

# Public Hearing – Puerto Rico Electrical Power System Enhancement and Improvements Action Plan

## Foreword:

Comments and recommendations were received from the public, in English and in Spanish, during the first public hearing on the development of the Puerto Rico Electrical Power System Enhancement and Improvements Action Plan. All comments will be available in their entirety, in the language and format in which they were submitted, at [www.cdbg-dr.pr.gov](http://www.cdbg-dr.pr.gov).

This document summarizes the comments submitted in English and Spanish, for the benefit of readers. Some of the cited comments may be paraphrased from the original comments as a result of the translation process or for the sake of brevity. All personally identifiable information has been removed from the comments in order to protect the privacy of commenters. Please refer to the text of the submitted comments in order to obtain additional information.

You can contact the Puerto Rico Department of Housing (PRDOH) to request a full translation of any of the comments, as well as any alternative means or formats that will allow you to access these public comments and the Department of Housing's responses to said comments. All requests must be submitted to:

- By phone, at 1-833-234-CDBG or 1-833-234-2324
- By email, at [infoCDBG@vivienda.pr.gov](mailto:infoCDBG@vivienda.pr.gov)
- Online, at <http://www.cdbg-dr.pr.gov/contact/> or at <http://www.cdbgdr.pr.gov/contacto/>
- By mail, at:
  - Puerto Rico CDBG-DR Program
  - P.O. Box 21365
  - San Juan, PR 00928-1365

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### Comment: Martí Grant Management | Raquel Martínez

"MRS. MARTI WANTS AN INVITATION TO PARTICIPATE IN THE MIT GRANT MANAGEMENT SERVICES BID CONFERENCE. SHE NEEDS FOR THE DATE SCHEDULED FOR SAID BID TO BE UPDATED."

### PRDOH's response:

We thank you for your participation in this public hearing on the development of the Puerto Rico Electrical Power System Enhancement and Improvements Action Plan.

For more information regarding CDBG-MIT Program processes, you can access the CDBG-MIT website at <https://cdbg-dr.pr.gov/cdbg-mit/>, or <https://cdbg-dr.pr.gov/en/cdbg-mit/> for the English version.

To access the Notice of Fund Availability (NOFA) catalog, you can visit the CDBG website at <https://cdbg-dr.pr.gov/oportunidades-de-fondo/> in Spanish or <https://cdbg-dr.pr.gov/en/funding-opportunities/> in English.

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### Comment: AMANESER 2025

*"The federal government is allocating an unprecedented amount of money aimed at improving and transforming Puerto Rico's electric system. In the case that is the subject of these public hearings, 1.9 billion dollars will be allocated. This is in addition to at least 9.6 billion dollars that have been allocated by FEMA for the rehabilitation and transformation of the [electric] system and which will be channeled through PREPA.*

***There is general consensus in the country that we must move towards energy from renewable sources as soon as possible.*** This has been the mandate established in the Puerto Rico Energy Public Policy Act, which provides that 100% of our energy must come from renewable sources by 2050. This same Act requires that by 2025 40% [of our energy] be produced by renewable sources. Today, with 2021 coming to an end, only slightly over 3% of our energy is produced by renewable sources.

*The transformation of the electric power system in order to make it more resilient and to meet the Energy Public Policy goals involves several aspects that need to be addressed in a systemic manner. In the long term, it calls for the replacement of the entire fossil fuel-based system and its large and centralized generating units with new systems based on renewable and distributed sources with a solid storage framework. This will require substantial investment and its completion will take over a decade.*

***In the medium term, sufficient renewable energy capacity must be installed and put into operation in order to allow the entire country to be sufficiently resilient to face a natural event, such as a hurricane like Maria or the 2020 earthquakes.***

*However, none of the strategies focused on these timescales will put an end to the pain and anguish of the most vulnerable communities that are constantly facing uncertainty*

as to whether they will be hit this year by a hurricane, by an earthquake, or by the blackouts that have become more frequent and prolonged over the last few months.

**After Hurricane Maria struck the island, hundreds of thousands of citizens from all Puerto Rico were left without electricity for several months; in some cases, for up to one year. The proposed strategies fail to address this issue in an effective manner,** with the urgency required and at the necessary scale. The measures to provide energy security to the most vulnerable is an urgent task that requires approaches other than the strategies proposed in the IRP to upgrade the grid or the generation system.

This is imperative to reduce costs and to ensure its fast implementation; but most importantly, with each year that goes by without solving the problem of energy security for the most vulnerable we risk facing another tragedy as the one caused by [Hurricane] Maria.

AMANESER 2025 has been successfully promoting this type of solution over the last 3 years. Our approach will allow for an immediate solution to the problem of energy security for the most vulnerable, while working on the transformation in the medium and long term.

AMANESER 2025 promotes the development of systems to provide immediate energy security to low- and moderate-income residential areas. This currently include off-grid systems with approximately 2 kW of power and 5-6 kWh battery capacity. These systems are provided at an extremely low cost, less than half of the full cost, with enough power to cover all the critical loads of an average home. Since the model includes the engagement of the community and of an electrician certified in solar installations throughout the entire process, it not only reduces costs, but also generates a cultural change that involves training on renewable energy and climate change. Experience shows that a new awareness towards a more responsible energy consumption is created.

This is the first stage of a model that includes the creation of community microgrids and municipal cooperatives to transform the country's electric system in an organic manner.

