

Aug 17, 2026

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Manual Load Shedding

Introduction

LUMA operates the Puerto Rico Transmission and Distribution System (T&D System) assets under a long-term agreement administered through a public-private partnership overseen by the Puerto Rico Public-Private Partnership Authority (P3A), in its capacity as Administrator, and subject to regulatory oversight by the Puerto Rico Energy Bureau (Energy Bureau). Under the Puerto Rico Transmission and Distribution Operation and Maintenance Agreement (T&D OMA), executed on June 22, 2020, between the Puerto Rico Electric Power Authority (PREPA), P3A, LUMA Energy, LLC, and LUMA Energy ServCo, LLC, (jointly, LUMA) is responsible for improving the reliability and resilience of Puerto Rico's electric grid.¹

Pursuant to the T&D OMA, LUMA's responsibilities encompass system operations, transmission, and distribution. Generation facilities fall under the ownership and operation of other entities. In fulfilling its obligations, LUMA depends on generation resources provided by Genera PR, LLC, EcoEléctrica, L.P., AES Puerto Rico, L.P., and additional independent power producers, enabling coordinated dispatch, system stability, meeting customer demand while prioritizing affordability, compliance and reliable service in alignment with Prudent Utility Practice and the System Operation Principles (SOP).

Under the T&D OMA, LUMA is responsible for the System Operations Activities, applying and managing the System Operation Principles to promote the coordinated, reliable, and compliant operation of the transmission and distribution system. This includes the scheduling and economic dispatch of power from all available generation resources, integrating load requirements under applicable contractual frameworks, developing load and energy forecasts, assessing operational constraints, and maintaining communication protocols necessary for system stability. In carrying out these duties, LUMA manages system operations in accordance with Prudent Utility Practice and fulfills its role in supporting secure and effective power delivery across the grid.²

On July 28, 2026, the Energy Bureau issued a Resolution and Order (the "July 28 Order") directing LUMA to provide a detailed explanation of its compliance with the Manual Load Shedding provisions of Procedure No. 17 in relation to the MLS event of July 22, 2026. [REDACTED]

[REDACTED]

¹ Article 5 "O&M Services" of the T&D OMA.

² Annex I "Scope of Services" I. C. System Operator Activities, of the T&D OMA.

Manual Load Shedding

SYSTEM OPERATION PRINCIPLES NEPR-MI-2021-0001

Response: RFI-LUMA-MI-2021-0001-20260728-PREB-01

SUBJECT

Manual Load Shedding

REQUEST

(i) a description of how load shed blocks are rotated during MLS events in accordance with Section 3.1.7 and Appendix C of the Load Shedding Procedure.

