



Department of Energy
Washington, DC 20585

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REQUEST FOR: DAVID STAUDT
ASSOCIATE DIRECTOR, FINANCIAL ASSISTANCE
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FROM: MARIA ROBINSON
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U.S. DEPARTMENT OF ENERGY
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SUBJECT: **Puerto Rico-Energy Resilience Fund (PR-ERF) DE-FOA-0003096, Revision to Definition of “Very Low-Income Single-Family Household”**

Dear Mr. Staudt:

GDO is requesting your approval for GDO/NETL to request from PR-ERF Topic Area (TA) 2 awardees information to add additional income qualifying programs to the definition of “Very Low-Income Single-Family Household”. GDO would request recommendations from TA2 awardees on additional programs to add to the definition of “Very Low-Income Single-Family Household”. If GDO would be able to verify the enrollment of households in a particular program then GDO would add that additional program to the definition. The expanded definition would apply to all TA1, 2, and 3 awardees of the PR-ERF DE-FOA-0003096.

Currently the Funding Opportunity Announcement (FOA) for PR-ERF defines “Very Low-Income Single-Family Household” as “[a] household in which at least one individual is enrolled in or receives benefits from one or more of the following government assistance programs: Low-Income Home Energy Assistance Program (LIHEAP), Nutrition Assistance Program (NAP), or Temporary Assistance for Needy Families (TANF).” After receiving requests from TA2 awardees on expanding this definition, reviewing responses to the Request for Information that was issued in February 2023, and reviewing applications that were submitted for the FOA GDO believes there would be no adverse effect to considering adding additional income qualifying programs.

On February 21, 2023, GDO issued a PR-ERF Request for Information related to the PR-ERF. GDO received nearly 100 unique responses to the Request for Information (RFI) from a diverse

group of stakeholders representing academia, industry, government, nonprofits, and community groups. The RFI included a category **Beneficiary & Community Considerations** and asked respondents for input on “*existing criteria, screening tools, databases, or definitions that DOE should incorporate in program design*”. See Attachment. GDO incorporated many of the recommendations into the program design. GDO also performed more extensive analyses on design recommendations that materially impacted the PR-ERF program goals to optimize between the maximum number of households impacted, maximum resilience benefit to a household, and maximum reduction in household energy burden. GDO employed quantitative analysis support to weigh the costs and benefits of certain design and structuring decisions.

Based on the information received in the RFI, GDO defined “Beneficiary” in the FOA, which is applicable to all TAs, as “[i]ndividual, family, or privately owned household that receives direct services or benefits from this FOA. Beneficiaries include (a) very low-income single-family households where an individual with an energy dependent disability resides (no geographic restriction); or (b) very low-income single-family households located in a Last Mile Community.” “Very Low-Income Single-Family Household” is defined as “[a] household in which at least one individual is enrolled in or receives benefits from one or more of the following government assistance programs: Low-Income Home Energy Assistance Program (LIHEAP), Nutrition Assistance Program (NAP), or Temporary Assistance for Needy Families (TANF)”. GDO decided not to include Plan Vital within the definition of “Very Low-Income Single-Family Household” because it did not have a means of verifying that a household was receiving benefits through Plan Vital.

Deployment Phase negotiations with Topic Area 2 (TA2) awardees began in mid-January 2024. During individual planning meetings with awardees, awardees expressed concerns and requested flexibility with the definition of Beneficiaries, specifically the definition of Very Low-Income Single-Family Household:

- Comunidad Solar Toro Negro has requested flexibility with the definition of Beneficiaries in the municipalities of Ciales and Orocovi.
- Barrio Eléctrico has requested flexibility with the definition of Very Low-Income Single-Family Household in the municipalities of Coamo and Isabela by considering beneficiaries of Plan Vital as potential beneficiaries under TA2.
- Solar United Neighbors has requested flexibility with the definition of Beneficiaries in the municipalities of Salinas and Guayama, specifically the La Margarita community.
- TA2 awardees have raised concerns on income qualifying criteria (PAN, TANF, LIHEAP) being used to determine eligible beneficiaries and how it reduces the number of households that could apply under the program.

