

Grantee: Puerto Rico

Grant: B-18-DE-72-0001

January 1, 2024 thru March 31, 2024 Performance

Grant Number: B-18-DE-72-0001	Obligation Date:	Award Date:
Grantee Name: Puerto Rico	Contract End Date: 08/05/2028	Review by HUD: Submitted - Await for Review
Grant Award Amount: \$1,932,347,000.00	Grant Status: Active	QPR Contact: No QPR Contact Found
LOCCS Authorized Amount: \$1,932,347,000.00	Estimated PI/RL Funds: \$0.00	
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.

The U.S. Department of Energy aptly points out, "[m]aintaining and enhancing the resiliency 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 resiliency." (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 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, 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



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 that ensures 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	\$530,651,544.19	\$542,726,531.81
Total Funds Drawdown	\$692,979.68	\$955,277.72
Program Funds Drawdown	\$692,979.68	\$955,277.72
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$692,979.68	\$955,277.72
HUD Identified Most Impacted and Distressed	\$0.00	\$0.00
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
Puerto Rico Department of Housing	\$ 692,979.68	\$ 955,277.72

Progress Toward Required Numeric Targets

Requirement	Target	Projected	Actual
Overall Benefit Percentage	70.00%	70.00%	.04%
Overall Benefit Amount	\$1,271,484,326.00	\$1,271,484,326.00	\$782,789.08
Limit on Public Services	\$289,852,050.00	\$0.00	\$0.00
Limit on Admin/Planning	\$386,469,400.00	\$115,940,820.00	\$112,230.30
Limit on Admin	\$96,617,350.00	\$96,617,350.00	\$99,674.76
Most Impacted and Distressed	\$1,932,347,000.00	\$1,582,347,000.00	\$0.00

Overall Progress Narrative:

During the reporting period, the Puerto Rico Department of Housing (PRDOH) continued 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 Commerce's Energy Support Program, while the ER2 Competitive Application intake period closed and project application reviews began.

Section 3

Electrical power system improvements is defined in 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 grantee's 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 is ensuring the implementation of Section 3 for the Electrical Systems Enhancements and Improvements:

https://recuperacion.pr.gov/en/download/2nd-amendment-to-the-cdbg-dr-action-plan-for-the-electrical-systems-enhancements-substantial-draft-for-public-comments/?wpdm_dl=53316&refresh=65ba81748789f1706721652&ind=1704376984443&filename=1704376983wpdm_AD_M_POLI_Energy%20Action%20Plan_Amendment%20%20-%20SUBSTANTIAL_EN.pdf

Continuing from the work from the past quarter, this Q1-2024 we continue to see planning and program implementation activities prior to construction, as ER1 and ER2 predominantly in planning phases as they complete application phases and identify projects and entities who will administer covered projects.

Typical to disaster recovery is the planning process where initial concept, design of program, stakeholder engagements, and program implementation planning occurs before there is project specific planning and project specific design phases which



then leads to bidding 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.

The PRDOH team will be using templates 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 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 programs reflect data expressed in DRGR accordingly.

The PRDOH Section 3 compliance team provides 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 template available online. 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.

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. This past quarter the team has begun to evaluate additional methods to connect 53 identified workers from Palâ¿ Residencial events to future construction projects. The ER2 program also held programmatic training sessions of which Section 3 was discussed and covered with program managers. Once entities and applicants are selected for the program, additional training will be provided to support and ensure compliance.

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¿s commitment to offering new employment opportunities. In these orientations, new personnel are asked to fill out self-certifications and provide supporting documentation of Section 3 status, when applicable.

