Grantee: Puerto Rico

Grant: B-18-DE-72-0001

July 1, 2024 thru September 30, 2024 Performance

Obligation Date:

08/05/2028

Active

\$0.00

Grant Status:

Contract End Date:

Estimated PI/RL Funds:

Grant	Number:
B-18-DE	E-72-0001

Grantee Name: Puerto Rico

Grant Award Amount: \$1,932,347,000.00

LOCCS Authorized Amount: \$1,932,347,000.00

Total Budget: \$1,932,347,000.00

Disasters:

Declaration Number

FEMA-4339-PR

Narratives

Disaster Damage:

More than four (4) years have passed since Hurricanes Irma and María struck Puerto Rico in September of 2017. However, the impact on the power grid remains ever present in the daily lives of Island residents. Power outages are common and unpredictable, electricity prices continue to rise, and rolling blackouts due to insufficient generation have been common. The impact of the hurricanes on the power system was devastating and led to the longest sustained blackout in modern United States (U.S.) history. Without power, residents were unable to gain access to healthcare, communication, refrigeration, water, cooling, and security. With sustained systemic insecurity, residents continue to feel many of the same impacts, economic recovery is hampered, and the cycle of recovery cannot be completed. Energy remains the single most comprehensive and critical factor to the future of the Island.

The Electrical Power System Enhancements and Improvements Action Plan is not a specialized blueprint on the components of the electrical power system in need of repairs. Several extensive studies have already been conducted by Puerto Rico and U.S. governmental agencies, including 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 (DOE). This Action Plan seeks to adjust critical findings from these reports and identify the remaining unmet need for communities that stand vulnerable to the impacts of power insecurity. It aims to discern resilience opportunities for long-term system enhancement for the benefit of all residents.

Electrical Power System Recovery Needs:

Hurricanes Irma and María devastated 80% of the Islands' electric power system. Therefore, the initial immediate recovery process was implemented in such a way as to provide electric service to the people of the Islands in the fastest possible way. This meant that expediency reigned instead of the deep reconstructive approach that would have taken much longer and for which funding and resources were not immediately available. Because of this, the people of Puerto Rico face a lack of continuity of electric power service in great part due to the system's weakness. The need for permanent solutions to ensure system resiliency and sustainability must be a priority moving forward.

system resiliency and sustainability must be a priority moving forward. The U.S. Department of Energy aptly points out, "[m]aintaining and enhancing the resilience of the electric grid at fair and reasonable costs can provide service and value to Puerto Rican communities. Yet, no single investment in energy infrastructure at one point in time will achieve resilience." (Emphasis added) One of the goals set by PRDOH is to maximize the appropriated use of CDBG-DR Program funds, which will result in the coordination and engagement of governmental and non-governmental stakeholders to successfully detail and identify unmet needs. PRDOH has developed the Electrical System Enhancements and Improvement Programs founded on the allocation

PRDOH has developed the Electrical System Enhancements and Improvement Programs founded on the allocation requirements as well as identified unmet needs. Along with incorporating input from disaster-impacted municipalities, utilities, and other stakeholders.

HUD defines an electrical power system in a broad way. Bringing together the many components that contribute to the proper operation of the grid, including physical assets for generation, transmission, and distribution, as well as technological and administrative components. Specifically, the definition is stated in 86 FR 32681, 32692: "An electrical power system shall be defined as an interconnected or autonomous set of transmission lines, distribution lines,

"An electrical power system shall be defined as an interconnected or autonomous set of transmission lines, distribution lines, substations, central power generation stations, other sources of power, distributed energy resources, or enabling technologies and services, such as industry standard billing, accounting information technology, cybersecurity enhancements, microgrids and fuel transfer delivery systems, that are necessary for the provision of reliable, resilient, stable, and cost effective electrical service."

The main objective of the CDBG-DR Program is to support the economic and social development of Puerto Rico's communities, providing quality of life, safety, security, and growth opportunities for the future of all residents. The availability of CDBG-DR funds provides a unique opportunity to improve quality of life on the Island and strengthen the economy through electric power system enhancements. Lessons learned from the catastrophic events of Irma and María will

Award Date:

Review by HUD: Submitted - Await for Review

QPR Contact: No QPR Contact Found



give Puerto Rico the choice to be more resilient, more robust, wiser, and to rise in a sustainable manner. The state of emergency caused by Hurricanes Irma and María is felt every day and still very present in Puerto Rico. The current condition of the electrical power system is critical. Without the implementation of transformative mitigation and resilience phases, the system will remain extremely weak and susceptible to collapse from any future major event, in which vulnerable communities will suffer the most, once again. Every community in Puerto Rico deserves to enjoy a strong, reliable, and resilient electrical power system thatensures the tranquility of the people and a better quality of life for its residents.