In order to leverage this type of model, we specifically propose the following:

1. That the funds be used to promote energy security for vulnerable communities, as determined by:
  - a. Their economic status (low and moderate income)
  - b. The time it took for them to be reconnected to the grid after Hurricane Maria
  - c. Any other objective community vulnerability criterion.
2. The models to be implemented must provide said security in a short period of time. The processes to identify, recruit, and train residents until the systems are installed must take place during the same year.
3. These models must be:
  - a. Simple, in order to allow for a meaningful participation of the residents in their implementation.

- b. Replicable, so that they may be implemented in many places with minimal variations.
  - c. Scalable, so that they may be installed in stages and scaled up in an organic manner. The system installed during the first stage to provide immediate energy security must increase the grid's resiliency and must be compatible with the subsequent creation of microgrids or systems connected to the grid.
4. The fund distribution strategy must promote partnerships among municipalities, communities, and organizations that are working collaboratively to provide energy security to residents in a cost-effective manner.

AMANESER 2025 is working with groups in 9 municipalities. Equipment has been installed in five of these municipalities and we will begin to work in two other municipalities next month. If we were supported by CDBG funds, we could install 500 additional systems over the next 3 years at a cost of \$3.5 million.

The table below shows 4 scenarios based on the percentage of the 1.9 billion to be allocated for the installation of systems based on the community models we are proposing. Each allocation level includes 2 scenarios based on the contribution of CDBG funds and the contribution of residents. Each scenario considers how many systems would be installed if 100% of the money came from CDBG funds, while sub-scenario B shows that 50% of the money comes from the residents.

<b>SCENARIOS FOR THE USE OF FUNDS</b>						
			<b>100% CDBG Share</b>		<b>50% CDBG Share</b>	
	<b>%</b>	<b>Total Funds</b>	<b>\$/EA</b>	<b>Homes</b>	<b>\$/EA</b>	<b>Homes</b>
Scenarios 1 & 1B	100%	\$1,920,000,000	\$7,000	274,286	\$4,200	457,143
Scenarios 2 & 2B	75%	\$1,440,000,000	\$7,000	205,714	\$4,200	342,857
Scenarios 3 & 3B	50%	\$960,000,000	\$7,000	137,143	\$4,200	228,571
Scenarios 4 & 4B	25%	\$480,000,000	\$7,000	68,571	\$4,200	114,286

We appreciate the opportunity to participate and to contribute on this important matter."

**PRDOH's response during the public hearing:**

CDBG-DR funds for the enhancement of the Puerto Rico's electric grid could be used for community projects that provide resiliency to the electric system. In order to qualify, the community project may collectively integrate the average critical loads of all homes in order to supply energy to the entire community. This can be done by means of a microgrid that will supply all the proposed homes. The project must fulfill all the

requirements of the program, as published in the Electrical Power System Enhancement and Improvements Action Plan. In addition, it is important to emphasize that mitigation funds for resilient energy systems for individual homes are available under the CDBG-MIT Action Plan. For more information about this program, please visit the CDBG-DR webpage, under the CDBG-MIT section, which is available in English and in Spanish at: <https://cdbg-dr.pr.gov/en/cdbg-mit/> and <https://cdbg-dr.pr.gov/cdbg-mit/>. We appreciate your recommendations regarding the technical requirements for the systems.

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#### Comment: Digmarie Alicea-Santana

*"Note: I am part of the working group for the recovery of Puerto Rico. I want to attend the hearings as a listener, in order to gain fuller knowledge on the processes being carried out and on the interest of participants on key recovery issues. Thank you."*

#### PRDOH's response:

PRDOH appreciates your enthusiasm and your desire to become part of this process. Promoting civic engagement and ensuring that citizens' ideas are taken into consideration during the process for the development of the Action Plan is particularly important to PRDOH. Any interested individual or entity has the right to access and participate in these public hearings on the Puerto Rico Electrical Power System Enhancement and Improvements Action Plan. This first public hearing, which was held on October 20, 2021, was recorded and will be posted on the CDBG-DR web page and on YouTube, at: <https://www.youtube.com/watch?v=mYNkugnEujM>.

PRDOH will hold a second public hearing on the Puerto Rico Electrical Power System Enhancement and Improvements Action Plan following the publication of the draft action plan on the CDBG-DR website, where you will have the opportunity to participate and submit your comments. For more information about the plan, you can visit the following webpage, which is available in Spanish, at <https://cdbg-dr.pr.gov/plan-de-accion-de-red-de-energia/> or in English, at <https://cdbg-dr.pr.gov/en/power-grid-action-plan/>.

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#### Comment: Jeanine Neipert

*"I have no comments at this time."*

#### PRDOH's response:

Once the Puerto Rico Electrical Power System Enhancement and Improvements Action Plan is published on the CDBG-DR website, a 45-day period will be established for individuals, entities, or other agencies to submit their comments on the plan.

To stay up to date with the plan's development process, you can visit the following webpage, which is available in Spanish at <https://cdbg-dr.pr.gov/plan-de-accion-de-red-de-energia/> or in English, at <https://cdbg-dr.pr.gov/en/power-grid-action-plan/>.

