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UNITED STATES DEPARTMENT OF
HOUSING AND URBAN DEVELOPMENT

Status of Puerto Rico Electrical System Enhancements Efforts

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Executive Summary

The U.S. Department of Housing and Urban Development (HUD), Office of Inspector General (OIG) reviewed the Puerto Rico Department of Housing's (PRDOH) Electrical Power System Enhancements and Improvements programs to provide (1) background and funding information, (2) an update on the status of the programs and their progress, and (3) other relevant program information for interested stakeholders including Congress and the public.

In June 2021, HUD allocated \$2 billion in Community Development Block Grant-Disaster Recovery (CDBG-DR) funds for enhanced and improved electrical power systems in areas impacted by Hurricanes Irma and Maria. HUD provided nearly 97 percent (\$1.93 billion) of the disaster recovery funds to Puerto Rico. The Governor of Puerto Rico designated PRDOH as the agency responsible for administering disaster recovery and mitigation program funds. PRDOH budgeted most of its \$1.93 billion disaster recovery funds for its two main electrical grid programs: (1) \$500 million for the Energy Grid Rehabilitation and Reconstruction Cost Share Program (ER1), and (2) \$1.3 billion for the Electrical Power Reliability and Resilience Program (ER2).

PRDOH launched ER1 on October 26, 2023, along with its program guidelines. PRDOH is coordinating its efforts with the Central Office for Recovery, Reconstruction, and Resilience¹ (COR3) and the Puerto Rico Electric Power Authority (PREPA). The purpose of this collaboration is to receive information for the projects currently obligated and those under Federal Emergency Management Agency evaluation to help finalize project selection decisions. Additionally, PRDOH and PREPA signed a subrecipient agreement on March 1, 2024.

For ER2, PRDOH published two program guidelines: one for the strategic (\$325 million) and competitive (\$730 million) projects, and one for the set-aside program that will provide energy resilience to small and medium-size businesses (\$30 million). This represents 25 percent, 55 percent, and 2 percent of the ER2 program budget, respectively. Furthermore, PRDOH is currently selecting projects for its competitive program, and it expects to award funding by the end of 2024.

As of July 12, 2024, PRDOH has spent nearly \$180,000 overall, which is less than 1 percent of its total budget. PRDOH requested from HUD an extension to use grant funds for both projects until May 2033, which is nearly 5 years after the original August 2028 deadline and 15 years after Congress appropriated funds for electrical grid needs in Puerto Rico.

As part of our ongoing strategic planning, we will periodically evaluate the status of both the ER1 and ER2 programs to determine how far along they are with their respective timelines, any challenges encountered, and any significant risks that may warrant additional work by HUD OIG.

¹ The Government of Puerto Rico created the Central Office for Recovery, Reconstruction, and Resiliency by Executive Order OE-2017-65 to ensure that Puerto Rico successfully undertakes reconstruction efforts with efficiency, effectiveness, and transparency, while capitalizing on opportunities to build back in a way that makes Puerto Rico better, stronger, and more resilient.

Background

In September 2017, Hurricanes Irma and Maria struck Puerto Rico. The impact of the hurricanes on the power system was devastating and led to the longest sustained blackout in modern U.S. history. More than 6 years after the hurricanes struck Puerto Rico, the island's unreliable power grid continues to negatively impact residents. Power outages are common and unpredictable, electricity prices continue to rise, and rolling blackouts due to insufficient generation have been frequent. The Puerto Rico Department of Housing (PRDOH) states that energy remains the single most comprehensive and critical factor to the future of the island.

Puerto Rico and U.S. Government agencies have conducted extensive electrical power system studies. These studies include the Puerto Rico Electric Power Authority (PREPA) 10 Year Infrastructure Plan, the Grid Modernization Plan for Puerto Rico conducted by the Central Office for Recovery, Reconstruction and Resiliency (COR3), the 2021 Fiscal Plan for PREPA as Certified by the Financial Oversight and Management Board for Puerto Rico, and key studies by the U.S. Department of Energy. According to PRDOH, it seeks to adjust critical findings from these reports to identify the remaining unmet need for communities that stand vulnerable to the impacts of power insecurity and to discern resilience opportunities for long-term system enhancement for the benefit of all residents.