Overall	This Report Period	To Date
Total Projected Budget from All Sources	\$0.00	\$1,932,347,000.00
Total Budget	\$0.00	\$1,932,347,000.00
Total Obligated	\$5,261,467.99	\$548,025,065.94
Total Funds Drawdown	\$1,187,922.46	\$3,592,528.23
Program Funds Drawdown	\$1,187,922.46	\$3,592,528.23
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$1,187,922.46	\$3,592,528.23
HUD Identified Most Impacted and Distressed	\$1,147,562.19	\$3,427,059.25
Other Funds	\$ 0.00	\$ 0.00
Match Funds	\$ 0.00	\$ 0.00
Non-Match Funds	\$ 0.00	\$ 0.00
Funds Expended		
Overall	This Period	To Date

Overall This Period To Date \$ 1,187,922,46 \$ 3,592,528,23 Puerto Rico Department of Housing

Progress Toward Required Numeric Targets

Requirement	Target	Projected	Actual
Overall Benefit Percentage	70.00%	70.00%	.17%
Overall Benefit Amount	\$1,271,484,326.00	\$1,271,484,326.00	\$3,038,694.79
Limit on Public Services	\$289,852,050.00	\$.00	\$.00
Limit on Admin/Planning	\$386,469,400.00	\$115,940,820.00	\$165,468.98
Limit on Admin	\$96,617,350.00	\$96,617,350.00	\$152,219.85
Most Impacted and Distressed	\$1,932,347,000.00	\$1,932,347,000.00	\$3,427,059.25

Overall Progress Narrative:

During the reporting period, the Puerto Rico Department of Housing (PRDOH) continued with the implementation of both the ER1 and ER2 Programs. Under ER1, coordination continued with COR3 and FEMA on the review and selection of projects. Under ER2, planning and implementation continued for strategic projects such as the Centro Medico Microgrid and the Department of Economic Development and Commerceâ*iis* Energy Support Program, while ER2 Competitive Application reviews for project eligibility and pre-selection were completed and determinations made and communicated to applicants.

ER1 And ER 2 Section 3 Activity Summary The electrical power system improvements take the definition from 86 FR 32681, 32692, as the acquisition, construction, reconstruction, rehabilitation or installation of facilities, improvements, or other components that are undertaken to extend, upgrade, and otherwise enhance and improve the cost-effectiveness, reliability, efficiency, sustainability, or long-term financial viability of the granteeâics electrical power system, including activities to increase the resilience of the electrical power system to future disasters and to address the impacts of climate change. This definition includes interim assistance and financing public or private acquisition for reconstruction or rehabilitation, and reconstruction or rehabilitation, of privately-owned property.

The PRDOH continues working to ensure the implementation of Section 3 for all the federal allocations of funding including the Electrical Systems Enhancements and Improvements programs which can be found here on the PRDOH website. The PRDOH program and compliance teams have discussed policy applicability, promoted training and awareness and engaged entities identified in the electrical systems enhancements and improvements action plan and signed agreements to date. Program provided orientations during this past quarter to share programmatic information on Section 3 and other compliance areas for planning purposes as they gear up for future awards. Planning processes are typical to disaster recovery, where initial project concepts, design of program, stakeholder

engagements, and program implementation planning occurs before there is project specific planning and project specific design phases. These then lead to bidding and procurement process and completes with the actual construction activities



breaking ground. Due to this lifecycle of federally funded capital projects, Section 3 federal reporting in DRGR for this funding stream will not show high data results for a number of reporting periods until actual construction activity begins. During Q3-2024 we continue to see planning and program implementation activities prior to construction, as ER1 and ER2 are predominantly working through their planning phases to complete application and eligibility processes, project selection and administering entities. Specifically in the ER 1 program, the programs are working through their selection process with the entities COR 3 and PREPA to review and qualify projects. For the ER 2 Program the program is working through their plans prior to final selection and award. These are all phases within planning and pre- construction; therefore, no construction activity is being generated or identifiable at this time. We anticipate that future quarters that contain updates post planning phases and post procurement processes can identify contractors and data for actual construction costs where additional insights can be drawn for Section 3 purposes.

