

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

NEPR Received: Sep 23, 2022 4:53 PM
--

IN RE: LUMA’S RESPONSE TO
HURRICANE FIONA

CASE NO. NEPR _____

**SUBJECT: Notice on Preliminary Damage
Assessment in Response to Hurricane Fiona**

**NOTICE ON PRELIMINARY DAMAGE ASSESSMENT IN RESPONSE TO
HURRICANE FIONA**

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 the following:

On Thursday, September 15, 2022 at 08:00, upon the announcement by the United States National Weather Services of the imminent passage of Tropical Storm Fiona through Puerto Rico, LUMA activated its Emergency Operations Center (“LEOC”) in compliance with LUMA’s Emergency Response Plan (“ERP”). On September 18, 2022, the Category 1 Hurricane by the name of Fiona affected Puerto Rico.

Hurricane Fiona is classified in accordance with the LUMA ERP Event Classification Type, as a Type 1 Emergency Event that represents catastrophic emergency conditions. *See* LUMA’s ERP of May 27, 2022, Section 6.3, page 25 and Major Outage Restoration-Annex A (“Annex A”), Section 7.2, page 19, filed in *In re Planes de la Autoridad de Energía Eléctrica de Puerto Rico para Atender Emergencias*, Case No. NEPR-MI-2019-0006. A Type 1 Event “is a catastrophic event, historically resulting in significant damage to the electrical transmission and distribution system or a widespread outage.” *See* ERP, Section 6.3.5, page 27. In a Type 1 Event, “[t]he severity of the damage affects the entire system in such a way that restoration

activities may require ten (10) days or more **once it is safe to begin restoration activities.**” *See* ERP, Annex A, page 20 (emphasis added).

Per the ERP, LUMA follows restoration priorities to restore power safely and quickly to customers. These priorities are shown in Figure 3 of ERP Annex A which illustrates the hierarchy of the response and restoration priorities: damage assessment, make safe/down wires, 1. Transmission and Substations, 2. Community Lifelines, 3. Large Area Customers, 4. Smaller Area Customers. *See* Annex A, Section 8, page 31.

LUMA’s preliminary damage assessments¹ to enable restoration begin when “field personnel can be deployed without unacceptable safety risks from continued dangerous conditions and potential of additional damage to the electric system is low.” *See* Annex A, Section 7.1.9, page 17. When it is safe to do so, LUMA begins a preliminary damage assessment of the affected area(s) of the Transmission and Distribution System (“T&D System”). *Id.* Appendix A, page 44, item 3 (damage assessment). The preliminary damage assessment is completed within a “reasonable time” at the beginning of the Operation Response phase. “Reasonable time” is defined in Annex A as one hundred and twenty (120) hours or five (5) days, for events that affect the T&D System in such degree that restoration requires more than ten (10) days, such as Hurricane Fiona. *See* Annex A, Section 7.1.8, Section 3 at page 17 and Annex A, Appendix A, page 44, item 3 (damage assessments). These damage assessments assist LUMA with “estimations of the time needed to assess and complete restorations.” *Id.* page 14.

LUMA hereby provides notice to this honorable Puerto Rico Energy Bureau (“Energy Bureau”) that LUMA initiated the preliminary damage assessment at 07:00 on September 20, 2022. No later than 07:00 on September 26, 2022, LUMA will submit the global, system wide

¹ A damage assessment is a “mechanism utilized to determine the magnitude of damage and impact of disasters.” *See* ERP, Annex A, Section 13.2.

Estimated Time of Restoration (“ETR”)² for 90% of Service Outages, in accordance with Section 5 of Appendix A of Annex A which outlines the requirements for the ETR metric and provides that “[a] preliminary ETR for 90% service restoration will be made available on the Internet 24 hours after the preliminary damage assessment in pdf format.” To wit, LUMA shall provide a global, system-wide ETR on or before 07:00 on September 26, 2022; that is, no later than 144 hours from the start of the preliminary damage assessment (120 hours for preliminary damage assessment plus 24 hours for ETR determination).

Exhibit 1 of this Motion includes an Emergency Event Status for Hurricane Fiona.

WHEREFORE, LUMA respectfully requests that the honorable Bureau **take notice** of the aforementioned and of Exhibit 1 of this Motion, for all purposes.

RESPECTFULLY SUBMITTED.

In San Juan, Puerto Rico, this 23rd day of September, 2022.



DLA Piper (Puerto Rico) LLC
500 Calle de la Tanca, Suite 401
San Juan, PR 00901-1969
Tel. 787-945-9107
Fax 939-697-6147

/s/ Margarita Mercado Echegaray
Margarita Mercado Echegaray
RUA NÚM. 16,266
margarita.mercado@us.dlapiper.com

²“ETRs are a predictor of outage lengths which assist with determining the operational resources and actions required. Due to every event’s unique nature, subjective analysis as well as experience during similar events are required to estimate resource, material and equipment requirements based on weather or other known hazard conditions. ETRs are segregated into four types: Global, Regional, Local, and Individual Customer.” *See* Annex A, Section 8, page 30.