In addition, the U.S. Department of Energy, the U.S. Department of Homeland Security (DHS), HUD, and the Government of Puerto Rico executed a memorandum of understanding (MOU)² to engage the parties together in the pursuit of a resilient, sustainable, and equitable energy grid for the citizens of Puerto Rico. The MOU intends to provide a framework for collaboration to ensure that Puerto Rico has the capabilities, tools, and resources needed to capitalize on opportunities. This MOU stipulates specific roles and responsibilities for all parties. For HUD, these roles and responsibilities include: (1) working with PRDOH to maximize funding flexibilities to enhance and improve electrical power systems; (2) supporting Puerto Rico's HUD-funded disaster recovery and mitigation activities; (3) when appropriations permit, providing technical assistance to PRDOH and its subrecipients; and (4) collaborating with the MOU parties on a public engagement plan to enhance transparency, build trust, and address public concerns.

The Government of Puerto Rico named PRDOH as the entity responsible for administering the electrical power system enhancements grant funds. PRDOH uses its HUD funding³ to support a portfolio of programs that may serve to provide energy and infrastructure resilience in various ways to address the needs of citizens of Puerto Rico at different scales. Our review focused on the \$1.93 billion Electrical Systems Improvements allocation.

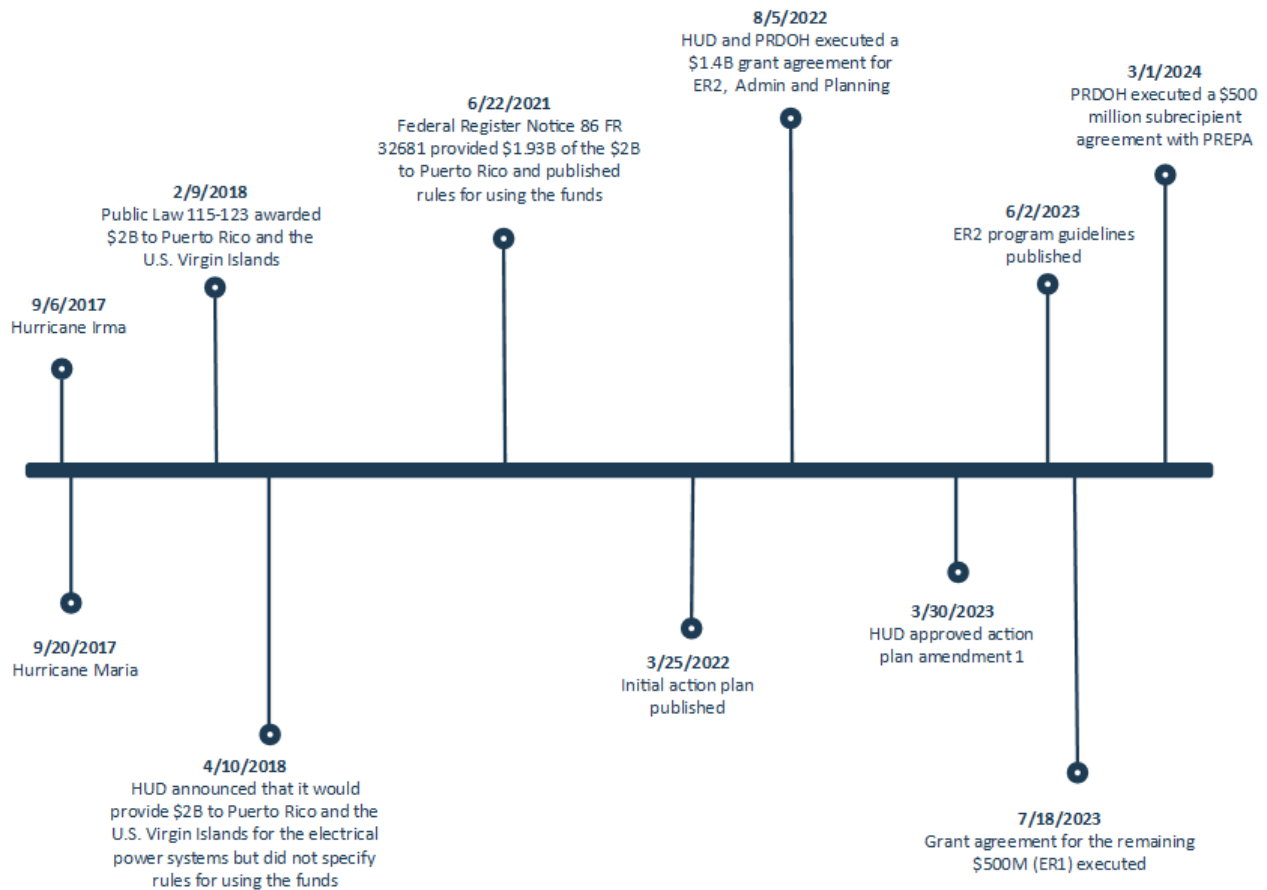
² [MOU - DOE-DHS-HUD-Puerto Rico.pdf \(energy.gov\)](#)