We continue to see two agreements for the Electrical Power Reliability and Resilience Program: DDEC receiving \$30million, ASEM receiving \$1.325 million. No agreements for the Farm and Energy Resilience Program, none for the Energy Grid Rehabilitation and Reconstruction Cost Share Program.

The PRDOH team continues making templates and tools available for subrecipient or direct contract execution that will include the Section 3 clauses and language that will obligate contractors and/or subrecipients to comply with Section 3 benchmarks and efforts. PRDOH also has in place a structure to meet the requirements for providing training through established learning platforms and a team that is ready to provide training and technical support when appropriate. In previous conversations, PRDOH has provided feedback to HUD on the difficulty for subrecipients and contractors to differentiate Section 3 data by national objective for activities. In our conversations with HUD representatives, we arrived at a mutual understanding regarding the difficulty of tracking national objectives within Section 3 reporting. For this reason, our final data included within the LMI and UN categories for provide key program support to all subrecipients and contractors and works with our procurement team to participate in pre-submission sessions to provide awareness of Section 3 compliance. The team also aids the procurement team in providing preference considerations for Section 3 Businesses in procurement processes and providing support in committee evaluations.

PRDOH staff developed and makes available public resources via the webpage to provide guidance on the implementation of the 24 CFR 75, performed review of department procedures to align workload for new team members, updates to training curriculums and assessment of programmatic progress. Our compliance team currently has a structure and procedures in place for Section 3 data quarterly reporting and makes templates available online for documenting efforts. Additionally, our team provides training sessions prior to the quarterly reporting period to provide guidance and assist existing contractors and subrecipients on Section 3 reporting.

and subrecipients on Section 3 reporting. PRDOH periodically hosts Self Certification events at Public Housing Complexes throughout the island. These events are known as Palâ¿Residencial. We have collected over 1,020 Self Certifications for Section 3 candidates from these events and make these listings available to contractors and subrecipients upon request. To date, we have impacted 61 public housing projects with this initiative. The PRDOH team will implement additional tools to identify and connect Section 3 identified workers from previous Palâ¿? Residencial events to future construction projects.

workers from previous Palâ*i* Residencial events to future construction projects. The PRDOH compliance team also partners with the PRDOH Human Resources Division for new hire onboardings, where orientation is provided on Section 3 and reinforces PRDOHâ*i* is commitment to offering new employment opportunities.

Project Summary

Project #, Project Title	This Report	To Da	te
	Program Funds Drawdown	Project Funds Budgeted	Program Funds Drawdown
9999, Restricted Balance	\$0.00	\$0.00	\$0.00
Administrative B-18-DE-72-0001, Energy Program	\$39,829.83	\$96,617,350.00	\$152,219.85
Infrastructure ER1 B-18-DE-72-0001, Infrastructure Energy	\$0.00	\$500,000,000.00	\$0.00
Infrastructure ER2 B-18-DE-72-0001, Infrastructure Energy	\$1,147,562.19	\$1,316,406,180.00	\$3,427,059.25
Planning B-18-DE-72-0001, Energy Program Planning	\$530.44	\$19,323,470.00	\$13,249.13

Activities

Project # /

Administrative B-18-DE-72-0001 / Energy Program



Grantee Activity Number: ESP-ADMDOH-NA Activity Title: Energy Program Administration

Activity Type:	Activity Status:
Administration	Under Way
Project Number:	Project Title:
Administrative B-18-DE-72-0001	Energy Program Administration
Projected Start Date:	Projected End Date:
08/05/2022	08/05/2028
Benefit Type:	Completed Activity Actual End Date:
N/A	
National Objective:	Responsible Organization:
N/A	Puerto Rico Department of Housing

Overall	Jul 1 thru Sep 30, 2024	To Date
Total Projected Budget from All Sources	\$0.00	\$96,617,350.00
Total Budget	\$0.00	\$96,617,350.00
Total Obligated	\$728,302.40	\$881,172.99
Total Funds Drawdown	\$39,829.83	\$152,219.85
Program Funds Drawdown	\$39,829.83	\$152,219.85
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$39,829.83	\$152,219.85
Puerto Rico Department of Housing	\$39,829.83	\$152,219.85
Most Impacted and Distressed Expended	\$0.00	\$0.00

Activity Description:

PRDOH is the administrative entity responsible for administering CDBG-DR, CDBG-MIT, and CDBG-DR Energy funds as allocated by HUD.

Location Description:

The location of the personnel administrating this fund will be at the Puerto Rico Department of Housing located in San Juan, Puerto Rico.