Exhibit 1

Emergency Event Status

Restoration Status

Initial aerial assessment of 115 kV and 230 kV transmission lines was carried out. Limited catastrophic damage from initial visual patrols to the 230 and 115 kV transmission has been identified at this time. However, damage assessment of transmission lines is on-going. Several transmission substations sustained significant flooding and damage.

Initial high-level flyover aerial inspections of 38kV expected to be complete 9/23 throughout the island on the prioritized feeders (aerial only).

LUMA continues to perform substation assessments and roadside assessments on all distribution feeders, beginning with the feeders that supply critical facilities, while also prioritizing roadside assessments to meet restoration priorities. We have identified equipment damage to several substations.

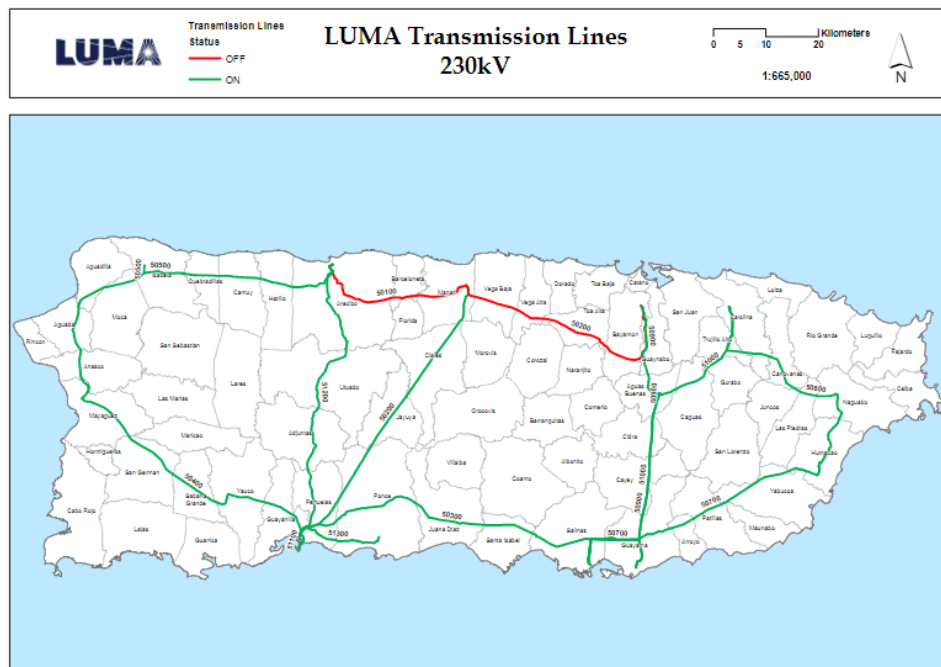
In the coming days and weeks, LUMA will continue to carry out damage assessments in line with current standards and engineering practice, while progressing restoration.

LUMA continues to review data from ground assessments and work with engineering to develop work order packages. On September 22, crews completed the assessment of 190 feeders and work order packages are being completed to perform repairs.

Work plans are developed for day crews to carry out restoration on high-customer count and critical feeders. The feeders are prioritized by region in engineering design work packages and emergency restoration work orders being provided to the ROCCs. Repairs are being made to impact critical feeders to restore service.

LUMA continues to follow the Restoration Annex A and is focused on the critical lifeline facilities level 1 Annex C in the Emergency Response Plan.