Based on recommendations and concerns presented by TA2 awardees, GDO proceeded to evaluate individual RFI responses and NETL reviewed applications to assess if considering additional programs that demonstrate compliance with the “Very Low-Income Single-Family Household” definition will make any difference in how applications were reviewed during the merit review/selections, i.e., was an entity scored lower or removed as non-responsive due to proposing beneficiaries based on additional programs that were not included in the definition of “Very Low-Income Single-Family Household.”

From the RFI:

- Most respondents noted the need to prioritize low to mid income (LMI) individuals, individuals with disabilities, high health risk individuals that require energy dependent medical devices or medication that requires refrigeration.
- Some respondents recommended including individuals that received assistance from Plan Vital, a government assistance program.
- Decisions on how to prioritize beneficiaries should be left to local leaders who work hand in hand with civil society members in each community.
- A primary consideration should be to deliver solar energy and battery storage to people and places where it *would not have otherwise been available or installed without the support provided through this program*. Additionally, respondents suggest focusing on the areas that have been historically the worst hit by hurricanes and those that suffer the longest power outages after severe weather events.

Additional details can be found in Attachment A. According to the TA2 consensus documents (Attachment B), applicants indicated that their beneficiary targeted group would be very low income and/or low-income households. Applicants were not scored lower or removed as non-responsive because of programs they were proposing to assess household's income levels. It is important to note that during the merit review process, how TA2 awardees were going to include qualifying beneficiaries, was not actively discussed between panelists.

Based on the above, GDO requests approval to request from TA 2 awardees information to add additional income qualifying programs to the definition of "Very Low-Income Single-Family Household". In addition, after further due diligence GDO was able to confirm that if it were to include Plan Vital as an additional qualifying program then it would be able to verify Beneficiary eligibility through the Puerto Rico Department of Health.

Please do not hesitate to contact me with any questions.

Sincerely,

Maria Robinson

Attachment A: ***Information on Beneficiary Criteria, PR-ERF RFI***

Summary: Targeted population recommended to be either very low income or LMI communities
Background and Definitions

- RFI was released on February 21, 2023.
- Definitions included:
 - Beneficiary: an individual, household, or other entity that receives direct services or benefits from this Fund.
 - Low- to moderate-income (LMI): A household with income less than 80% of the area median income (the midpoint of a region's income distribution), calculated yearly by the U.S. HUD.
- Program design:
 - *DOE will explore investment opportunities to address resilience improvements with a broad range of possible beneficiaries (LMI single-family houses, LMI multi-family buildings, and LMI households with people with disabilities).*
- Summary of responses of questions (5&9) on ***Beneficiary & Community Considerations***
GDO was seeking input. Section A and B includes responses provided by RFI respondents.
 - *Question 5: As per the Consolidated Appropriations Act, this fund should focus on low- and moderate-income households and households with individuals with disabilities. Recognizing there is more need than funding, how should DOE prioritize possible beneficiaries? Are there existing criteria, screening tools, databases, or definitions that DOE should incorporate in program design?*
 - Most respondents note the need to prioritize low to mid income (LMI) individuals, individuals with disabilities, high health risk individuals that require energy dependent medical devices or medication that requires refrigeration.
 - Decisions on how to prioritize beneficiaries should be left to local leaders who work hand in hand with civil society members in each community.
 - A primary consideration should be to deliver solar energy and battery storage to people and places where it *would not have otherwise been available or installed without the support provided through this program.* Additionally, respondents suggest focusing on the areas that have been historically the worst hit by hurricanes and those that suffer the longest power outages after severe weather events.
 - *Question 9: What measures can DOE take to reduce the barriers to program participation? What measures can be taken to reduce the barriers to participation?*
 - Documentation requirements need to be flexible for the titles issue that exists. Applications must be available in Spanish and a technical assistance line or service center must be available for support. Applications should not be evaluated competitively against each other or first come, first served. A rolling application process will allow the most rural, illiterate, or unaware LMI applicants the time to embrace the idea, understand the program, get their information together and get through the application process. Multiple application mechanisms should be created to address the digital divide. Offer the application on an internet portal but also, through phone centers, walk in regional offices offering paper applications, and in the most rural

areas—where transportation is difficult, bring the application process to the people.