³ This funding includes supplemental CDBG-DR funding to respond to presidentially declared disasters, PRDOH's \$1.93 billion disaster recovery funding specifically for electrical power system enhancements and improvements to respond to Hurricanes Irma and Maria. It also includes Puerto Rico's mitigation funding, which may be used for electrical power system enhancements in limited circumstances.

Timeline

Below is a graphic representation of key Grid Rehabilitation and Reconstruction Cost Share Program (ER1) and Electrical Power Reliability and Resilience Program (ER2) milestone events.

Graphic 1: Timeline of Events of Puerto Rico Electrical System Enhancements Efforts



To compile this report, we (1) requested and reviewed documents, plans, and reports related to the Puerto Rico electrical system improvement efforts; (2) reviewed HUD’s Disaster Recovery Grant Reporting (DRGR) System data; and (3) interviewed select HUD and PRDOH officials. We conducted our review in accordance with the Council of the Inspectors General on Integrity and Efficiency’s Quality Standards for Federal Offices of Inspector General. We provided a draft of this report to HUD and PRDOH for their review. We considered their feedback and made minor revisions accordingly.

Budgets and Disbursements

HUD required PRDOH to submit an action plan identifying the proposed use of its electrical power system grant funds.⁴ In addition, it requires PRDOH to amend its action plan if it intends to update its electrical power system needs assessment; modify or create new activities; or reprogram funds. In its action plan, amendment 2, approved by HUD on April 11, 2024, PRDOH budgeted \$1.93 billion for the electrical grid. Specifically, it allocated most of its grant funds to two projects discussed in detail below: (1) the Energy Grid Rehabilitation and Reconstruction (ER1) Cost Share Program, and (2) the Electrical Power Reliability and Resilience Program (ER2). PRDOH also allocated funds for administrative and planning purposes. According to HUD’s DRGR System,⁵ as of July 12, 2024, PRDOH had disbursed less than 1 percent (just under \$180,000) of its grant funds for grid related work. The table below provides specific amounts for each budgeted activity, disbursed amounts, and respective percentages.

Table: Funding for PRDOH’s ER1 and ER2 Programs as of July 12, 2024

Activity	Budget	Percentage of budget	Disbursements	Percentage disbursed*
Energy Grid Rehabilitation and Reconstruction (ER1) Cost Share Program	\$500,000,000	25.88%	\$0	0%
Electrical Power Reliability and Resilience Program (ER2)	1,316,406,180	68.12%	104,084	0.008%
Administrative Budget	96,617,350	5.00%	63,120	0.065%
Planning	19,323,470	1.00%	12,556	0.065%
Total	1,932,347,000	100%	179,760	0.009%

* The percentages disbursed are for individual line items in each activity category.

PRDOH’s Ongoing Electrical Grid Efforts

Details for PRDOH’s two main programs to enhance the electrical grid – ER1 and ER2 – include the following:

ER1 (Energy Grid Rehabilitation and Reconstruction Cost Share Program)

Budget: \$500 Million

Amount Spent as of July 12, 2024: \$0

Summary:

HUD allows grantees to use their disaster recovery funds to fulfill all or a portion of the non-Federal cost-share match requirements of the Federal Emergency Management Agency’s (FEMA) Public Assistance