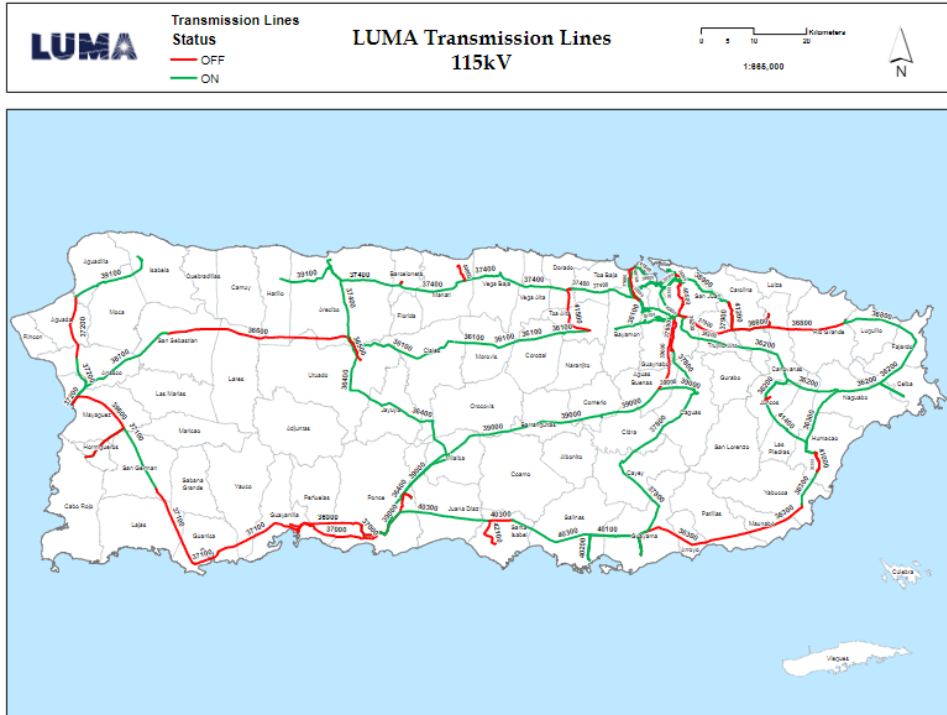
230 kV Transmission Lines



Map is as of 1100 hours today.

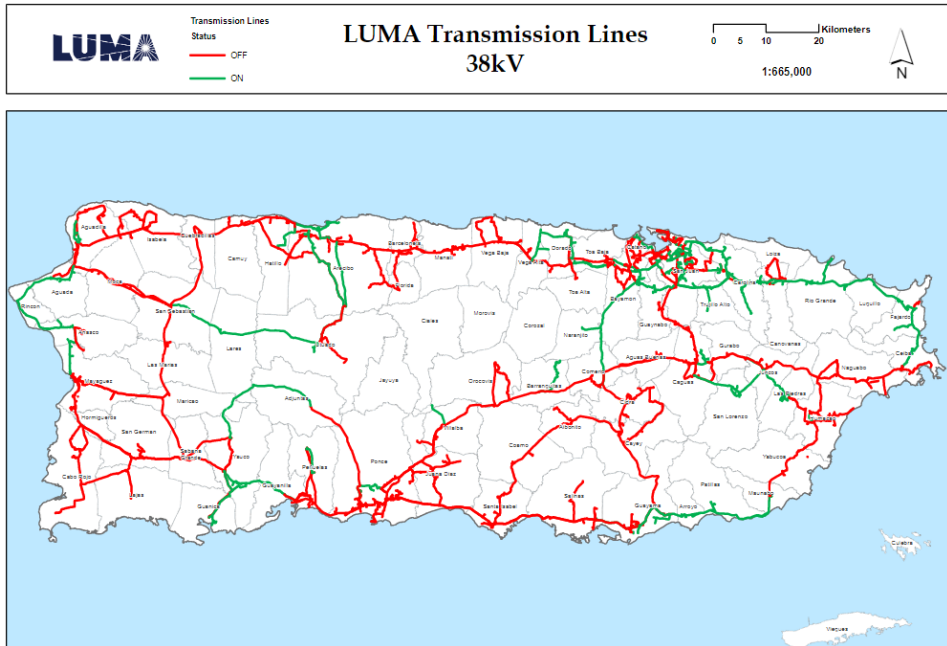
Emergency Event Status

115 kV Transmission Lines



Map is as of 1100 hours today.

38 KV Transmission Lines



Map is as of 1100 hours today.

Emergency Event Status

Customer Outages	37.95% of customers are in service
Total Customers with Service	Approximately 557,135 customers
Total Customers without Service	Approximately 911,088 customers
Status of Lifeline Residential Customers and Critical Customers	<p>LUMA has identified and is prioritizing restoration in accordance with our Emergency Response Plan.</p> <p>90 out of 150 feeders to hospitals are energized, and currently 79 have confirmed service. Additional callouts continue.</p> <p>The top 103 critical sites for PRASA have been reviewed and are being prioritized for restoration. Key accounts have received confirmation that 32 of the PRASA facilities are connected.</p>
Estimated Time of Restoration (ETR)	<p>Per our ERP, LUMA began preliminary damage assessments once Hurricane Fiona passed, and it was safe for our crews to do so. The preliminary damage assessment, which includes aerial and ground patrols of the transmission and distribution system are ongoing. This island-wide effort includes leveraging a fleet of four helicopters, and hundreds of ground crews, covering thousands of miles. Completion of the damage assessment is a critical component of establishing a viable ETR.</p> <p>Over the next several days, weather and ground conditions permitting, LUMA expects to substantially complete its damage assessment. The results of this damage assessment coupled with the projected availability of generation capacity, will enable LUMA to determine the ETR(s).</p> <p>Currently, among the identified risks to restoration of service include the following:</p> <ul style="list-style-type: none"> • availability of generation resources, • system stability as load is matched to generation, and extensive switching activities are undertaken, • weather conditions, and • access that may have damage or be blocked due to debris, flooding or otherwise. <p>This list of risks may change based on information from damage assessments.</p> <p>LUMA will continue to work closely with PREPA, and our other partners, until every customer has power restored. We expect to provide a global, system-wide ETR on or before 0700 hrs on September 26, 2022.</p>