RESPONSE

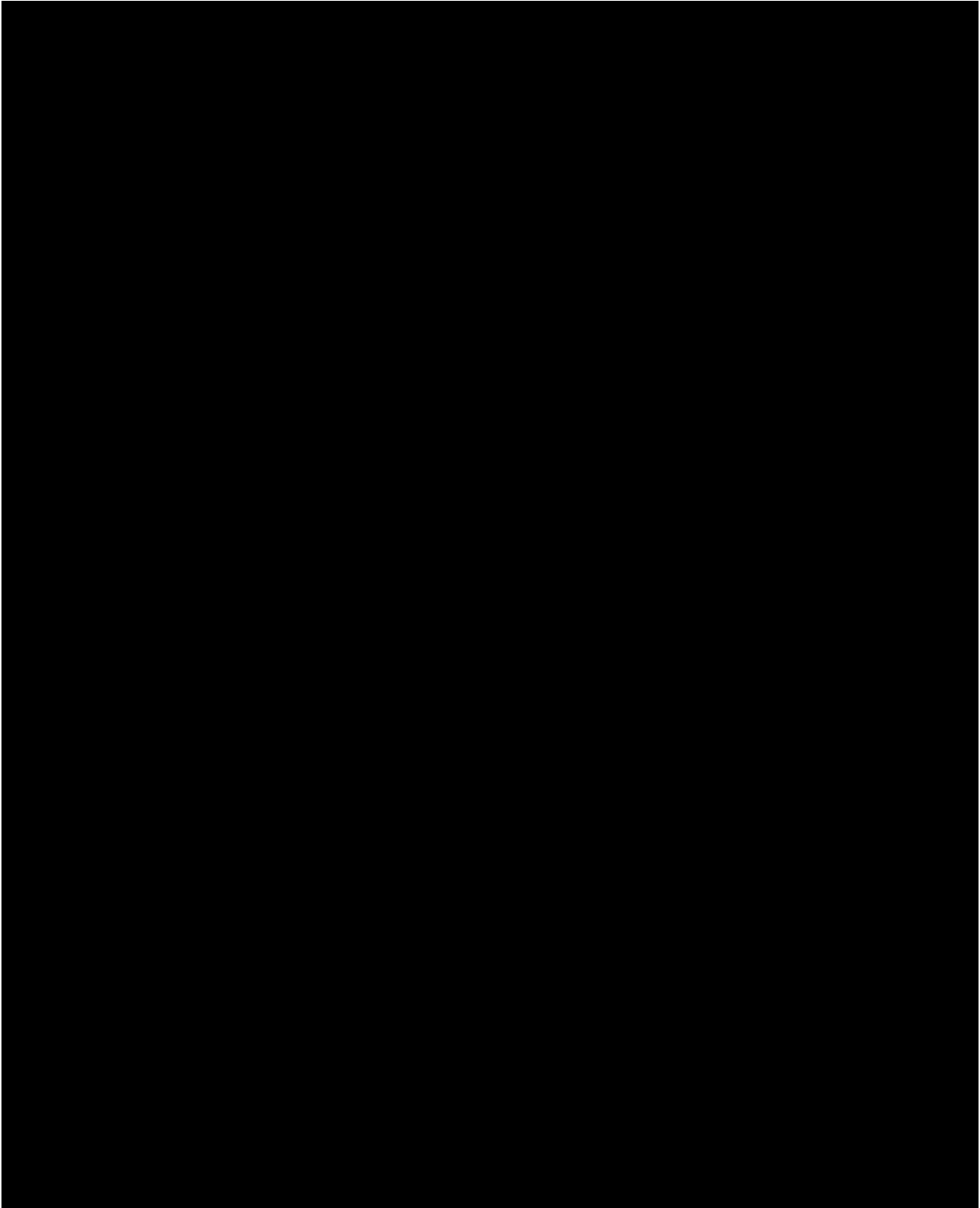
Load Shedding is the calculated and controlled shutdown of electric power in one or more areas of a Bulk Power System (BPS). This action is executed systematically to safeguard the integrity of the grid and prevent a system-wide failure when the electrical demand exceeds, or is expected to exceed, the available generation capacity of the system. The Load Shedding Procedure, identified as Procedure No. 17, encompasses executing both types of Load Shedding events, manual and automatic, and performing load-shed performance reviews to identify areas for improvement.³

Automatic Load Shedding (ALS) occurs when the system experiences the sudden loss of a generation unit or a rapid increase in load beyond reserve levels or ramping capability, creating a condition in which system frequency cannot be maintained within acceptable limits. Under these circumstances, protective transmission under-frequency relays trip designated transmission breakers, and protective distribution feeder under-frequency relays automatically initiate a predefined sequence of load-shed blocks.