Activity Progress Narrative:

During the reporting period, the contract for ER2 Program Management services continued with the implementation. The scope of work, responsibilities, and activities for the PM under this contract include the following high-level tasks as needed: • Overall program management and administration, including operational support, program and project management, document control and management, and accounting and reporting. • Project selection, including development/refinement of project selection criteria and methodology, technical assistance, application review and capacity assessment, financial evaluation, environmental review, and agreement execution. • Project implementation, including award management and scheduling, property acquisition monitoring and technical assistance, procurement monitoring, design development monitoring, permitting monitoring, environmental compliance monitoring, construction monitoring, commissioning and operations and maintenance (O&M) plan review, regulatory compliance monitoring, and review and recommendation of payment requests. • Administrative closeout to include both project-specific and overall programmatic closeout.

The primary activities conducted in this reporting period were overall program management and administration and project selection activities such as completion of reviews for application completeness, eligibility, and



scoring and ranking based on program prioritization criteria, and the communication of determinations to applicants and the pre-selection of projects to progress to the Feasibility Review phase. PRDOH's oversight plan for this contract as well as the ER1 Program is to continue to use established oversight and monitoring tools and resources as well as its Grant Management Team to conduct and monitor program administration activities and performance through close coordination and collaboration throughout the life of the grant and during each programs' phases.

Accomplishments Performance Measures

No Accomplishments Performance Measures

Beneficiaries Performance Measures

No Beneficiaries Performance Measures found.

Activity Locations

No Activity Locations found.

Other Funding Sources No Other Funding Sources Found

Other Funding Sources Budgeted - Detail

No Other Match Funding Sources Found

Activity Supporting Documents:

None

Project # / Infrastructure ER1 B-18-DE-72-0001 / Infrastructure Energy





Grantee Activity Number: ESP-IER1DOH-LMI Activity Title: Energy Grid Rehab and Recon ER1 LM

Activity Type:	Activity Status:
Electrical power system improvements	Planned
Project Number:	Project Title:
Infrastructure ER1 B-18-DE-72-0001	Infrastructure Energy Program ER1
Projected Start Date:	Projected End Date:
08/05/2022	08/05/2028
Benefit Type:	Completed Activity Actual End Date:
Area (Census)	
National Objective:	Responsible Organization:
Low/Mod	Puerto Rico Department of Housing

Overall	Jul 1 thru Sep 30, 2024	To Date
Total Projected Budget from All Sources	\$0.00	\$350,000,000.00
Total Budget	\$0.00	\$350,000,000.00
Total Obligated	\$0.00	\$350,000,000.00
Total Funds Drawdown	\$0.00	\$0.00
Program Funds Drawdown	\$0.00	\$0.00
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$0.00	\$0.00
Puerto Rico Department of Housing	\$0.00	\$0.00
Most Impacted and Distressed Expended	\$0.00	\$0.00

Activity Description:

The purpose of this program is to maximize the benefit of federal grant programs by positioning CDBG-DR as the ideal local match program to other federal funding streams. This approach will relieve the financial burden related to the recovery efforts of Puerto Rico's Electrical Grid and Puerto Rico's long-term infrastructure resilience needs. Through the matching of funding provided by other federal agencies, critical infrastructure needs will be addressed making the Island more adaptable to changing conditions and able to withstand and recover rapidly from disruptions caused by future disasters. At this time, most long-term reconstruction projects are still in preparation. As a result, the exact amount of CDBG-DR funds necessary to meet the entire universe of non-federal match requirements is still being assessed. PRDOH will collaborate with COR3 on long-term natural hazards resilience strategies and how infrastructure investments align with other planned Puerto Rican or local capital improvements.

Location Description:

Improvement of electrical power system throughout the island.

Activity Progress Narrative:

During the reporting period, the Puerto Rico Department of Housing (PRDOH), completed the Preliminary Project Eligibility Report for fifteen (15) projects received. Additionally, on September 18th PRDOH held coordination meeting with HUD to discuss PREPA projects and national objective compliance for the Program.



Accomplishments Performance Measures

No Accomplishments Performance Measures

Beneficiaries Performance Measures No Beneficiaries Performance Measures found.

Activity Locations

No Activity Locations found.