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#### Comment: Madeline Candelaria

*"Greetings: The people who participated in the FEMA Sheltering and Temporary Essential Power Program ["Tu Hogar Renace"] were provided partial and temporary assistance, which left a great unmet need. Some were also affected by the earthquakes. A sector of this population are people who are still in need of assistance for several reasons. That was my case; I need assistance for the optimization of the power grid, which will help me address different economic, health, education, and other situations. I also have a family member with breathing problems who needs respiratory therapy. I suggest that an opportunity be offered to these cases by requesting evidence, such as medical evidence and/or a case number from "Tu Hogar Renace" or from any other natural disaster."*

#### PRDOH's response during the public hearing:

"Thank you very much, Mrs. Candelaria, for your interest in this public hearing and in the CDBG-DR funds. We are aware of the needs that have arisen in our communities as a result of the earthquakes of 2019 and 2020. The Puerto Rico Department of Housing has an Action Plan for Earthquakes approved by the HUD. We encourage you to visit our website and explore this Plan, which contains detailed information on eligible municipalities, as for the Electrical Power System Enhancement and Improvements Action Plan, it focuses on system improvements to the power grid and at the community and critical facility level. Individuals and homes may receive solar panels and batteries for critical energy needs under the Community Energy and Water Resilience Installations Program (CEWRI). We are currently working with eligible families under the Home Repair, Reconstruction, or Relocation Program (R3). However, mitigation funds are available for resilient energy systems for individual homes under the CDBG-MIT Action Plan. For more information regarding this program, please visit the CDBG-DR website, under the CDBG-MIT section."

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#### Comment: Nuclear Alternative Project

*"Recently, the Nuclear Alternative Project (NAP), an organization with whom Humanistas de Puerto Rico collaborates, published that they had identified two potential locations for the installation of a nuclear plant for power generation. This has generated great interest and positive comments, as well as particularly negative reactions steeped in fear and misinformation."*

We also found that people were curious about the subject, since the issue of power generation has become increasingly important on the Island in the face of climate change, as well as the loss and closure of power plants in Puerto Rico. Most of the energy is produced by burning fossil fuels that cause greenhouse gas emissions, such as carbon dioxide, methane, and other substances that contribute to global warming and environmental pollution. The conversation regarding how to mitigate or solve these problems has generally revolved around the promotion of alternative power sources that are dependent on the weather, such as photovoltaic panels and windmills. The use of hydroelectric power has been discussed, although to a lesser extent.

Our organization has talked publicly and openly about the suitability of generation by nuclear power plants since at least 2014. The conversations we have had on this subject have changed over time, from strict opposition to these power plants, to interest in them, to gaining support from a substantial number of people. This is due to our efforts to educate the population through our publications and our informal partnership with the NAP for about 3 years. They emphasize on the technical aspects of these power plants because that is their area of expertise, while Humanistas de Puerto Rico stresses the practical aspects and benefits of this type of power generation.

We have always noted that opposition to these power plants is usually based on incorrect or unfounded perceptions regarding the damages caused by old, traditional models in other countries (Chernobyl, Fukushima, and Three Mile Island), the confidence that solar or wind power is less polluting and more reliable, and, notably, a massive distrust in the ability of our public institutions, such as the Puerto Rico Electric Power Authority and the Island's government itself. We have also witnessed the antagonism from politicians who, in fact, introduced bills to prohibit these power plants for many years and, surprisingly, from environmental activist organizations. In short, the subject has generated a heated debate among the people, which encourages us to continue our work to inform the public.

Our position in favor of the nuclear alternative is based on the mountains of reliable information available on them, in addition to the data and the support provided by the NAP, which is composed of young Puerto Rican professionals who work on this. Therefore, we rely on their expertise. This is what we know so far:

- 1) Nuclear generation does not emit any greenhouse gases from the production of energy.
- 2) The "smoke" seen in the pictures of nuclear reactors is nothing but steam.
- 3) The mining and manufacturing required to produce photovoltaic panels is highly polluting and ethically problematic; they are not hurricane-resistant and need to be installed on flat terrain, usually agricultural land, if they are to be connected to the power grid.
- 4) There are currently no reasonable industrial mechanisms for the recycling of photovoltaic panels. The existing systems have a high-power consumption and depend

on the market value of some of its components. It would be best if this is done in a way that allows for the extraction and resale of these components in an economically feasible manner, something that needs to be technologically developed for now.

5) The wind does not blow all the time and there is no sunshine during half day or when it is cloudy.

6) Wind turbines require vast amounts of lubricants, are not hurricane-resistant, and are not recyclable.

7) Wind and solar sources require secondary backup systems when they are not producing electricity. This is usually handled with batteries in houses and small structures. In the case of the power grid, backup is provided by the burning of fossil fuels, such as natural gas, diesel, or coal. In other words, power generation at the commercial level using sun and wind systems reinforces and perpetuates the burning of fossil [fuels], it does not reduce or eliminate it.

8) The [nuclear] reactors that are used today are safe and reliable. In the countries where they are being used, they are complying with the Tokyo [sic] agreements for the reduction of gas emissions that exacerbate climate change. Many of these nuclear reactors have been operating for decades, while others are in the process of extending their service life with certifications that can extend their useful life to up to 80 years.

9) The [nuclear] reactors we are proposing for use in Puerto Rico are 3<sup>rd</sup> and 4<sup>th</sup> generation small modular reactors (SMR), which are safer and can be installed in spaces as small as "una cuerda" [Puerto Rico's unit area measurement of 3,930 m<sup>2</sup> approximately one acre]. Their passive safety design prevents them from exploding and prevents the fuel from melting. Once the nuclear source is exhausted, the entire unit is removed, and a new unit is installed in the same place. They are resistant to hurricane winds, earthquakes, and flooding.

