23, 1985, Regulation 3237. Regulation 3237 appears to have had the purpose of substituting Regulation 1876, but it did not expressly repeal it, and, therefore, both documents appear as active in the DS electronic registry of regulations.
- A 2001 manual titled “Manual de Normas de Alumbrado Público”. This document was never filed at the DS and, therefore, never became a regulation, but PREPA applied it as a manual of standards apparently in substitution of the Regulations 1876 and 3237.
- Technical Bulletins (“Comunicados Técnicos”) published in PREPA’s website relating to streetlighting.
- The document filed by PREPA in this proceeding on May 31, 2021, referred to by PREPA as “Final Design Criteria Codes and Standards for Streetlighting, Substations, Transmission and Underground Distribution Construction”. This latter document apparently was intended to substitute, in whole or in part the preceding documents.

(All of the PREPA documents listed above, the “PREPA Street Lighting Documents”).

19. As can be noted, the oldest of these PREPA Street Lighting Documents were registered as regulations in the DS (that is, Regulations 1876 and 3237) in 1975 and 1985, respectively; however, PREPA adopted subsequent technical documents but did not register them as regulations. PREPA failed to repeal Regulations 1876 and 3237, although it apparently was not applying them and had substituted them with the various manuals it subsequently adopted and published, causing the referenced regulations to become, for all intended purposes, outdated and obsolete. Accordingly, such regulations should be repealed by PREPA and future manuals, such as the one developed by LUMA and described herein, should be treated as flexible documents that can be modified from time to time to adjust to changing circumstances, standards and technology and not documents subject to a rulemaking process.

20. Pursuant to its rights and responsibilities under the T&D OMA and Applicable Law and in accordance with Prudent Utility Practice, LUMA developed the more updated and comprehensive LUMA Street Lighting Manual included in Exhibit 1. The LUMA Street Lighting Manual is intended to apply in substitution of the PREPA Street Lighting Technical Documents.

21. LUMA respectfully submits that, pursuant to the T&D OMA, LUMA had the responsibility to develop the LUMA Street Lighting Manual and has the responsibility to apply this Manual as the most updated technical document on the subject and in substitution of the PREPA Street Lighting Technical Documents. However, Regulations 1876 and 3237, albeit obsolete and out of use, could create an impediment to full implementation of the LUMA Street Lighting Manual and, as a result, to LUMA’s exercise of its rights and responsibilities under the

T&D OMA. So long as these regulations remain in effect, they could potentially be interpreted as having the force of law and overriding the more updated LUMA Street Lighting Manual or any other technical documents on the subject developed by LUMA to adopt the latest industry standards. This result would also be contrary to the energy public policies in furtherance of reconstruction and modernization. Therefore, LUMA respectfully submits that action should be taken to repeal Regulations 1876 and 3237.

22. Being PREPA the only entity that can repeal these regulations, LUMA respectfully requests this honorable Energy Bureau, in the exercise of its powers under Act 57, to order PREPA to repeal these regulations so that LUMA can implement the LUMA Street Lighting Manual without impediments, in compliance with the T&D OMA, and in furtherance of applicable energy public policy.

**WHEREFORE**, LUMA respectfully requests the Energy Bureau to **take notice** of the aforementioned, **accept** *Exhibit 1* hereto in attention to the Energy Bureau’s Resolution and Order of May 11, 2023, and **order** PREPA to repeal the Public Lighting Standards Manual (“Manual de Normas de Alumbrado Público”), effective January 31, 1974, Regulation 1876, and the Requirements and Standards for the Construction of Public Lighting System (“Reglamento estableciendo los Requisitos y Normas para la Construcción del Sistema de Alumbrado Público”), effective August 23, 1985, Regulation 3237, so that LUMA can implement its “Street Lighting System Design and Construction Manual” (in *Exhibit 1* herein) without impediments in accordance with its rights and responsibilities under the T&D OMA and in furtherance of energy public policies, or take such other action this honorable Energy Bureau deems appropriate towards such objectives.

**RESPECTFULLY SUBMITTED.**

I hereby certify that I filed this motion using the electronic filing system of this Energy Bureau and that I will send an electronic copy of this motion to PREPA at [lionel.santa@prepa.pr.gov](mailto:lionel.santa@prepa.pr.gov).

In San Juan, Puerto Rico, this 15<sup>th</sup> day of November 2023.



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Exhibit 1

*LUMA Street Lighting Manual*