- Applicants should not be denied for reasons that include home ownership, documentation, location in flood prone areas, immigration status, address issues, credit score or employment status. Mechanisms to include families that do not own the house they live in are important.

Section A: Individuals Responses to Question #5 of RFI

- **036-SUN:**
 - focus on low to mid income housing and individuals with disabilities. **Clearly identify who is NOT eligible and deliver funding in tranches by geographic area.**
 - Setting income eligibility requirements is specifically NOT suggested. Target communities with strong local leadership to come forward with ideas on their preferred approach, model, partnerships rather than dictate what will be installed.
- **01-SESA:** Fund Very Low Income households first (30% of Area Median Income).
- **35-SESA:**
 - Federal dollars could be used to boost the currently available financing options by buying down lender risk and thus expanding their beneficial reach to Very Low-Income persons.
- **02-Power Solar LLC:**
 - Target households with 1) Very Low Income, 2) electricity-dependent medical devices, and 3) those that suffer prolonged isolation after storms.
- **105 Queremos Sol :** A model such as regional community solar trusts” where the communities collectively own the systems through the trust, and manage future maintenance, repairs and replacements. The community solar trust could be modeled off the principles behind public trusts such as Caño Martín Peña and Bosque Modelo. DOE could explore reaching out to these Trusts and other reputable community trusts in Puerto Rico for this. Geographical criterion should account for vulnerability of electrical service specific to areas outside of the metro area and low income and people with disabilities who live in these vulnerable areas.
- **5-Power Combustion Technologies:**
 - individuals with disabilities that are homeowners and can deploy energy system at rooftop or at backyard to energize an alternative critical emergency circuit(s).
 - When these are served, then move on to the others in need per low and moderate income and don't let the PV Solar Companies and providers get all the tickets to provide equipment as they always get the biggest benefits and leaves everybody out.
- **41-Sunnova:** DOE should prioritize **low-income households and households with disabilities in communities of high risk.** High risk communities include, but are not limited to, those with (i) higher-than-average health risks and (ii) higher-than-average risk of prolonged isolation following extreme weather events
- **113 HF:**
 - Develop a model that will prioritize serving eligible households who meet BOTH the LMI financial need criteria AND individuals with disabilities criteria, with

special attention given to all households that require energy for lifesaving devices/equipment.

- In cases where the direct beneficiary is an entity, rather than an individual household, applicants should show how the project will directly benefit LMI individuals with disabilities.
- **078- PR AEG Island-Wide Task Force:**
 - Narrow social burden criteria to delineate a priority or target population and geography to receive limited federal assistance. This delineation could also inform the public of outlier communities thereby facilitating the coordination of alternative solutions.
 - Utilize Housing and Urban Development (HUD) adjusted income limits published for CDBG-DR and -MIT programs.
 - **Tools/databases:**
 - ReNCAT - a software application that suggests microgrid portfolios that reduce the impact of large-scale disruptions to power, using the Social Burden Metric to measure how hard society is working to meet their basic needs.
 - Access Terminal - a GIS interactive platform with validated Hazard, Water, Geology, Weather, Real Estate Data, primary services, PREPA/LUMA infrastructure, Industry Locations, EPA Brownfields, etc. It was initially developed for collecting property taxes but has powerful applications in vulnerability mapping.
 - CDBG vulnerability maps - interactive maps with indicators that affect the natural and environmental resources of Puerto Rico, allowing for communities and the public to use this data to support any planning process at the local level.
 - Puerto Rico Hazards and Risks Dashboard - a dashboard that summarizes the average risk score and the risk score by hazard type in two ways: by municipality and by map extent.
 - Hosting Capacity Dashboard - an Esri-HERE based dashboard that provides guidance to developers and customers to understand the impacts of connecting distributed generation to the system.
 - Puerto Rico Homeowner Assistance Program Report - a document that includes maps on Forbearance Rates across Puerto Rico which could also be an indicator of vulnerability.
 - Public Geodata Portal - a government website with separate maps ranging from property tax data, tsunamis, and census.
- **56- EJPR:** Seek direct contact with local government officers in Puerto Rico including mayors of municipalities, school directors, medical directors of facilities and NGOs with experience to identify underserved and excluded communities and clients with special needs and conditions. Contact island wide NGOs and professional associations serving the whole island such as SER de Puerto Rico, AARP and others like PECES and Centros Sor Isolina, whose in-depth knowledge of their communities can significantly help identify local community needs. Potentially engage health insurers and medical providers to provide initial contact