10) There is an imperative worldwide need for electricity to be affordable and safe for the environment and, so far, nuclear [energy] is the best form to energize and to meet these parameters. We invite the news media, commentators, politicians, and the general public to discuss all their questions or concerns regarding nuclear energy with us or with NAP professionals and we urge them not to provide misinformation or to promote irrational panics over this subject. The nuclear alternative is not perfect and tends to be costly in the short run, but it should not be flatly rejected, since it certainly causes much less pollution than the renewable [sources] proposed for Puerto Rico, it does not require secondary backup from batteries or fossil fuels and require little space to operate. Humanistas de Puerto Rico is a nonprofit organization that follows a humanistic philosophy and considers ethics, science, reason, freedom of thought, and compassion as the best principles to create a better world."

### PRDOH's response:

Thank you for your presentations regarding the development of the Puerto Rico Electrical Power System Enhancement and Improvements Action Plan. The projects that will be funded with these funds shall meet the requirements established by the HUD in the Federal Register, as well as all applicable local and federal laws and regulations. PRDOH considers civic engagement and the contributions from all entities, agencies, or organizations during the development of this energy plan to be of utmost importance. PRDOH and its team will take your presentations into consideration while exploring and developing alternatives for the use of these CDBG-DR funds for the optimization of the power grid.

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### Comment: Hispanic Federation

[Summarized Comment]

*“On June 22, 2021, the Department of Housing and Urban Development (HUD) published a \$1,932,347,000 (\$1.93 billion) allocation for the optimization of Puerto Rico's electric system (86 FR 32681). As required by the federal notice of fund allocation, on October 20, 2021, the Puerto Rico Department of Housing (PRDOH) will hold the first public hearing on the Puerto Rico Electrical Power System Enhancement and Improvements Action Plan (Action Plan). To this end, the Hispanic Federation submits the following comments to the Action Plan.*

*In short, Hispanic Federation requests the following from PRDOH:*

- The Action Plan must ensure access to resilient and affordable solar energy for vulnerable and low-income families and communities, in accordance with the national objective governing the allocation of funds.*
- PRDOH cannot automatically accept the matching of funds for the 10-year Plan proposed by the Puerto Rico Electric Power Authority (PREPA) and LUMA Energy, LLC (LUMA). On the contrary, it must ensure that the use of the \$1.93 billion in funds complies with the energy public policy established under Act 17-2019, the Puerto Rico Energy Public Policy Act, as amended, to achieve a 100% transition to renewable energy by the year 2050. This, in alignment with its own CDBG-MIT Action Plan.*
- The Action Plan must prioritize the integration of decentralized rooftop solar systems with energy storage, protecting agricultural land and areas of high ecological value.*

### **HUD Allocation Notice and the requirement of alignment with the CDBG-MIT Action Plan**

*HUD's notice regarding the allocation of \$1.93 billion in CDBG-DR funds states that these funds offer a unique and significant opportunity to mitigate disaster risks in the electric system and improve the reliability, resilience, efficiency, and sustainability of the grid. Section V.A.2.a. (10) of the notice of fund allocation requires the Action Plan to be in line with the CDBG-DR and CDBG-MIT Action Plans.*

*In the CBDG-MIT Action Plan, PRDOH acknowledges that “[h]istorically there has been disconnection between legislation passed by the Government of Puerto Rico and planning and implementation by the public corporation PREPA. PREPA’s adoption of the reform in Act 17, 2019, Puerto Rico Energy Public Policy, 29 LPRA § 1141 is uncertain.” See, CBDG-MIT Action Plan approved on April 19, 2021, p. 175. Therefore, this new Action Plan must prioritize alignments with the CBDG-MIT Action Plan that will promote the goal of real resiliency and 100% renewable energy by the year 2050.*

### **Let Us Humanize Energy**

*Since 2017, when the electric system was totally destroyed and we lost over 3,000 people, we have witnessed how the electric system has been on the decline, thrusting our people into a race for survival. Today, power outages are increasingly frequent and last longer, endangering the lives of thousands of people who depend on energy for their subsistence. This is simply unacceptable, especially when it is a matter of political will, since the technology is available and the well-off are getting more access to energy with over one thousand monthly installations of rooftop solar systems with battery storage. Political decisions have turned access to this essential service into a social justice issue where only those with the economic means are able to address their basic needs.*

*It is the government’s responsibility to save lives, reduce poverty, and achieve social justice with the effective use of the \$1.93 billion for the optimization of Puerto Rico’s power grid. For this reason, the Action Plan must ensure access to resilient and affordable solar energy for vulnerable and low-income families and communities in accordance with the national objective governing the allocation of funds.*

### **Problems Posed by the Potential Matching of Funds under PREPA and LUMA’s 10-Year Plan**

*The Federal Emergency Management Agency (FEMA) allocated around \$9.4 billion for the reconstruction of the power grid in Puerto Rico following the disasters of 2017. PREPA, along with LUMA, the operator of its transmission and distribution grid, have submitted a 10-Year Plan for the use of these federal funds. This plan provides a general description of where investments on the electric system will be made over the next 10 years. This plan is supposed to comply with both Act 17-2019 and the IRP.*

*It has recently become known that PREPA and LUMA are counting on the \$1.93 billion considered in the Action Plan under evaluation as matching funds for the \$9.4 billion from FEMA and their 10-Year Plan.*

*The 10-Year Plan is focused almost entirely on fossil fuel-based power generation, including natural gas. In the CBDG-MIT Action Plan, PRDOH rejected the integration of natural gas as an interim measure prior to investing in renewable energy.*

*The 10-Year Plan does not identify a single rooftop renewable energy project or battery storage projects at the residential level. It also fails to identify a clear plan directed towards the creation of community microgrids to address the needs of the most vulnerable, especially those who live in the most remote areas of Puerto Rico, given that they were the last to receive electricity service in the wake of Hurricanes Irma and Maria.*

The 10-Year Plan also fails to meet the objectives of the notice of allocation of these CDBG-DR funds to provide the communities, especially the most vulnerable communities, with resilient energy.