Other Funding Sources No Other Funding Sources Found

Other Funding Sources Budgeted - Detail

No Other Match Funding Sources Found

Activity Supporting Documents:

None





Grantee Activity Number: ESP-IER1DOH-UN Activity Title: Energy Grid Rehab and Recon ER1 UN

Activity Type:	Activity Status:
Electrical power system improvements	Planned
Project Number:	Project Title:
Infrastructure ER1 B-18-DE-72-0001	Infrastructure Energy Program ER1
Projected Start Date:	Projected End Date:
08/05/2022	08/05/2028
Benefit Type:	Completed Activity Actual End Date:
Area(Census)	
National Objective:	Responsible Organization:
Urgent Need	Puerto Rico Department of Housing

Overall	Jul 1 thru Sep 30, 2024	To Date
Total Projected Budget from All Sources	\$0.00	\$150,000,000.00
Total Budget	\$0.00	\$150,000,000.00
Total Obligated	\$0.00	\$150,000,000.00
Total Funds Drawdown	\$0.00	\$0.00
Program Funds Drawdown	\$0.00	\$0.00
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$0.00	\$0.00
Puerto Rico Department of Housing	\$0.00	\$0.00
Most Impacted and Distressed Expended	\$0.00	\$0.00

Activity Description:

The purpose of this program is to maximize the benefit of federal grant programs by positioning CDBG-DR as the ideal local match program to other federal funding streams. This approach will relieve the financial burden related to the recovery efforts of Puerto Rico's Electrical Grid and Puerto Rico's long-term infrastructure resilience needs. Through the matching of funding provided by other federal agencies, critical infrastructure needs will be addressed making the Island more adaptable to changing conditions and able to withstand and recover rapidly from disruptions caused by future disasters. At this time, most long-term reconstruction projects are still in preparation. As a result, the exact amount of CDBG-DR funds necessary to meet the entire universe of non-federal match requirements is still being assessed. PRDOH will collaborate with COR3 on long-term natural hazards resilience strategies and how infrastructure investments align with other planned Puerto Rican or local capital improvements.

Location Description:

Improvement of electrical power system throughout the island.

Activity Progress Narrative:

During the reporting period, the Puerto Rico Department of Housing (PRDOH), completed the Preliminary Project Eligibility Report for fifteen (15) projects received. Additionally, on September 18th PRDOH held coordination meeting with HUD to discuss PREPA projects and national objective compliance for the Program.



Accomplishments Performance Measures

No Accomplishments Performance Measures

Beneficiaries Performance Measures No Beneficiaries Performance Measures found.

Activity Locations

No Activity Locations found.

Other Funding Sources No Other Funding Sources Found

Other Funding Sources Budgeted - Detail

No Other Match Funding Sources Found

Activity Supporting Documents:

None

Project # / Infrastructure ER2 B-18-DE-72-0001 / Infrastructure Energy



Grantee Activity Number: ESP-IER2DOH-LMI Activity Title: Electric Power Resilience ER2 LM

Activity Type:

Electrical power system improvements **Project Number:** Infrastructure ER2 B-18-DE-72-0001 **Projected Start Date:** 08/05/2022 **Benefit Type:** Area (Census) **National Objective:**

Low/Mod

Activity Status:

Under Way **Project Title:** Infrastructure Energy Program ER2 **Projected End Date:** 08/05/2028 **Completed Activity Actual End Date:**

Responsible Organization:

Puerto Rico Department of Housing

Overall Total Projected Budget from All Sources	Jul 1 thru Sep 30, 2024 \$0.00	To Date \$921,484,326.00
Total Budget	\$0.00	\$921,484,326.00
Total Obligated	\$1,387,978.45	\$31,194,529.67
Total Funds Drawdown	\$1,126,225.90	\$3,038,694.79
Program Funds Drawdown	\$1,126,225.90	\$3,038,694.79
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$1,126,225.90	\$3,038,694.79
Puerto Rico Department of Housing	\$1,126,225.90	\$3,038,694.79
Most Impacted and Distressed Expended	\$1,126,225.90	\$3,038,694.79

Activity Description:

The Electrical Power Reliability and Resilience Program (ER2) provides assistance to applicants and subrecipients to create electrical system reliability and resilience. The program will serve the needs of communities by funding projects that are not currently anticipated to be funded from other federal or local sources. For construction activities, the awardee or subrecipient must agree to budget the operations and maintenance activities for the long-term sustainability of the electrical power system improvements. These multi-year budgets for operations and maintenance will apply for the useful life of the improvement or enhancement. Projects must demonstrate leverage, with the ER2 award consisting of not more than 60% of the proposed project cost, depending on the size and scale, and other factors of the project, as it will be outlined in the Program Guidelines. Publicly owned projects may receive an award up to 100% of the proposed project cost. Program funds will be provided for infrastructure and physical assets that qualify as Electrical Power System Improvements. Projects are encouraged to integrate energy assets and contribute to the diversification of energy resources. Projects pursued as Microgrids shall conform to the Microgrid Regulations, as approved by the Puerto Rico Energy Bureau (PREB).198 Projects will be evaluated to identify opportunities for alignment with efforts to increase energy efficiency. PRDOH anticipates that approximately 80% of projects funded under ER2 will qualify as Other sources of power, distributed energy, microgrids components. PRDOH understands the importance of proper land-use, so projects proposed as solar farms may only be allowed in accordance with permissible landuse, permits and applicable zoning regulations. PRDOH will seek opportunities to utilize brownfields and the built environment as per EPA guidance and recommendations. PRDOH may use procurement methods in accordance with PRDOH policies and procedures. Additionally, PRDOH may utilize direct and subrecipient selection methods in accordance with its policies and procedures and Program Guidelines. Eligible activities to be outlined in the Program Guidelines may include, but are not limited to, the range of eligible activities allowable under PREB microgrid and renewable energy regulations such as



renewable, hybrid, and combined heat and power (CHP) microgrids or mini-grids, and electric power based on solar energy to foster distributed power generation (DGs). Potential models may include business structures such as Community Solar, Energy Wheeling, Power Purchase and Operating Agreements (PPOA), Private Utility, or other business models approved by PREB. To strengthen coordination with other relevant governmental agencies of Puerto Rico, PRDOH may work closely with those relevant governmental agencies.

The ER2 Program allocation will be used for the following:

- *The strategic selection of eligible projects of public benefit selected by PRDOH and other critical stakeholders; and/or
- *The competitive selection of eligible projects proposed by eligible entities through an application process.

Location Description:

Improvement of electrical power system throughout the island.

Activity Progress Narrative:

During the reporting period, the Puerto Rico Department of Housing (PRDOH) completed the first phase of reviews of the ER2 Competitive Applications submitted for funding. Determinations were made and communicated to applicants regarding eligibility, and some projects were pre-selected to progress to the Feasibility Review phase in early August 2024. During the month of September, the Program conducted Program Introductory Sessions and the Feasibility Analysis Training with pre-selected applicants and provided application-specific technical assistance.

Both strategic and competitive projects under ER2 will aim to achieve a variety of measurable outcomes, including but not limited to a reduction in the frequency and duration of electric service disruptions for LMI residents and critical facilities/services; reduction in the utility's costs related to generation, transmission and distribution, operations and maintenance, and administration; reduction in electricity consumption from fossil fuel generation sources and an increase in renewables generation; and an overall reduction in energy costs and usage through improved electric service reliability and resilience. Additional proposed performance measures include, but are not necessarily limited to:

- % reduction in loss of service,
- % reduction in emergency maintenance costs,
- # of fewer outages of critical facilities and utilities,
- % decrease in disruption hours to residents and businesses from impacts of storm events,
- % reduction in energy costs,
- % of area electrical demand generated from facility,
- # of micro-grids constructed to sustain critical services during a power outage,
- % decrease in the number of inaccessible days,
- % reduction in kWh used, % reduction in utility costs

A challenge identified in the development of these performance measures is access to critical data from the utility that is necessary for the establishment of baselines and reporting on the outcomes. Another challenge identified is how to measure the impact of specific projects funded by the grant in light of other non-CDBG-funded energy-sector improvement projects being implemented concurrently that also impact the performance of the electrical grid. As projects are reviewed, selected, and developed, PRDOH will define additional accomplishments, performance measures, and measurement tools that better reflect available resources for measurement and reporting. For example, PRDOH has identified and pre-selected some projects that are anticipated to have a direct impact on the grid as a whole and benefit its users across the entire Island as a result, since they are large utility-scale generation and/or storage facilities that are to directly provide energy to the island-wide transmission system that supplies power through the distribution system to deliver power to clients.

Accomplishments Performance Measures

No Accomplishments Performance Measures

Beneficiaries Performance Measures

No Beneficiaries Performance Measures found.

Activity Locations

No Activity Locations found.