- **053-USBC:** Establish geographic areas of higher need (based on grid vulnerability, isolation, and demographics), and set aside funding specifically for these areas. Alternatively, give higher priority to proposals that include these areas. Require a demographic profile of beneficiaries be submitted with applications.
- **054-Solshine:** Approved solar projects should be required to provide proof that their subscribers consist of a blend of low-income customers, non-profits, municipalities, and businesses. In other mature community solar markets, an anchor customer could consume 50% of the overall load of the solar array with the balance being consumed by a blend of other “types” of subscribers. With such a high concentration of low-income residents, it would be a beneficial program if most of the customers met a certain income level. It is important not to isolate other small businesses that either cannot afford to install solar, may have a roof that is no suitable for solar or have title issues that do not allow for 3rd party ownership options.
- **054-Solshine:** Make solar available for every Puerto Rican regardless of property ownership or economic status
- **45-Generac:** Priority could be given to those residents in low to moderate communities who require medical devices. By enabling houses to “island” during an outage, batteries can support essential medical devices. These customers could be given priority for solar & storage funds or for stand-alone storage. Have well defined income limits to avoid crowding out of eligible people. See PR-HUD guidance.
- **60 Share Sun-** Additional resources to the most rural communities like Adjuntas. Focus on a decentralized power supply including rooftop solar and batteries and microgrids that will all but ensure that power is not lost when storms strike. DOE’s program must ensure that power is available not only in Puerto Rico’s cities, but to the isolated, rural areas as well.
- **104-CEDD:** Focus on those with disabilities using assistive technologies such as electric wheelchairs, hearing/memory aids, as these people may have higher energy burdens and are more likely to be LMI. People on refrigerated medications such as insulin/injectable antibiotics/eye drops may also experience the same issue. Should also consider populations on Vieques and Culebra (two small islands located off the eastern coast of Puerto Rico with incredibly low per-capita income, limited healthcare facilities, and limited educational opportunities)
- **70- CDA:** funds should prioritize low-income communities overburdened by the centralized, fossil-fired power plants particularly in Guayama, Salinas, Penuelas, Guayanilla and Catano, ; low-income communities that historically have experienced the most prolonged power outages and the lowest income communities throughout Puerto Rico. The elderly and bedridden patients and other vulnerable groups within the low-income communities should be prioritized.
- **85 EDF:**
 - Provide grants to those households that would unlikely be able to afford to install systems on their own. Income should be a principal factor in determining eligibility, but not the only one.
 - Developed eligibility criteria that prioritizes full-time residents elderly, disabled, health issues, families with children.