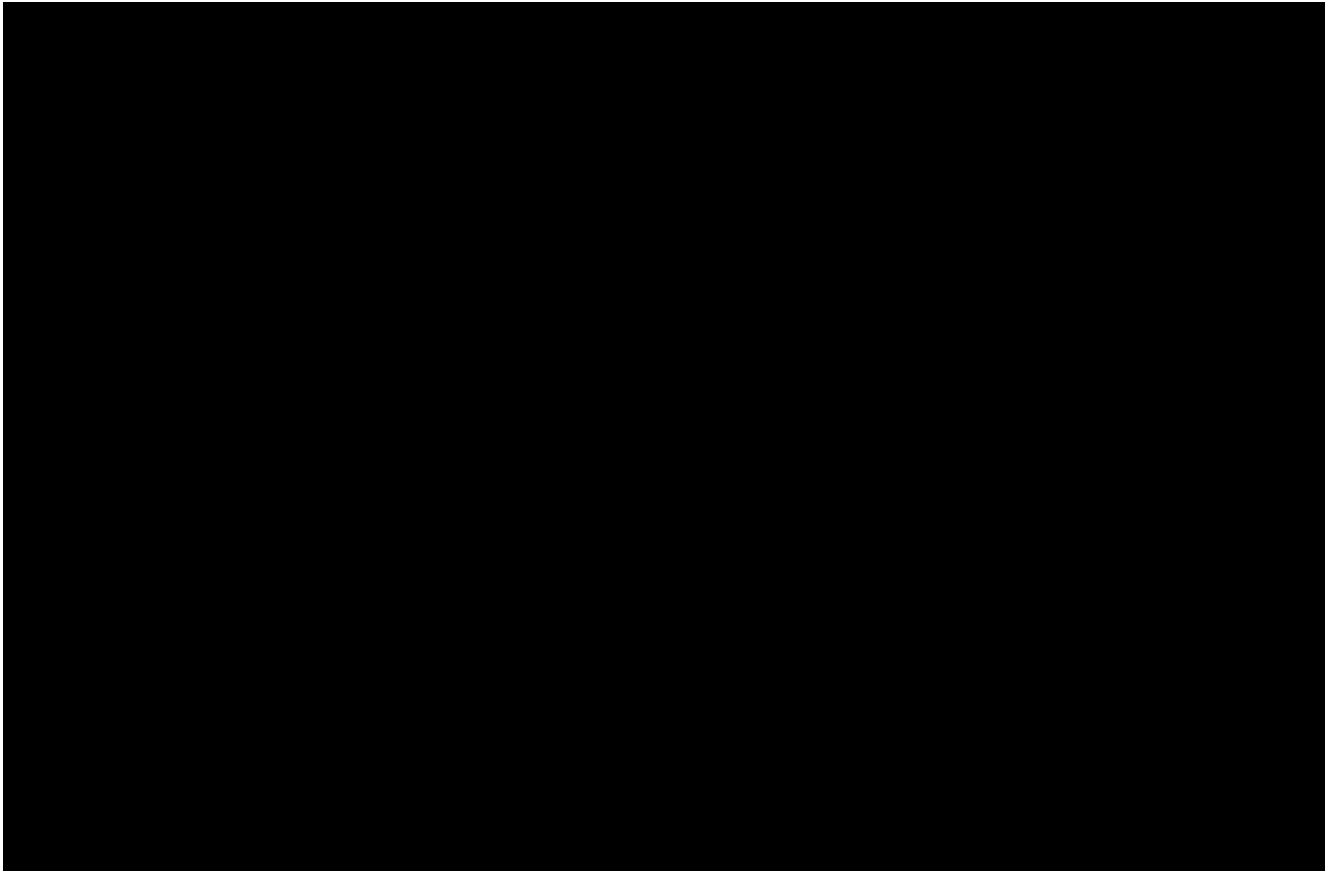
Manual Load Shedding (MLS), by contrast, is a planned and proactive action typically required when there is a generation deficiency or an overloaded condition on the BPS. Manual load-shed blocks differ in composition and measurement from those used during automatic events and are deployed in accordance with the System Operation Principles to maintain system stability and security.

³ System Operation Procedures, Procedure No. 17: Load Shedding (Revision 1.2, dated December 15, 2021) ("Load Shedding Procedure" or "Procedure No. 17 Load Shedding 1.2"), Docket No. NEPR-MI-2021-0001.