The 10-Year Plan not only makes us vulnerable in terms of energy by forcing us to import 100% of our energy, but it also continues to contribute to and perpetuate the emission of greenhouse gases that have a negative impact on the environment and increase the effects of climate change. Due to the condition of the archipelago of Puerto Rico, this is something that should not be taken lightly; rather, all our public policies and investments should be aimed at mitigating the effects of climate change, which are becoming increasingly evident, particularly on the coasts of the islands.

The 10-Year Plan submitted by PREPA and LUMA clearly fails to present a clear and concrete direction to meet the 100% renewable energy goal established under Act 17-2019 and the IRP. On the contrary, it invests what little money it assigns to power generation to fossil fuel-based generation. Despite this noncompliance with the country's energy public policy, PREPA and LUMA intend to use the \$1.93 billion under evaluation in these comments as a match source for FEMA funds.

For this reason, PRDOH should not automatically accept a match of funds for the 10-Year Plan proposed by PREPA and LUMA. Instead, they must ensure that the use of the \$1.93 billion in funds complies with the energy public policy of achieving a 100% transition to renewable energy by 2050. This, in alignment with its own CDBG-MIT Action Plan. Meanwhile, the use of the \$1.93 billion should prioritize a transition toward resilient and affordable energy that will not perpetuate a centralized and vulnerable system that depends on fossil fuels.

### **Resilience of Rooftop Solar Energy Systems with Battery Storage**

In the CDBG-MIT Action Plan, PRDOH acknowledges the vulnerability of our electric grid's transmission lines, while it also acknowledges the resilience of solar energy systems.

In a study titled "Puerto Rico Low-to-Moderate Income Rooftop PV and Solar Savings Potential," the U.S. Department of Energy (DOE) concludes that rooftop solar generation can technically cover all the residential consumption in Puerto Rico for all income levels. Meanwhile, a study titled "Puerto Rico Distributed Energy Resource (DER) Integration Study" from the Queremos Sol proposal, concludes that a system predominantly served by distributed solar energy is feasible, viable, and is highly likely to reduce general system costs. These studies show the need and the feasibility to prioritize the integration of rooftop solar energy systems with battery storage in order to meet the country's energy demand.

Also, rooftop solar systems minimize the impact of the electrical infrastructure on agricultural land, thus promoting food security in our communities. They also minimize the impact on areas of high ecological value; therefore, rooftops are the best alternative to be prioritized. Furthermore, they reduce to the greatest extent possible the unnecessary costs entailed by transmission lines that increase the vulnerability of the grid.

Therefore, the Action Plan for the use and management of the \$1.93 billion in funds should prioritize the integration of rooftop solar energy systems with battery storage.

### **Citizen Participation and Public Hearing Process**

We welcome the new instances of participation and their new formats, while recognizing that there is still plenty of room to continue expanding this vision of inclusion and democracy that should govern this process.

As discussed above, it has been mentioned in the press that the \$1.93 billion under evaluation in this public hearing will be matching funds for FEMA funds, as if the citizen participation process required under the federal allocation notice were a pro forma process. However, we trust the integrity of the participatory processes held by PRDOH and that the recommendations and concerns of the communities will be addressed. Particularly, we request that PRDOH does not automatically accept a match of funds for the 10-Year Plan proposed by PREPA and LUMA, and that it allows a real citizen participation that will result in an effective use of these funds.”

### **PRDOH's response:**

PRDOH appreciates all of your recommendations and acknowledges the importance of the use and development of renewable energy, as well as the area of opportunity provided by the implementation of solar energy projects. These renewable energy options are being considered for the Puerto Rico Electrical Power System Enhancement and Improvements Action Plan.

In compliance with the national objectives of the CDBG Program, this Action Plan will be giving priority to disadvantaged populations, such as individuals with low and moderate income.

We invite you to access the Action Plan on November 8, 2021. The Plan will be available in English and Spanish through the following links: <https://cdbg-dr.pr.gov/plan-de-accion-de-red-de-energia/> and <https://cdbg-dr.pr.gov/en/power-grid-action-plan/>.

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### **Comment: Instituto de Competitividad y Sostenibilidad Económica de PR** [Summarized Comment]

#### **“ICSE Recommendation #1:**

1. *The unmet need and main opportunity to be addressed by the CDBG-DR is that its grant guidelines incorporate the mandates of Puerto Rico Act 17-2019 for the transformation of the energy sector in their entirety. Act 17 (empowers/enables) the Puerto Rico Energy Bureau (**PREB**) to work with modern participatory and decision-making principles that will achieve optimal solutions for the electric system in the public interest.*

Act 17 provides that all Energy activities and its stakeholders are subject to a transparent regulation by the PREB through its public proceedings and approval processes.

The PREB has made it clear in its proceedings that their duties and responsibilities are assigned by Law, and that the political interests of the Puerto Rico Electric Power Authority, the private interests of LUMA and any other interests are secondary to the policy of Act 17 and the PREB regulations.

