

Order No. 202-25-2

Pursuant to the authority vested in the Secretary of Energy by section 202(c) of the Federal Power Act (FPA), 16 U.S.C. § 824a(c), and section 301(b) of the Department of Energy Organization Act, 42 U.S.C. § 7151(b), and for the reasons set forth below, I hereby determine that an emergency exists in Puerto Rico due to a shortage of electric energy, a shortage of facilities for the transmission of electric energy, and other causes, and that issuance of this Order will meet the emergency and serve the public interest.

Emergency Situation

The Puerto Rican electrical grid remains in a fragile state due to decades of deferred maintenance, insufficient investment and the bankruptcy of the system owner and operator. Further, the devastating effects of Hurricanes Irma and Maria (both Category 5) in 2017, Fiona (category 2) in 2022, and earthquakes in 2020, have significantly contributed to the grid's deterioration. Recent investments in the Puerto Rico grid have provided insignificant improvement towards augmenting reliability and security of the grid.

The result is that Puerto Rico continues to experience frequent partial or total blackouts,¹ with the latest island-wide blackout occurring on April 16, 2025, and impacting all 1.4 million electric customers. Furthermore, the power quality metrics in Puerto Rico remain poor² (voltage and frequency regulation), affecting not only residential customers, but also industry, commerce, telecommunications, healthcare, public safety and other essential critical services.

Poor reliability performance is observed in transmission (38, 115, and 230 kV) and distribution grids (under 38 kV). Transmission lines are currently operated with up to 70% derating to avoid failures from infrastructure conditions (e.g., line sagging into vegetation).³ Lack of vegetation control on the transmission and distribution system right-of-way is one of the main causes of power failures. More than 55% of the approximately 1,150 distribution primary circuits are operated at 4.16kV, and although the average circuit length is just over 11 miles, there are many 4.16kV circuits exceeding 100 miles in length. Preliminary analysis completed utilizing Automatic Meter Readings revealed that approximately 40% of the monitored locations displayed voltage violations (voltage above the voltage band prescribed

¹ See, e.g., Puerto Rico Public Service Regulatory Board (PSRB), Consolidated Investigation Report, PSRB Case Nos. NEPR-IN-2024-002, NEPR-IN-2024-003 (Apr. 4, 2025) (outlining findings regarding significant power outages in Puerto Rico and highlighting that “Puerto Rico’s electrical grid continues to face significant vulnerabilities, largely due to outdated infrastructure and insufficient maintenance practices.”).

² A. Nassif, “Managing distribution resources: the LUMA perspective” (23PESGM4426), IEEE PES General Meeting 2023.

³ On March 24–26, 2025, Department of Energy staff engaged with stakeholders in Puerto Rico who raised concerns regarding these issues.

by Standard C84.1), regardless of time of day, being exacerbated during sun hours where distributed PV exports are more prominent.⁴ Without adequate voltage management, the system experiences high voltages that can result in nuisance distributed PV trips, damage of customer electronic equipment, and other power quality problems.

LUMA reported to DOE that for a 12-month period of May 2024 to April 2025 LUMA's 115KV and 230KV transmission system has experienced 23 events related to vegetation impacting over 2.2 million customers interruptions (CI) and 1.5 billion customer minutes interruption (CMI). LUMA estimates the benefit of a full vegetation clearing of the 115KV and 230KV transmission right of way could lead to a total reduction of over 80% of events or over 1.76 million customer interruptions (CI) avoided and over 1.2 billion customer minutes of interruption (CMI) avoided. The totality of these benefits would be realized after the full clearing is completed⁵.

Implementing control of the overgrown vegetation on power lines is an immediate imperative to prevent further system instability. A preliminary investigation indicated that the root cause of the last full system blackout on April 16, 2025, was inadequate clearance between vegetation and line 50100 which then cascaded, as a result of other system failures, to cause the general blackout.⁶ Addressing overgrown vegetation is a precondition to returning the Puerto Rico electrical system to an acceptable state.

On April 2, 2025, the Governor of Puerto Rico issued an Executive Order, EO-2025-016, which declared a state of emergency with respect to Puerto Rico's electricity system.

"I hereby declare a modification and expansion of the state of emergency concerning Puerto Rico's electric system, including—but not limited to—the transmission and distribution system, as well as the generation system and the auxiliary infrastructure required to operate Puerto Rico's electric system in a reliable and affordable manner and in compliance with applicable laws, including environmental regulations. This declaration also seeks to modernize and strengthen the system in line with our current times and circumstances."