Project Summary

Project #, Project Title	This Report	To Date	
	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	\$15,676.96	\$96,617,350.00	\$99,674.76
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	\$677,302.72	\$1,316,406,180.00	\$843,047.42
Planning B-18-DE-72-0001, Energy Program Planning	\$0.00	\$19,323,470.00	\$12,555.54

Activities

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



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

Activity Type:

Administration

Activity Status:

Under Way

Project Number:

Administrative B-18-DE-72-0001

Project Title:

Energy Program Administration

Projected Start Date:

08/05/2022

Projected End Date:

08/05/2028

Benefit Type:

N/A

Completed Activity Actual End Date:

National Objective:

N/A

Responsible Organization:

Puerto Rico Department of Housing

Overall

Jan 1 thru Mar 31, 2024 To Date

	Jan 1 thru Mar 31, 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	\$15,676.96	\$139,257.19
Total Funds Drawdown	\$15,676.96	\$99,674.76
Program Funds Drawdown	\$15,676.96	\$99,674.76
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$15,676.96	\$99,674.76
Puerto Rico Department of Housing	\$15,676.96	\$99,674.76
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 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 reviews for application completeness, eligibility, and scoring and ranking based on program prioritization criteria. PRDOH's oversight plan for this contract as well as the ER1 Program is to utilize 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:

Electrical power system improvements

Project Number:

Infrastructure ER1 B-18-DE-72-0001

Projected Start Date:

08/05/2022

Benefit Type:

Area (Census)

National Objective:

Low/Mod

Activity Status:

Planned

Project Title:

Infrastructure Energy Program ER1

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

Jan 1 thru Mar 31, 2024 To Date

\$0.00 \$350,000,000.00

Total Budget

\$0.00 \$350,000,000.00

Total Obligated

\$350,000,000.00 \$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 this reporting period, the Puerto Rico Department of Housing (PRDOH) executed a Subrecipient Agreement with the Puerto Rico Electric Power Authority on March 1st for a total budget of five hundred million dollars (\$500,000,000) under the ER1 Program. On March 18th, the ER1 Program sent COR3 the compliance requirements for projects to be selected for ER1 using the traditional match methodology. The ER1 Program has continued its coordination with COR3 & FEMA



regarding the FEMA PA projects already approved under the PREPA FFAST PW, which is expected to be the primary source of ER1 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



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

Activity Type:

Electrical power system improvements

Project Number:

Infrastructure ER1 B-18-DE-72-0001

Projected Start Date:

08/05/2022

Benefit Type:

Area (Census)

National Objective:

Urgent Need

Activity Status:

Planned

Project Title:

Infrastructure Energy Program ER1

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

Jan 1 thru Mar 31, 2024 To Date

\$0.00 \$150,000,000.00

Total Budget

\$0.00 \$150,000,000.00

Total Obligated

\$150,000,000.00 \$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 this reporting period, the Puerto Rico Department of Housing (PRDOH) executed a Subrecipient Agreement with the Puerto Rico Electric Power Authority on March 1st for a total budget of five hundred million dollars (\$500,000,000) under the ER1 Program. On March 18th, the ER1 Program sent COR3 the compliance requirements for projects to be selected for ER1 using the traditional match methodology. The ER1 Program has continued its coordination with COR3 & FEMA



regarding the FEMA PA projects already approved under the PREPA FFAST PW, which is expected to be the primary source of ER1 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

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	Jan 1 thru Mar 31, 2024	To Date
Total Projected Budget from All Sources	\$0.00	\$921,484,326.00
Total Budget	\$0.00	\$921,484,326.00
Total Obligated	\$21,445,107.08	\$29,790,277.24
Total Funds Drawdown	\$666,542.57	\$782,789.08
Program Funds Drawdown	\$666,542.57	\$782,789.08
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$666,542.57	\$782,789.08
Puerto Rico Department of Housing	\$666,542.57	\$782,789.08
Most Impacted and Distressed Expended	\$0.00	\$0.00

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 land-use, 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 in the review of potential activities.

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) closed the ER2 Competitive Application intake period and began application reviews for project selection. Reviews during this period focused on completeness, eligibility, scoring, and ranking based on threshold and prioritization criteria to determine initial project eligibility and selection.

The first Centro Medico Microgrid (CMM) Design, Construction, Operations, and Maintenance Request for Proposals was canceled to revise the scope of work and send out a new RFP. The RFP revisions are based on stakeholder feedback from potential proponents as well as analysis and additional data collection performed during the reporting period by PRDOH and its Grant Manager, LUMA Energy, and the Puerto Rico Medical Services Administration (ASEM for Spanish acronym).