Manual Load Shedding



Manual Load Shedding



Manual Load Shedding

SYSTEM OPERATION PRINCIPLES NEPR-MI-2021-0001

Response: RFI-LUMA-MI-2021-0001-20260728-PREB-02

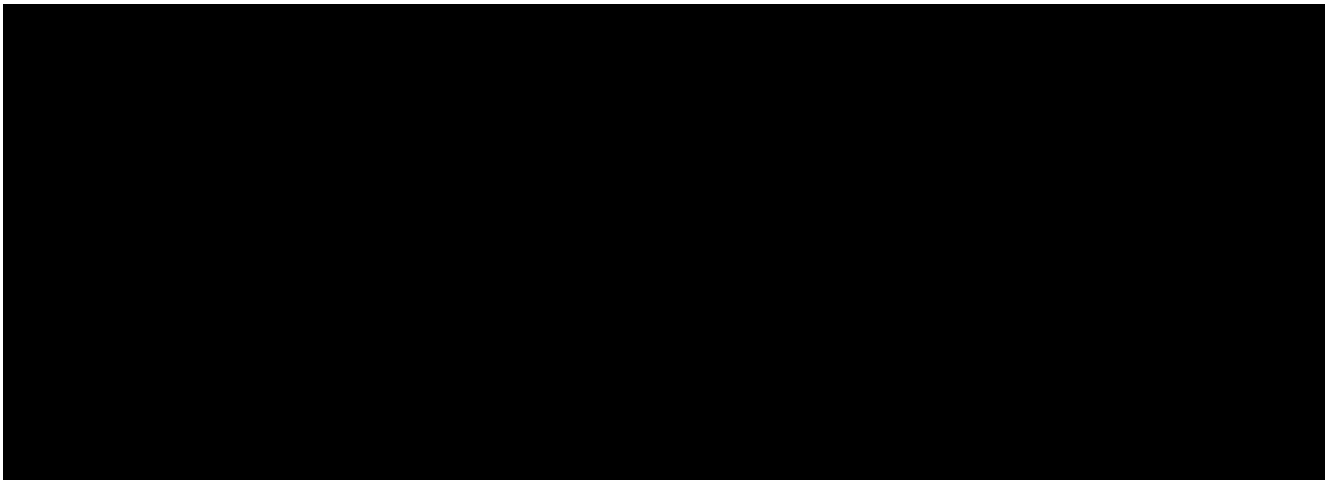
SUBJECT

Manual Load Shedding

REQUEST

(ii) copies of the control room logbook ("bitácora") entries corresponding to the MLS event of July 22, 2026, together with a table identifying, for each load shed block, the time it was shed, the time it was restored, and the total duration of the interruption.

RESPONSE



Manual Load Shedding

SYSTEM OPERATION PRINCIPLES NEPR-MI-2021-0001

Response: RFI-LUMA-MI-2021-0001-20260728-PREB-03

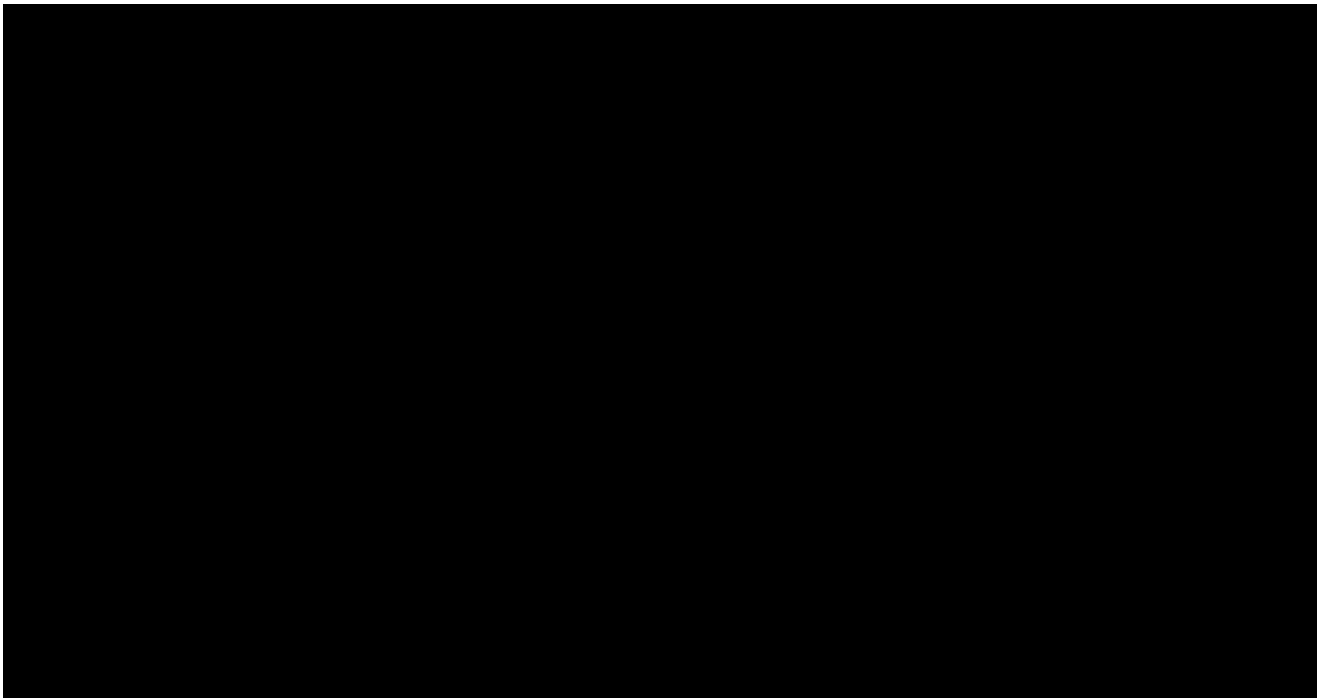
SUBJECT

Manual Load Shedding

REQUEST

(iii) an identification of any block that remained interrupted in excess of two (2) hours during said event, with an explanation of the cause.