On April 4, 2025, a PREB hearing examiner filed a Consolidated Investigation report in the PREB docket regarding two investigations of significant power outages that occurred in Puerto Rico in June 2024 which highlighting the large number of annual electric service

⁴ A. Nassif, "Managing distribution resources: the LUMA perspective" (23PESGM4426), IEEE PES General Meeting 2023.

⁵ Technical information provided by LUMA to DOE via email on May 14, 2025.

⁶ Metro Puerto Rico, Informe preliminar revela causa del apagón de miércoles santo (Apr. 18, 2025), <https://www.metro.pr/noticias/2025/04/18/informe-preliminar-revela-causa-del-apagon-de-miercoles-santo> (Accessed May 12, 2025).

grid interruptions and outages the Puerto Rico grid is experiencing. The report also notes the underlying causes of such interruptions which include vulnerability to severe weather events, lack of vegetation management, and aged/faulty equipment like poles, interrupters, cables, insulators and transformers, among others.⁷

Given the emergency nature of the expected load stress, the responsibility of the Puerto Rico Electric Power Authority (PREPA) to ensure maximum reliability on its system, and the ability of PREPA to ensure the operational availability of transmission facilities to meet load requirements, I have determined that, under the conditions specified below, the operational availability of the Specified Transmission Facilities, as described in the attachment “Order No. 202-25-2 Specified Transmission Resources,” is necessary to best meet the emergency and serve the public interest for purposes of FPA section 202(c).

FPA section 202(c) requires the Secretary of Energy to ensure that any 202(c) order that may result in a conflict with a requirement of any environmental law be limited to the “hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable,” be consistent with any applicable environmental law and minimize any adverse environmental impacts. Anticipated circumstances precipitated by the expected load stress and electricity shortages may necessitate the transmission of electric energy via the Specified Transmission Facilities.

To minimize adverse environmental impacts, this Order is limited to the Specified Transmission Facilities units and the parameters determined by PREPA for reliability purposes.

Order

Based on my determination of an emergency set forth above, I hereby order:

From May 16, 2025 to August 14, 2025, PREPA is directed to perform vegetation management, including vegetation clearing to re-establish a right-of-way, to ensure operational availability of the Specified Transmission Facilities.

PREPA is directed to provide the parameters outlined above to the Department upon implementation, and to report data on all improvements to transmission line ratings and completion of vegetation management activities at the Specified Transmission Facilities by August 15, 2025, or the date upon which a renewal request is submitted, whichever occurs first.

⁷ Puerto Rico Public Service Regulatory Board (PSRB), Consolidated Investigation Report, PSRB Case Nos. NEPR-IN-2024-002, NEPR-IN-2024-003 (Apr. 4, 2025), <https://energia.pr.gov/wp-content/uploads/sites/7/2025/04/20250405-IN20240002-0003-CONSOLIDATED-INVESTIGATION-REPORT.pdf>.

The Specified Transmission Facilities are limited to only those necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable, is consistent with any applicable Federal, State, or local environmental law or regulation and minimizes any adverse environmental impacts.

Renewal of this Order, should it be needed, must be requested prior to its expiration. If the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before this Order expires.

Issued in Washington, D.C. at 2:24pm Eastern Daylight Time on this 16th day of May 2025.



Chris Wright
Secretary of Energy

Attachment:

Order No. 202-25-2 Specified Transmission Resources

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Transmission Facilities	
Voltage (kV)	Line Identification
230	50900
230	50300
230	51300
230	50700
230	50200
230	51000
230	50500
230	50100
230	50400
230	51100
230	51200
230	50600
230	50800
115	37200
115	39100
115	41200
115	36800
115	37400
115	36200
115	40300
115	39000
115	36400
115	36900
115	38200
115	36100
115	36300
115	39800
115	38300
115	38900
115	36500
115	37800
115	37000
115	42000
115	40400
115	38400

115	38500
115	38600
115	38700
115	38800
115	37500
115	38100
115	36600
115	36700
115	41400
115	37100
115	41300
115	40200
115	40100
115	37300
115	37700
115	39700
115	37600
115	39900
115	41000
115	39600
115	40800
115	40900
115	37900
115	38000
115	41500
115	41100
115	50800
115	41600
115	41700
115	40500
115	40600
115	41800
115	39500
115	42100
115	39300
115	39400
115	40000
115	39200
115	42400
115	4402
115	40700

115	42500
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