⁴ Federal Register Vol. 86, No. 117 (June 22, 2021), 86 FR 32681

⁵ The Disaster Recovery Grant Reporting (DRGR) System was developed by HUD’s Office of Community Planning and Development for the CDBG Disaster Recovery (CDBG-DR) program. The DRGR System is primarily used by grantees to access grant funds and report performance accomplishments for grant-funded activities. The DRGR System is used by HUD staff to review grant-funded activities, prepare reports to Congress and other interested parties, and monitor program compliance.

program. ER1 is designed to meet the 10 percent non-Federal cost-share match for FEMA's unprecedented \$10.5 billion⁶ Public Assistance allocation for Puerto Rico Electric Power Authority's (PREPA) island-wide FEMA Accelerated Award Strategy (FAASt) Project. Eligible projects for ER1 will be those that were determined to be eligible under FEMA or the Federal agency acting as the primary source of funding to participate in the program. PRDOH will work closely with the Central Office for Recovery, Reconstruction and Resiliency (COR3) and other governmental agencies and applicants that are FEMA program subrecipients to provide its non-Federal cost share match.

Status as of July 2024:

- PRDOH launched ER1 on October 26, 2023. PRDOH is working with COR3 and PREPA to receive information for projects currently obligated, under FEMA evaluation, or both. Analysis of this information will help finalize project selection decisions. Results of these decisions are expected to be incorporated into the ER1 project selection standard operating procedures.
- PRDOH developed the HUD Compliance Geographic Information System (GIS) Tool to document the ER1 methodology used for project selection.
- PRDOH approved and published ER1 program guidelines on October 26, 2023.
- In January 2024, COR3 decided to no longer pursue the Global Flexible Match⁷ Approach. PRDOH will pay the 10 percent non-Federal cost match.
- PRDOH executed a subrecipient agreement with PREPA for \$500 million on March 1, 2024.
- On April 10, 2024, PRDOH sent a letter to COR3 requesting a reconsideration of their determination regarding the Global Flexible Match Approach.
- On April 26, 2024, PRDOH sent a letter to LUMA⁸ and Genera PR⁹ requesting to finalize the Project Prioritization Strategy with PREPA.
- On May 21, 2024, PREPA submitted a potential project list that included 14 project worksheets (PWs).¹⁰ The estimated cost share was \$65.95 million.
- On June 14, 2024, PRDOH completed preliminary project eligibility reports for the submitted projects. PRDOH further stated preliminary projects include (1) transmission and distribution, and (2) electricity generation as part of FEMA's FAASt strategy.

Plans Moving Forward:

As of July 2024, PRDOH had provided its forecasts for ER1. Plans moving forward include the following:

- By the end of the 3rd Quarter of 2024, PRDOH expects to complete Project Worksheets and Requests for Reimbursement (RFR) evaluations and prepare its first PREPA invoice. FEMA will

⁶ As of April 11, 2024

⁷ The flexible match approach seeks to streamline the cost share match process by selecting specific projects within an overall project worksheet. PRDOH may choose to fund the 100 percent of costs for specifically selected projects with CDBG-DR match, up to the total corresponding cost share amount for the entirety of the PW, and/or up to the committed available cost share amount.

⁸ LUMA Energy, LLC is the operator of the transmission and distribution grid.

⁹ Genera PR, LLC is the power and energy service provider.

¹⁰ A project worksheet is the form used to document the scope of work and cost estimate for a project. This form supplies FEMA with the information necessary to approve the scope of work and itemized cost estimate before funding. Each project must be documented on a separate project worksheet.

fund 90% of the energy grid project, while PRDOH, using disaster recovery ER1 funds, will fund the remaining 10%.

- By the end of the 4th Quarter of 2024, PRDOH expects to complete evaluation of additional projects identified by PREPA.
- PRDOH published a request for proposals to contract with a program manager for ER1 and is evaluating proposals.
- The grant's end date is currently August 5, 2028. PRDOH requested an extension to use grant funding until May 12, 2033.