RESPONSE



Manual Load Shedding

SYSTEM OPERATION PRINCIPLES NEPR-MI-2021-0001

Response: RFI-LUMA-MI-2021-0001-20260728-PREB-04

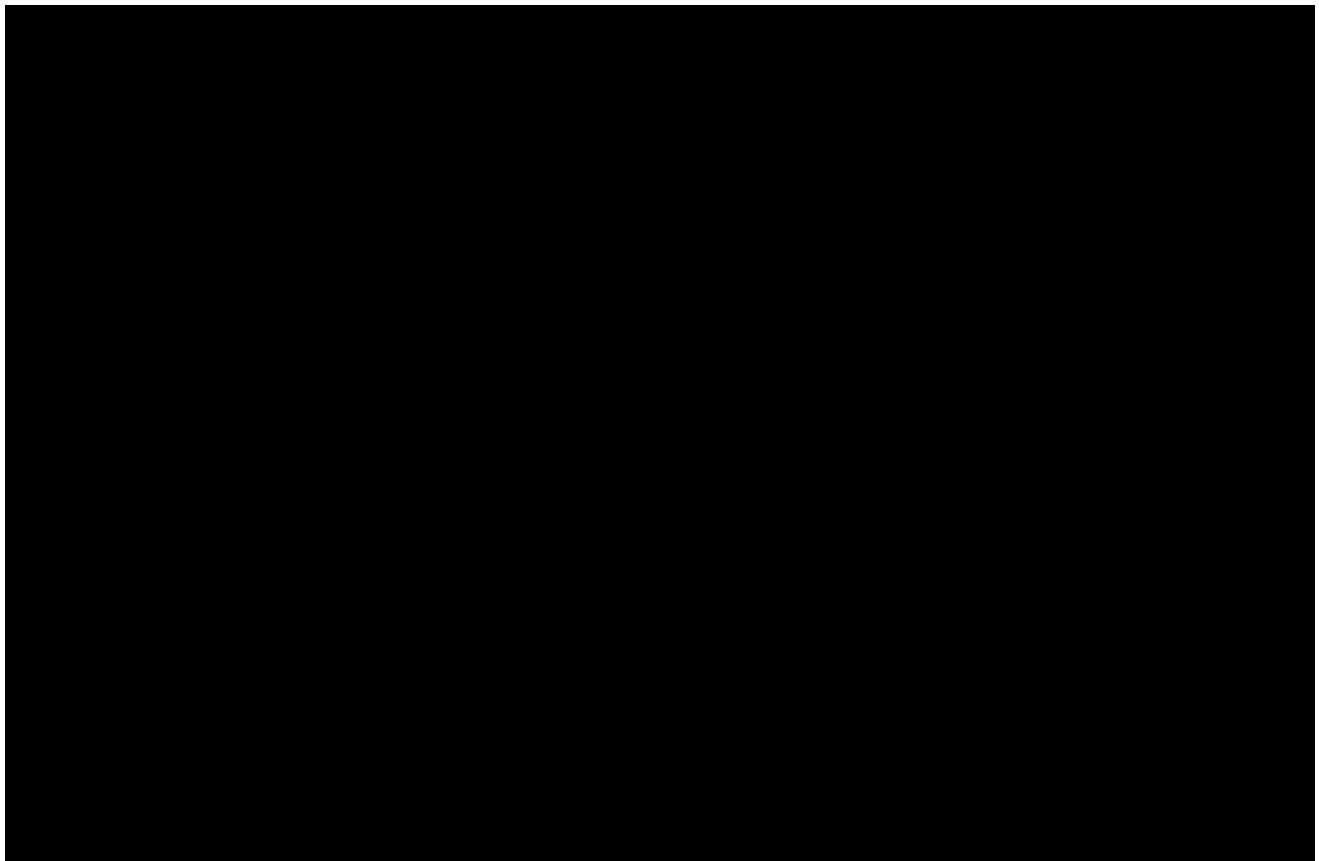
SUBJECT

Manual Load Shedding

REQUEST

(iv) the current status of the SCADA automatic load rotation functionality referenced in Appendix C, the interim measures used to ensure timely rotation while that functionality remains unavailable, and the estimated date for its restoration.

RESPONSE



Manual Load Shedding