ICSE has intervened in these regulatory proceedings since 2015, then known as the Energy Commission created under Act 57. We can attest to the PREB's superior legal and institutional capacity to gather consumers and prosumers to create an optimal road map on CDBG grant guidelines and comprehensive programs of national interest that optimize the impact of funding, thus preventing narrow political interests that would segregate funds into a potpourri of uses for taxpayer's money that is well intended, but misdirected.

#### ICSE Recommendation #2:

2. Under Puerto Rico Laws, PRDOH's actions in compliance with HUD regulations do not substitute or overlap those of the PREB.

ICSE recommends that PRDOH immediately begin a direct coordination with the PREB in order to incorporate PREB's participation and leadership into these Public Hearings, including PREB's official procedures.

Act 17 provides that all electric system investments and programs must comply with the PREB's approval of the Integrated Resources Plan, with open public participation, a transparent adjudication process, and world-class sustainability goals that include:

Long-term mandates for Puerto Rico to achieve 100% renewable energy generation by 2050, and 50% energy efficiency by 2040.

Ceasing coal-fired power generation by 2028.

Shorter-term objectives include 10% energy efficiency and 40% renewable energy generation by 2025.

A reduction in energy bills, about which neither LUMA nor PREPA have expressed their capacity to achieve it.

A plan to attain the transparency, equity, justice, efficiency, and resilience goals and principles of our energy policy in Puerto Rico.

#### ICSE Recommendation #3:

ICSE recommends PRDOH that CDBG-DR funds should be directed to projects, programs and initiatives located close to energy users and consumers/prosumers, thus avoiding to the greatest extent possible the use of these funds for the improvement of centralized utilities that are distant from consumer locations.

This use of funds stems from the adoption by Vivienda of the **Distributed Energy Resources** system as a model to reconfigure the electric power service on the Island with CDBG-DR

investments. The funds may be used directly by eligible subrecipients, which creates an opportunity to promote mini and microgrids close to consumer/prosumer locations.

The **PREB, DEDC**, key municipalities, non-governmental agencies, and nonprofit partner entities should be provided with direct financing to implement and carry out the **Distributed Energy Resource** project.

In adopting **Distributed Energy Resources**, PRDOH will turn consumers into prosumers, in compliance with HUD's national objectives to benefit low-and moderate-income individuals, eliminate **slum or blight**, and address the urgent energy needs of disadvantaged areas in Puerto Rico.

ICSE Recommendation #4:

PRDOH should also be aware that the energy sector in Puerto Rico is regulated by the PREB under Act 17-2019 and other public laws currently in effect.

PREB's existing procedures, such as the IRP, FEMA\_ [sic], **PREPA's 10-Year Plan**, Grid Optimization, Remediation Plan, Energy Efficiency Regulation, and many others, are directly relevant to the projects that will be financed with this allocation. Therefore, the PREB should be centrally consulted during the process for the approval of the CBDG-DR Action Plan.

ICSE Recommendation 5:

ICSE recommends that PRDOH adopt a planning process where financing priority is given to projects that will directly address the needs of the disadvantaged, underserved, and vulnerable populations. In adopting this planning policy, federal funds will be allocated with high priority to address the unmet needs of vulnerable and underserved low-and moderate-income communities.

ICSE Recommendation 6:

ICSE recommends that the 5% administrative limit be used to provide capacity planning and development directly to vulnerable and disadvantaged communities and organizations, in order to enable them to be empowered in the execution of their own energy projects as prosumers, energy communities, and more. This 5% should be distributed among non-governmental organizations and communities in order to develop capacity for the projects they are promoting.

ICSE Recommendation 7:

ICSE recommends promoting the use of revolving funds as a model to provide federal funds to disadvantaged communities and organizations, to the greatest extent possible.

By adopting this model, the funds approved for communities and organizations may be recovered through affordable energy rates, as result of the operation of these energy project, thus creating a positive cash flow that will go back to the original recipient and

may be reused for eligible economic development activities, as provided in the regulation with regard to the use of project income.

Private financial institutions should be invited to participate in the creation of successful revolving fund models that can include their experience and financial capacity to expand the scope of the appropriate federal amount.

ICSE Recommendation 8:

ICSE recommends that PRDOH focus the use of federal improvement funds on projects that are located closer to energy consumers and prosumers, such as:

1. The inclusion of solar projects owned by consumers in DERs; 2) mini and microgrids,
2. Energy cooperatives and communities, and 3) other community-based models

ICSE Recommendation 9:

ICSE recommends that PRDOH require that all projects have a **Resiliency Impact Statement** containing a detailed summary of the specific benefits that each project will provide to the disadvantaged communities and the ways in which each project minimizes and prevents long-term risks related to the energy privatization events at the communities being served.”

**PRDOH's response:**

PRDOH has met with stakeholders in order to receive recommendations regarding the Puerto Rico Electrical Power System Enhancement and Improvements Action Plan. It has also consulted entities in the economic, community, and industrial sectors, among others, in order to ensure that participation is as complete and diverse as possible during the plan's development. It has also held meetings with the Federal Technical Coordination Team (**TCT**) as part of its efforts to develop the plan.

In order to distribute these funds, PRDOH must meet the national objectives established by the HUD, prioritizing low- and moderate-income individuals, as well as those with urgent needs. PRDOH recognizes the importance of all of the parties involved in this process and will continue its efforts to ensure that participation during this plan's development is diverse, open, and transparent.

We thank you for your contribution to the Puerto Rico Electrical Power System Enhancement and Improvements Action Plan. PRDOH will take your suggestion into consideration as it continues to develop the plan.