ER2 (Energy Power Reliability and Resilience Program)

Budget: \$1.3 Billion

Amount Spent as of July 12, 2024: \$104,084

Summary:

ER2's objective is to enhance electric system reliability, affordability, and resiliency through the development and interconnection of projects that qualify as electric system enhancements or improvements. ER2 will serve the needs of communities by funding projects that are not currently anticipated to be funded from other Federal or local sources. The program's design will be carried out through the development and interconnection of microgrids and distributed energy resources, including renewable energy generation, combined heat and power systems, and battery energy storage systems, among other eligible project types. To be eligible to receive funds under ER2, applicants or subrecipients must be one of the following types of entities:

- Government of Puerto Rico agency, authority, trust, or board (undertaking projects to support electrical power system improvements);
- Unit of general local government (municipal governments);
- Public-private partnership as defined by Act 29-2009, as amended, known as "Public-Private Partnership Act";
- For-profit business;
- Public Hospital and Health System Entity; or
- Non-Governmental Organization or Not-for-Profit Entity that meets the capacity and experience requirements.

Status as of July 2024:

- On February 3, 2023, PRDOH executed a subrecipient agreement with the Puerto Rico Medical Services Administration to initiate the first project under the strategically selected projects portion of ER2. The project is the Centro Médico Microgrid (Medical Center Microgrid or CMM for its acronym in Spanish), with \$250 million expected to go towards the project.
- On June 2, 2023, PRDOH published ER2 guidelines.
- On August 15, 2023, PRDOH launched the competitively selected projects portion of ER2, opening it for applications, with \$230 million assigned.
- On August 21, 2023, PRDOH executed a program manager contract with Innovative Emergency Management, Inc. to assist with the implementation and administration of the ER2 Program.

- On November 28, 2023, PRDOH published the program guidelines for the Energy Support Incentive Program 2.0 Set-Aside. This set-aside provides \$30 million to the Department of Economic Development and Commerce (DDEC for its acronym in Spanish) and establishes the Department as a subrecipient. In turn, DDEC’s program will provide energy resilience to Puerto Rico’s small and medium-size businesses.
- In February 2024, PRDOH cancelled the original CMM RFP because out of the two proposals received, one proponent was disqualified for not meeting the bid bond requirements and the other was found to be financially and technically unfeasible. PRDOH is currently working on the specifications of the new RFP and integrating technical data that it now possesses. The new RFP process is forecasted to start at the beginning of the 4th Quarter of 2024, with an expected award date during the 3rd Quarter of 2025. In addition, PRDOH increased the CMM’s budget by \$75 million, from \$250 million to \$325 million, which is a 30 percent increase.
- During the 2nd Quarter of 2024, DDEC worked on the supplier registration and application period for their Energy Support and Incentive Program.
- PRDOH’s ER2 forecast showed a reduction in its budget of \$40 million, from \$1.125 billion to \$1.085 billion, or a 4 percent decrease.

Plans moving forward:

As of July 2024,¹¹ PRDOH had provided its forecasts for ER2. Plans moving forward include the following:

- The competitive projects program application period ended on January 30, 2024. Project selection and award will occur from the second to fourth quarters of calendar year 2024. On August 5, 2024, PRDOH announced 20 projects¹² for ER2. These projects included centralized energy generation, distributed energy resources and microgrids. In addition, PRDOH expects the implementation of the competitive projects to start in the 1st Quarter of 2025.
- PRDOH stated that it received proposals from both public and private entities and is completing the pre-eligibility reviews. It expected to notify pre-eligible proponents before the end of July 2024.
- PRDOH forecasts that it will finalize the remaining strategic projects selection by the end of the first quarter of 2025.
- The strategic projects are projected to be focused on the CMM and Energy Support Program, DDEC’s Energy Incentive Program. In a February 2024 update to HUD OIG, PRDOH provided a forecast showing that it allocated \$645 million to the strategic projects and \$230 million to the competitive projects. In July 2024, PRDOH updated its forecast to show that it shifted most of the allocated funding from the strategic projects (from \$645 million to \$355 million¹³) to the competitive projects (from \$230 to \$730 million).
- The grant’s end date is currently August 5, 2028. PRDOH requested an extension to use grant funding until May 12, 2033.