- Prioritize residents from rural and isolated areas or communities that are difficult to reach and where residents are particularly vulnerable to prolonged power outages.
- Priority could be given to those communities that were the last to receive a restoration of power. There are several existing databases that could be used, including Social Security, the Puerto Rico Nutrition Assistance Program, and LUMA's database of disabled residents, community groups and municipalities also have energy demand data broken down by town and by neighborhoods.
- There are economies of scale to be leveraged in developing projects that provide solar systems to multiple families living in the same community. Develop projects of multiple single-family homes that reside in the same neighborhood that work together as a group. This not only generates cost savings, but greatly facilitates outreach and education and instills a shared sense of purpose among participants. It can also facilitate longer-term operation and maintenance of the systems and contribute to workforce development and job opportunities.
- **93 CGI:** Partner with Vivienda and COR3, to derive address specific data sets that allows for the prioritization of LMI households, or additional access to affordable/subsidized reconstruction of rooftops for LMI households to enable the safe and secure installation of solar panels.
- **46-Windmar:** Creditworthiness is indeed a crucial factor; however, it may not be as significant an obstacle as commonly perceived.
 - Most leading solar energy providers in Puerto Rico do not consider income or debt-to-income (DTI) ratio when assessing applicants.
 - Anyone with a decent FICO score (alongside other standard credit considerations, such as bankruptcy history) can qualify for solar.
 - Notably, family members or friends can co-sign and contribute their qualifying FICO scores. This practice is common in Puerto Rico, where many people live near their friends and family.
 - Most solar installations today are for low-to-moderate income (LMI) households.
 - Consequently, many very low- or low-income households can, in theory, acquire a solar system today with no upfront costs.
- **110-RFI-Marchel J Castro-Sitiriche:** start with the communities of those that suffered the longest power outage after Hurricane María.
- **116-MAVI:** priority should be energy dependent people with disabilities. Energy dependent = people with disabilities that use electrical equipment to sustain their daily living activities, and in many cases, their lives.
- **118-LUMA:** DOE may work alongside government entities, for example the Puerto Rico Treasury Department, the Family Socioeconomic Development Administration ("ADSEF", for its Spanish acronym), and the Puerto Rico Public Housing Administration
- **96 IREC:**
 - Identifying the most vulnerable populations within the LMI category: income, community vulnerability (remote location, the difficulty for grid service restoration), and locations with a history of energy injustice, Hours of lost electrical service, medical needs: Resources for data: VA Hospital and Centro Psicopedagogico of Puerto Rico, [CDBG vulnerability map](#) developed by WCRP The [EPA Environmental Justice Screening and Mapping Tool](#).

- **119-DexGrid:** Members of the communities are onboarded to their microgrids because of their local proximity rather than any other consideration such as disability or income level. In the context of the specific challenges faced by Puerto Rico, we strongly believe that aggregating consumers with their local sponsor and supplier of electricity maximizes the chances for positive outcome over singling out any specific household or individual.
- **114 Coop Mont:** Prioritize beneficiaries in the center of the island “Cordillera Central” Adjuntas, Jayuya, Lares and Utuado. 58% are below the federal poverty level. PR has very little reliable data accurate and up to date. Prioritize the development of electric cooperatives. These cooperatives allow benefits to accrue to residents that cannot afford an energy resilient system.
- **71-Culebra:** The community of Culebra proposes that the Puerto Rico Energy Resilience Fund consider and give priority to low- and middle-income communities and potential beneficiaries located in remote and rural areas of the archipelago.
- **81-Fundacion Comunitaria:** For non-LMI or non-disabled working families, PRERF must provide funding as a percentage match. That is, provide a percentage of pareo and that the rest of the cost the family (not LMI) provides. **There should be an incentive for non-LMI working families.** We understand that the communities of the target beneficiaries, organized through networks of energy cooperatives, could represent the best solution to address the range of concerns we want to address when deploying resilient energy solutions for Puerto Rico
 - **Why cooperatives:** The cooperative system with its network of financial cooperatives, insurance cooperatives, housing cooperatives, retail cooperatives, worker owned cooperatives, consumer cooperatives, cooperatives. Production cooperatives, agricultural cooperatives, energy cooperatives, among others, have more than 1.3 million members and over \$14 million in consolidated assets. This model enjoys the confidence of the Puerto Rican population for its history of successor business, but above all, for emphasizing placing people above money.
- **89-ENACT Systems:** DOE should prioritize low- and moderate-income households and households with individuals with disabilities when allocating funds. An important criterion to consider is energy consumption data, which can be obtained from utilities and used to accurately size and price solar and storage projects.
- **082-Jadin Tech:** suggests using population-related demographics, similar to those used in the Bi-Lateral Infrastructure Law Rural and Remote Energy Grant, which incorporated data from the 2020 Census to support the selection criteria for funding opportunities based on socio-economic conditions in a region.
- **066-DNV:** Could align with definitions used for the Low-Income Home Energy Assistance Program (LIHEAP).
- **067-Power Combustion Technology, Inc:** DOE should focus on emergency equipment life support users and individuals with disabilities that are homeowners and can deploy energy system at rooftop or at backyard to energize an alternative critical emergency circuit(s). When these are served, then move on to the others in need per low and moderate income and don't let the PV Solar Companies and providers get all the tickets to provide equipment as they always get the biggest benefits and leaves everybody out.
- **98-OATI:** To effectively prioritize beneficiaries, DOE should consider a range of factors, including the level of need, the potential impact of the funding, and the availability of other resources.