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**Comment: Sheila Algarin**

“1) What does LUMA or PREPA plan to do to address the hundreds of complaints regarding utility poles that are about to collapse on urban residential properties? One of them has gone to LUMA's Customer Service Office in person five times and they are not

doing anything to follow up on these complaints. The Customer Service supervisors do not want to communicate with technical personnel to follow up on these complaints.

2) Which agency or entity is in charge of auditing LUMA's technical services? Is it the Energy Bureau, or is it some other agency or overseeing entity?

3) Was LUMA exonerated from lawsuits for damages to third parties due to negligence or inefficiency in addressing complaints promptly before damages occur?

#### PRDOH's response during the public hearing:

Thank you very much for your comment. It has been recorded and will be part of the record for this public hearing. The CDBG-DR Electrical Power System Enhancement and Improvements Action Plan will be published soon. The estimated publication date is November 8, 2021. Once the draft is available to the public, the public comments period will begin, which will last 45 days. In that Plan, you will be able to see the analyses completed and the programs proposed for addressing the Island's energy needs. We invite you to review it and comment on it.

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#### Comment: Michael Mount

"NA"

#### PRDOH's response:

To stay up to date on this process for developing the Electrical Power System Enhancement and Improvements Action Plan, you can visit the following website in Spanish or in English <https://cdbg-dr.pr.gov/plan-de-accion-de-red-de-energia/> or in English <https://cdbg-dr.pr.gov/en/power-grid-action-plan/>

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#### Comment: Mari Bonnet

"None"

#### PRDOH's response:

To stay up to date on this process for developing the Electrical Power System Enhancement and Improvements Action Plan, you can visit the following website in Spanish or in English <https://cdbg-dr.pr.gov/plan-de-accion-de-red-de-energia/> or in English <https://cdbg-dr.pr.gov/en/power-grid-action-plan/>

Comment: Ana

*“What are the federal fund [sic] for and how can they be applied for and can organizations participate”*

PRDOH's response during the public hearing:

“Thank you very much for your interest in the CDBG-DR funds for energy. The CDBG-DR funds for improvements to the electric power system offer a unique and important opportunity for these beneficiaries to undertake highly impactful, strategic activities intended to cover the necessary costs and mitigate the risk of a disaster to their electric power systems; improve system reliability, resilient, efficiency, and sustainability; and bolster the long-term financial viability of each system. Non-government, community, or nonprofit organizations may be eligible to receive CDBG-DR energy fund allocations if they meet the requirements established for the programs. If eligible, they will be responsible for covering all operation and maintenance costs with non-federal funds.”

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Comment: Ivonne

*“When are you going to start calling the R3 participants to evaluate panels and water tanks”*

PRDOH's response:

Thank you very much for your comment. As established in its guidelines, the CDBG-DR Community Energy and Water Resilience Installations Program (CEWRI) assists R3 Program participants, providing “energy and water efficiency improvements to promote resilience with installing photovoltaic (PV) systems with battery backup for critical loads and water storage system.”

For further information regarding R3 Program processes, you may access its guidelines, which are available in Spanish at <https://cdbg-dr.pr.gov/download/programa-de-reparacion-reconstruccion-o-reubicacion-2/> or in English at <https://cdbg-dr.pr.gov/en/download/home-repair-reconstruction-or-relocation-program-2/>.

The CEWRI Program guidelines are also available in Spanish at <https://cdbg-dr.pr.gov/download/programa-instalaciones-comunitarias-para-la-resiliencia-energetica-y-de-abastecimiento-de-agua/> or in English at <https://cdbg-dr.pr.gov/en/download/community-energy-and-water-resilience-installations-program-2/>.

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**Comment: Vanessa Colón Almenas**

*“Many people don't have internet access at home or smartphones. Will the Action Plan be available at the Department of Housing in paper form for people who want to read it? Thank you very much.”*

**PRDOH's response during the public hearing:**

“Thank you, Mrs. Colón. Yes, we'll have it available at our offices.”

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**Comment: Ivette Ortiz**

*“Hi, the sound quality for the cdbp [sic] youtube stream was bad, the audio was playing in both English and Spanish at the same time. It's a shame there weren't other options.”*

**PRDOH's response:**

PRDOH regrets the difficulties you experienced during the first public hearing on the development of the Electrical Power System Enhancement and Improvements Action Plan.

PRDOH believes that it is of the utmost importance to provide accessible and robust orientation regarding the plan to all citizens and stakeholders. As part of our efforts to achieve this goal, the first public hearing, held on October 20, 2021, was streamed on YouTube and Facebook, and it was broadcast on the radio station WIPR 940AM. This activity was recorded and is available on the CDBG-DR Puerto Rico YouTube channel in Spanish <https://www.youtube.com/watch?app=desktop&v=mYNkugnEujM&t=4s> and English <https://www.youtube.com/watch?v=TOguXPaCp6E>.

Once the draft for the Action Plan is published on November 8, a period of 45 days will be provided for the public to submit their comments on the plan. All of the questions concerning the energy plan that are sent to PRDOH will be answered and included as attachments in the Action Plan once it is approved by the HUD and published on the CDBG-DR website.

Afterwards, PRDOH will hold a second public hearing on December 8, 2021.

For further details regarding the Electrical Power System Enhancement and Improvements Action Plan, you may follow this link to visit the CDBG-DR website, available in Spanish and English at <https://cdbp-dr.pr.gov/plan-de-accion-de-red-de-energia/> and <https://cdbp-dr.pr.gov/en/power-grid-action-plan/>, respectively.

We thank you for your comment and we hope to count with your participation during the development of this Action Plan.