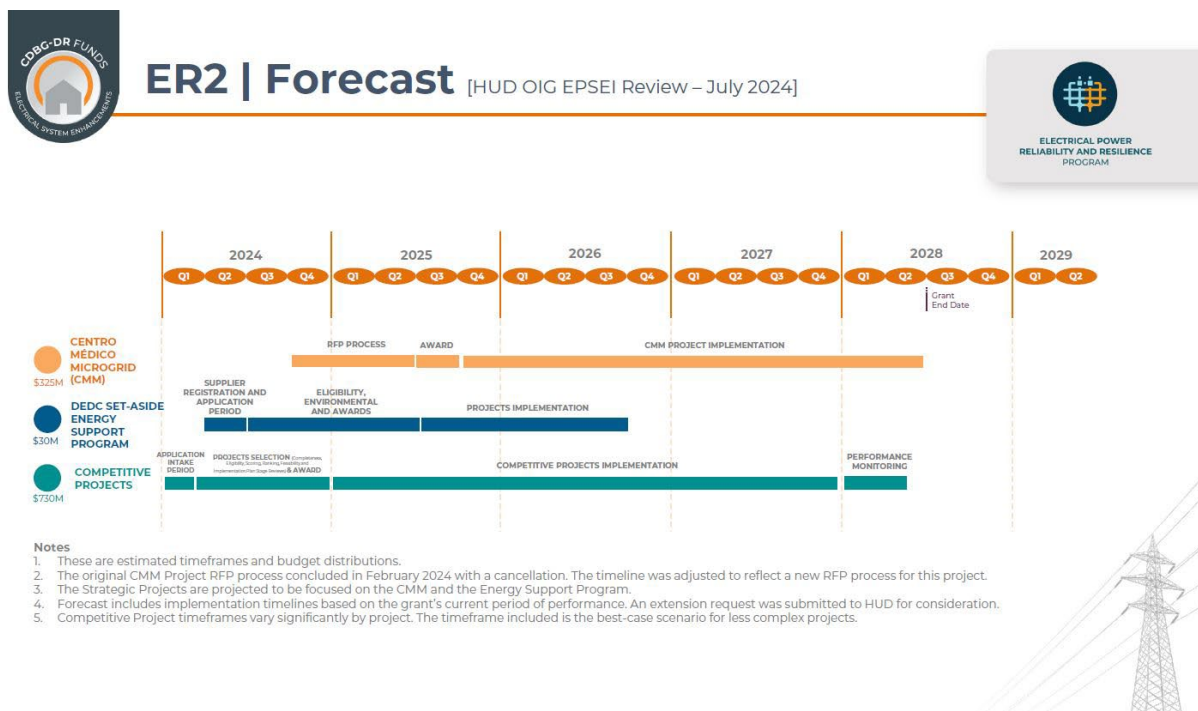
¹¹ All plans are as of July 2024, except for the August 5, 2024, announcement. For transparency purposes, we included all information available to HUD OIG before issuing this report.

¹² For these 20 projects, the types of entities selected were 15 private for-profit entities, 1 private not-for-profit entity, 3 municipalities, and 1 non-governmental organization.

¹³ For the strategic projects, PRDOH allocated \$325 million for the CMM project and \$30 million for the Energy Support Program.

PRDOH provided the following graphic to visualize the status of the projects discussed above:

Graphic 2: PRDOH’s ER2 Forecasts as of July 2024



Conclusion

PRDOH launched both the ER1 and ER2 electrical grid programs in 2023, and both programs are in their early implementation stages. In addition, as of July 12, 2024, PRDOH had spent less than 1 percent of its total budget for both programs (\$179,760 of \$1.93 billion). For ER1, PRDOH is working with its partners, Central Office for Recovery, Reconstruction, and Resilience (COR3) and the Puerto Rico Electric Power Authority (PREPA). Further, PRDOH signed a subrecipient agreement with PREPA obligating \$500 million. For ER2, PRDOH opened and closed its competitive application process and expects to award funds by the end of 2024. PRDOH announced 20 projects for ER2 on August 5, 2024, and expects to finalize the selection and award of the remaining strategic projects by the end of the first quarter of 2025. In addition, PRDOH requested from HUD an extension to use grant funds for both programs until May 2033, which is nearly 5 years after the original August 2028 deadline and 15 years after Congress appropriated funds for electrical grid needs in Puerto Rico. As part of our ongoing strategic planning, we will periodically evaluate the status of both ER1 and ER2 to determine how far along they are with their respective timelines, challenges encountered, and significant risks that may warrant additional work by HUD OIG.