- **076-Sunrun:** Sunrun strongly supports SESA’s recommendation that programs established because of the PR-ERF adopt the “additionality principle” meaning that the solar + storage installations resulting from the PR-ERF would not be deployed without the support of the PR-ERF. The current residential solar + storage market in Puerto Rico has some of the highest demand of any market in the country - and that demand is generally being met by solar + storage providers. However, very low-income families are currently an unmet market segment. Every dollar of the \$1 billion fund should be tethered to specific solar + storage projects that wouldn’t have otherwise been developed. Without such a requirement, there is a significant danger of new funding causing less solar and storage to be deployed rather than more.
- **076-Sunrun:** DOE should focus all available funding first and foremost on those completely unable to otherwise obtain the energy security benefits of solar and storage – specifically, those in the “Very Low Income” category, or those making 30% of the Average Family Income. According to a National Renewable Energy Laboratory dataset focused on solar storage potential in Puerto Rico, there are over 250,000 “Very Low Income” households, of which over 200,000 are “solar suitable.”
- **079 Horne:** DOE programs, and specifically for a DOE-supported VPP Pilot Program, could examine and incorporate more nuanced data in similar fashion to HUD’s required analyses for identifying and supporting otherwise vulnerable populations with the greatest needs to benefit from these programs. Furthermore, such a program can and should include opportunities for ease of access and reduction in the barriers for successful implementation for these vulnerable populations including LMI and disabled, or elderly, populations.
- **083 Resilient Power PR:** We propose the use of four (4) main criteria for the prioritization of beneficiaries under the current funding stream. Namely:
 - Environmental justice communities that are overburdened by the impact of continuous exposure to hazards (specifically the low-income communities within 3 miles of power, such as Aguirre, Costa Sur, AES, Palo Seco and San Juan Power).
 - Communities with longest post- disaster restoration of power (Resilient Power Puerto Rico’s Puerto Rico Energy Toolkit has two existing data sets (“Post-Maria Restoration by Source and Date” and “Post-Maria Restoration of the Final 30% by Community (Georeferenced Dataset)”)).
 - Communities with high levels of vulnerability to climate change
 - Individuals with disabilities and a heightened need for continuous electric service
- **086 UPR Resiliency Law Center et al.:** Researchers at UPR Mayaguez have identified the “200,000 most vulnerable families in Puerto Rico”. They were selected because they were without power for at least 329 days after Hurricane Maria. Decisions on how prioritize beneficiaries of this program should be left with local leaders. DOE should recruit these local leaders to work hand-in-hand with other civil society members from the targeted municipalities. DOE should use the EJSCREEN tool with the Low-Income Energy Affordability Data Tool to map energy burdens in Puerto Rico. DOE should also use data sources such as “community censuses” that are not administered by the government.
- **107-Convergent:** the focus should be on programs that offer the highest Benefit to Cost (BCA) ratio. New York Department of Public service and Maryland PSC have both published BCA evaluation handbooks that provide a template for institution a formal analysis for project and program design.

- **097-Sonnen:** priority within the low- and moderate-income population may be assessed and assigned based upon one or more of the following:
 - Total annual household gross income
 - Regularity of energy access disruption
 - Number of individuals legitimized as residing ‘permanently’ within the household
 - Number of children under 18
 - Age of individuals
 - Assessment of households with occupants verifiable as having permanent disabilities
- **099 Ricardo Herrera:** The focus households may be considered in this order:
 - Include one or more residents who depend on powered devices to sustain life 24/7/365. First in line should be determined by life expectancy. After the service life of the installed equipment ends, and the residents are not deceased, ownership can be awarded to the residents, or their legal guardians.

Section B: Summary of RFI Responses Provided by Private Citizens

- Consideration of beneficiaries of Plan Vital
- To consider low income, mid-mid/high income level.
- households where the sole provider is living on social security pension, irrespective of the geographical location. Ex-members of the US armed forces should be given priority.
- Individuals with an energy dependent disability.
- Middle working class
- Those that pay more than \$7,500 in taxes.