**Comment: Carlos A. Velázquez López**

*"I understand that in Puerto Rico there are currently some 40,000 or more photovoltaic systems installed on the roofs of private residences. An effective use for some of the funds from this program would be to explore the development of virtual solar power plants that interconnect thousands of homes in photovoltaic batteries that can also be used by the PREPA and LUMA to reduce demand during peak consumption hours. This is a systemic solution that is being used in other countries such as Germany and should be explored in Puerto Rico."*

**PRDOH's response:**

Thank you very much for your comment regarding the development of the Puerto Rico Electrical Power System Enhancement and Improvements Action Plan. PRDOH recognizes the importance and potential of photovoltaic systems on the Island.

Your suggestion will be taken into consideration when developing the plan. The Action Plan will be published on the CDBG-DR website on November 8, 2021, and it will be available in Spanish and English through the following links <https://cdbg-dr.pr.gov/plan-de-accion-de-red-de-energia/> or <https://cdbg-dr.pr.gov/en/power-grid-action-plan/>. After it is published, a second public hearing will be held where you may respond to what is established in the plan.

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**Comment: Lorena Vélez – Earthjustice**

*"The CDBG-DR funds constitute a unique opportunity to achieve Puerto Rico's energy goals, which seek to create a power grid that is resilient to natural disasters. They also respond to the need for protecting lives and preventing dependency on the interconnected system that forms part of the transfer and distribution of electricity. Therefore, through this letter, we request that the CDBG-DR funds be distributed to address the problems affecting the power grid in a way that they are directed at facilitating the installation of photovoltaic systems on roofs with batteries, because these are the most resilient systems for the climate and geographic reality in Puerto Rico. We also ask that they be implemented in low- and moderate-income homes and that the use of funds for solar energy systems at industrial scales be categorically refused. We would also like to direct your attention to the fact that the Government of Puerto Rico is alleging that these funds will be used to match FEMA funding for electric power systems. This is without taking into consideration public supply, and without providing guarantees of a proper legal process that is required by administrative law, in such a way that they have jumped to a conclusion regarding how to use the funds, thereby predetermining the process. Therefore, we reiterate the need for public participation and for alliances with community-based organizations. We sustain that it is the people who can best identify their own needs and the direction that all public policy affecting them should take. We therefore Ask PRDOH to provide all documents related to the distribution of CDBG-DR funds in Spanish."*

### PRDOH's response:

Currently, the Community Energy and Water Resilience Installations Program (CEWRI) is in operation, and it collaborates with other CDBG-DR programs to provide single-family homeowners, businesses, and public installations with energy and water efficiency improvements to promote resilience with installing photovoltaic (PV) systems with battery backup for critical loads and water storage system.

As part of the national CDBG goals, assisting vulnerable populations such as low- and moderate-income individuals has been identified as a priority. The matching of CDBG funds is an eligible activity, but it is not the only option. The public, community entities, non-government organizations, among others, may be selected to receive grants.

As administrator of this fund allocation, PRDOH assumes the responsibility of monitoring the proper and efficient use of these funds in compliance with all regulations and statutes applicable to the Plan and its proposed activities. As with other CDBG-DR programs, the Action Plan will have a transparency website where documentation related to the use and management of funds may be accessed, along with any contracts with subrecipient entities.

PRDOH thanks you for your time and participation regarding the CDBG-DR funds for the Optimization of Puerto Rico's Power Grid. PRDOH considers public participation essential to the process of developing the action plan for optimizing the power grid. We invite you to visit this website to stay up to date on key dates and activities for the energy Action Plan: <https://cdbg-dr.pr.gov/plan-de-accion-de-red-de-energia/> for the version in Spanish or <https://cdbg-dr.pr.gov/en/power-grid-action-plan/> for the version in English.

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### Comment: Carmen Santiago González

*"The case of Ponce en Marcha is still pending in the Court of First Instance, Superior Court of Ponce. In this case, the Electric Power Authority appears as a defendant. The judgment issued requires the PREPA to carry out a substantial amount of work in Ponce. Given the fiscal crisis and the effects of PROMESA, compliance with the judgment has been postponed. However, the availability of CDBG funds for electricity provides an opportunity for complying with the judgment using available federal funds. In this way, the obligation to the Autonomous Municipality of Ponce can be met and a portion of the available funds can be put to good use."*

### PRDOH's response:

PRDOH thanks you for your participation and agrees that collaboration with other entities, agencies, organizations, and citizens is a vital factor in the process of implementing and executing this Action Plan. The notice from the federal record (Vol. 86, No. 117), which awards and governs the use of funds for optimizing the power grid in Puerto Rico,

designates PRDOH as the administrating entity for the provided funds. Therefore, PRDOH is responsible for analyzing options and proposals related to the distribution and use of these funds, as well as for identifying the projects that make the best use of the funds.

If PREPA is provided assistance so that they meet the obligations established in the judgment, the eligible uses for the allocated funds will be restricted by the mandates established in the judgment. In order to ensure that these funds are allocated to the most favorable projects, PRDOH must evaluate all of the viable proposals before committing funds to a project or activity. The process of evaluating proposals may include a cost reasonability analysis, risk analysis, an analysis of the recipient entity, among others. In this way, it is possible to ensure that the projects to be funded are those that have the greatest impact and benefits for Puerto Rico's power grid.

Having said this, PRDOH recognizes the importance of addressing the community's needs throughout the Island. This will include the development of programs for improving electric power services in the southern region, as well as all other parts of Puerto Rico.

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