Other Funding Sources No Other Funding Sources Found

Other Funding Sources Budgeted - Detail

No Other Match Funding Sources Found



Activity Supporting Documents:



Grantee Activity Number: ESP-IER2DOH-UN Activity Title: Electric Power Resilience ER2 UN

Activity Type:

Electrical power system improvements **Project Number:** Infrastructure ER2 B-18-DE-72-0001 **Projected Start Date:** 08/05/2022 **Benefit Type:** Area (Census)

National Objective: Urgent Need

Activity Status:

Under Way **Project Title:** Infrastructure Energy Program ER2 **Projected End Date:** 08/05/2028 **Completed Activity Actual End Date:**

Responsible Organization:

Puerto Rico Department of Housing

Overall Total Projected Budget from All Sources	Jul 1 thru Sep 30, 2024 \$0.00	To Date \$394,921,854.00
Total Budget	\$0.00	\$394,921,854.00
Total Obligated	\$3,144,697.76	\$15,900,114.15
Total Funds Drawdown	\$21,336.29	\$388,364.46
Program Funds Drawdown	\$21,336.29	\$388,364.46
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$21,336.29	\$388,364.46
Puerto Rico Department of Housing	\$21,336.29	\$388,364.46
Most Impacted and Distressed Expended	\$21,336.29	\$388,364.46

Activity Description:

The Electrical Power Reliability and Resilience Program (ER2) provides assistance to applicants and subrecipients to create electrical system reliability and resilience. The program will serve the needs of communities by funding projects that are not currently anticipated to be funded from other federal or local sources. For construction activities, the awardee or subrecipient must agree to budget the operations and maintenance activities for the long-term sustainability of the electrical power system improvements. These multi-year budgets for operations and maintenance will apply for the useful life of the improvement or enhancement. Projects must demonstrate leverage, with the ER2 award consisting of not more than 60% of the proposed project cost, depending on the size and scale, and other factors of the project, as it will be outlined in the Program Guidelines. Publicly owned projects may receive an award up to 100% of the proposed project cost. Program funds will be provided for infrastructure and physical assets that qualify as Electrical Power System Improvements. Projects are encouraged to integrate energy assets and contribute to the diversification of energy resources. Projects pursued as Microgrids shall conform to the Microgrid Regulations, as approved by the Puerto Rico Energy Bureau (PREB).198 Projects will be evaluated to identify opportunities for alignment with efforts to increase energy efficiency. PRDOH anticipates that approximately 80% of projects funded under ER2 will qualify as Other sources of power, distributed energy, microgrids components. PRDOH understands the importance of proper land-use, so projects proposed as solar farms may only be allowed in accordance with permissible landuse, permits and applicable zoning regulations. PRDOH will seek opportunities to utilize brownfields and the built environment as per EPA guidance and recommendations. PRDOH may use procurement methods in accordance with PRDOH policies and procedures. Additionally, PRDOH may utilize direct and subrecipient selection methods in accordance with its policies and procedures and Program Guidelines. Eligible activities to be outlined in the Program Guidelines may include, but are not limited to, the range of eligible activities allowable under PREB microgrid and renewable energy regulations such as



renewable, hybrid, and combined heat and power (CHP) microgrids or mini-grids, and electric power based on solar energy to foster distributed power generation (DGs). Potential models may include business structures such as Community Solar, Energy Wheeling, Power Purchase and Operating Agreements (PPOA), Private Utility, or other business models approved by PREB. To strengthen coordination with other relevant governmental agencies of Puerto Rico, PRDOH may work closely with those relevant governmental agencies.

The ER2 Program allocation will be used for the following:

- *The strategic selection of eligible projects of public benefit selected by PRDOH and other critical stakeholders; and/or
- *The competitive selection of eligible projects proposed by eligible entities through an application process.

Location Description:

Improvement of electrical power system throughout the island.

Activity Progress Narrative:

During the reporting period, the Puerto Rico Department of Housing (PRDOH) completed the first phase of reviews of the ER2 Competitive Applications submitted for funding. Determinations were made and communicated to applicants regarding eligibility, and some projects were pre-selected to progress to the Feasibility Review phase in early August 2024. During the month of September, the Program conducted Program Introductory Sessions and the Feasibility Analysis Training with pre-selected applicants and provided application-specific technical assistance.