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 public facilities,
- # of Linear feet of Public Improvement,
- # of green infrastructure projects constructed
- # of fewer outages of critical facilities and utilities,
- # of vacant lots repurposed,
- % decrease in disruption hours to residents and businesses from impacts of storm events,
- % reduction in energy costs,
- % of area electrical demand generated from facility,
- % reduction in the number of kWh of electricity consumed on-site, #
- of micro-grids constructed to sustain critical services during a power outage,
- % decrease in number of inaccessible days,
- % of area electrical demand generated from facility,
- % 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.

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-IER2DOH-UN
Activity Title: Electric Power Resilience ER2 UN

Activity Type:
 Electrical power system improvements

Activity Status:
 Under Way

Project Number:
 Infrastructure ER2 B-18-DE-72-0001

Project Title:
 Infrastructure Energy Program ER2

Projected Start Date:
 08/05/2022

Projected End Date:
 08/05/2028

Benefit Type:
 Area (Census)

Completed Activity Actual End Date:

National Objective:
 Urgent Need

Responsible Organization:
 Puerto Rico Department of Housing

Overall	Jan 1 thru Mar 31, 2024	To Date
Total Projected Budget from All Sources	\$0.00	\$394,921,854.00
Total Budget	\$0.00	\$394,921,854.00
Total Obligated	\$9,190,760.15	\$12,748,441.84
Total Funds Drawdown	\$10,760.15	\$60,258.34
Program Funds Drawdown	\$10,760.15	\$60,258.34
Program Income Drawdown	\$0.00	\$0.00
Program Income Received	\$0.00	\$0.00
Total Funds Expended	\$10,760.15	\$60,258.34
Puerto Rico Department of Housing	\$10,760.15	\$60,258.34
Most Impacted and Distressed Expended	\$0.00	\$0.00

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 land-use, 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 in the review of potential activities.

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) closed the ER2 Competitive Application intake period and began application reviews for project selection. Reviews during this period focused on completeness, eligibility, scoring, and ranking based on threshold and prioritization criteria to determine initial project eligibility and selection.

The first Centro Medico Microgrid (CMM) Design, Construction, Operations, and Maintenance Request for Proposals was canceled to revise the scope of work and send out a new RFP. The RFP revisions are based on stakeholder feedback from potential proponents as well as analysis and additional data collection performed during the reporting period by PRDOH and its Grant Manager, LUMA Energy, and the Puerto Rico Medical Services Administration (ASEM for Spanish acronym).

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 public facilities,
- # of Linear feet of Public Improvement,
- # of green infrastructure projects constructed
- # of fewer outages of critical facilities and utilities,
- # of vacant lots repurposed,
- % decrease in disruption hours to residents and businesses from impacts of storm events,
- % reduction in energy costs,
- % of area electrical demand generated from facility,
- % reduction in the number of kWh of electricity consumed on-site, #
- of micro-grids constructed to sustain critical services during a power outage,
- % decrease in number of inaccessible days,
- % of area electrical demand generated from facility,
- % 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.

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



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

Activity Type:

Planning

Project Number:

Planning B-18-DE-72-0001

Projected Start Date:

08/05/2022

Benefit Type:

N/A

National Objective:

N/A

Activity Status:

Under Way

Project Title:

Energy Program Planning

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

Jan 1 thru Mar 31, 2024 To Date

\$0.00 \$19,323,470.00

Total Budget

\$0.00 \$19,323,470.00

Total Obligated

\$0.00 \$48,555.54

Total Funds Drawdown

\$0.00 \$12,555.54

Program Funds Drawdown

\$0.00 \$12,555.54

Program Income Drawdown

\$0.00 \$0.00

Program Income Received

\$0.00 \$0.00

Total Funds Expended

\$0.00 \$12,555.54

Puerto Rico Department of Housing

\$0.00 \$12,555.54

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 continued review of potential ER2 strategic projects and began review of ER2 competitive project applications, holding weekly meetings to identify areas for process improvement and discuss specific project and application issues. The first Centro Medico Microgrid (CMM) RFP was canceled so that additional project planning and scope of work revision activities could be conducted. PRASA submitted several projects to the ER2 Competitive Application that are now under review.

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