Both strategic and competitive projects under ER2 will aim to achieve a variety of measurable outcomes, including but not limited to a reduction in the frequency and duration of electric service disruptions for LMI residents and critical facilities/services; reduction in the utility's costs related to generation, transmission and distribution, operations and maintenance, and administration; reduction in electricity consumption from fossil fuel generation sources and an increase in renewables generation; and an overall reduction in energy costs and usage through improved electric service reliability and resilience. Additional proposed performance measures include, but are not necessarily limited to:

- % reduction in loss of service,
- % reduction in emergency maintenance costs,
- # of fewer outages of critical facilities and utilities,
- % decrease in disruption hours to residents and businesses from impacts of storm events,
- % reduction in energy costs,
- % of area electrical demand generated from facility,
- # of micro-grids constructed to sustain critical services during a power outage,
- % decrease in the number of inaccessible days,
- % reduction in kWh used, % reduction in utility costs

A challenge identified in the development of these performance measures is access to critical data from the utility that is necessary for the establishment of baselines and reporting on the outcomes. Another challenge identified is how to measure the impact of specific projects funded by the grant in light of other non-CDBG-funded energy-sector improvement projects being implemented concurrently that also impact the performance of the electrical grid. As projects are reviewed, selected, and developed, PRDOH will define additional accomplishments, performance measures, and measurement tools that better reflect available resources for measurement and reporting. For example, PRDOH has identified and pre-selected some projects that are anticipated to have a direct impact on the grid as a whole and benefit its users across the entire Island as a result, since they are large utility-scale generation and/or storage facilities that are to directly provide energy to the island-wide transmission system that supplies power through the distribution system to deliver power to clients.

Accomplishments Performance Measures

No Accomplishments Performance Measures

Beneficiaries Performance Measures

No Beneficiaries Performance Measures found.

Activity Locations

No Activity Locations found.

Other Funding Sources No Other Funding Sources Found

Other Funding Sources Budgeted - Detail

No Other Match Funding Sources Found



None

Project # / Planning B-18-DE-72-0001 / Energy Program Planning





Grantee Activity Number: ESP-PLNDOH-NA Activity Title: Energy Program Planning

Activity Type:	Activity Status:
Planning	Under Way
Project Number:	Project Title:
Planning B-18-DE-72-0001	Energy Program Planning
Projected Start Date:	Projected End Date:
08/05/2022	08/05/2028
Benefit Type:	Completed Activity Actual End Date:
N/A	
National Objective:	Responsible Organization:
N/A	Puerto Rico Department of Housing

Overall	Jul 1 thru Sep 30, 2024	To Date
Total Projected Budget from All Sources	\$0.00	\$19,323,470.00
Total Budget	\$0.00	\$19,323,470.00
Total Obligated	\$489.38	\$49,249.13
Total Funds Drawdown	\$530.44	\$13,249.13
Program Funds Drawdown	\$530.44	\$13,249.13
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$530.44	\$13,249.13
Puerto Rico Department of Housing	\$530.44	\$13,249.13
Most Impacted and Distressed Expended	\$0.00	\$0.00

Activity Description:

On the Planning side, electric vehicles will quickly become an important consideration for the Island energy improvements. DDEC outlined an initiative for a three-phase approach to planning for EV integration, including research and planning, an infrastructure deployment program, and community engagement and education. PRDOH will fund these activities under the planning funds, starting with Phase one (1) for Research and Strategic Planning, and funding Phases two (2) to three (3) upon successful completion of Phase one (1), while also allowing DDEC to explore funding options through DOE or other sources.

Location Description:

The planning activities for this fund will be carried at the Puerto Rico Department of Housing located in San Juan, Puerto Rico.

Activity Progress Narrative:

During the reporting period, PRDOH and its Grant Manager completed the first phase of review of ER2 competitive project applications, holding weekly meetings to identify areas for process improvement and discuss specific project and application issues. The Centro Medico Microgrid (CMM) strategic project continued additional project planning and scope of work revision activities. The Municipality of San Juan (MSJ) has been selected to implement the project moving forward, and stakeholder engagement continued with MSJ and ASEM to refine roles and responsibilities and the scope of work. For ER1, PRDOH and its Grant Manager continued coordination with COR3 and FEMA on the review and selection of projects.



Accomplishments Performance Measures

No Accomplishments Performance Measures

Beneficiaries Performance Measures

No Beneficiaries Performance Measures found.

Activity Locations

No Activity Locations found.

Other Funding Sources
No Other Funding Sources Found

Other Funding Sources Budgeted - Detail

No Other Match Funding Sources Found

Activity Supporting Documents:

None

Monitoring, Audit, and Technical Assistance

Event Type	This Report Period	To Date
Monitoring, Audits, and Technical Assistance	0	2
Monitoring Visits	0	2
Audit Visits	0	0
Technical Assistance Visits	0	0
Monitoring/Technical Assistance Visits	0	0
Report/Letter Issued	1	2



