BACKGROUND

The mission of the Federal Emergency Management Agency (FEMA) is to reduce the loss of life and property and protect our institutions from all hazards by leading and supporting the nation in a comprehensive, risk-based emergency management program of mitigation, preparedness, response, and recovery. Beginning September 17, 2017, Hurricane Maria caused significant damages to the Commonwealth of Puerto Rico (Commonwealth). In response, President Donald J. Trump issued a disaster declaration on September 20, 2017 encompassing the entire territory. The declaration authorized federal public assistance to affected communities and certain non-profit organizations through FEMA in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance (Stafford) Act of 1974 (42 United States Code §§ 5121-5207), *as amended*; the Sandy Recovery Improvement Act of 2013; and the Bipartisan Budget Act of 2018 (Pub. L. 115-123). The Puerto Rico Central Office of Recovery, Reconstruction and Resiliency (COR3) is the grant recipient, and multiple Commonwealth and Municipal agencies may be the subrecipient for specific projects.

This Programmatic Environmental Assessment (PEA) is prepared in accordance with Section 102 of the 1969 National Environmental Policy Act (NEPA), *as amended*, and the Regulations for NEPA Implementation (Title 40 Code of Federal Regulations [CFR] §§ 1500–1508) under the Council on Environmental Quality. This PEA considers potential environmental impacts of potential project alternatives, including a no action alternative, to determine whether to prepare a Finding of No Significant Impact (FONSI) or prepare an Environmental Impact Statement (EIS). In accordance with the above referenced regulations; Department of Homeland Security (DHS) Instruction Manual 023-01-001-01, Revision 01; FEMA Directive 108-1; and FEMA Instruction 108-1-1; FEMA is required, during the decision-making process, to evaluate and consider the environmental consequences of federal actions it funds or undertakes.

Recent changes to the President's Council on Environmental Quality regulations implementing NEPA (40 CFR §§ 1500–1508) became effective on September 14, 2020 (85 Fed. R. 43304-76 (July 16, 2020)). As stated in 40 CFR § 1506.13, the new regulations apply to any NEPA process begun after September 14, 2020. This PEA substantively commenced prior to that date; therefore, this PEA conforms to the CEQ NEPA implementing regulations that were in place prior to September 14, 2020, and procedures adopted pursuant to Department of Homeland Security Directive 023-01, Rev. 01, and FEMA Directive 108-1.

FEMA will review projects that fit within the parameters and thresholds considered in this PEA with any necessary project-specific consultation and permitting. Projects exceeding the thresholds or having impacts greater than those considered in this PEA may result in a project-specific tiered environmental assessment from this PEA, or a stand-alone project-specific environmental assessment. Projects that FEMA determines cannot meet a FONSI will require an EIS or FEMA may choose to not fund such a project. FEMA will engage the public for comment and input associated with project-specific assessments.

ALTERNATIVES

Under the Stafford Act, FEMA has authority to provide funding for cost-effective hazard mitigation and resiliency measures for facilities damaged by the recent disasters. The purpose of this PEA is to provide grant funding to restore damaged utilities and increase their resiliency in response to future disaster events. The need for the PEA is to re-establish a safe and reliable network of utilities (through repair, replacement, or realignment) in order to reconnect the communities affected by the storm with safe and efficient delivery of energy, water, sewer service, and communications, and help reduce the potential for future damages by upgrading damaged utilities in accordance with current engineering codes and standards. The grant funding is necessary to address these concerns and reduce the damage and disruption caused by future disasters throughout the Commonwealth.

The types of utilities projects covered under this PEA involve repair, restoration, replacement, and hazard mitigation of the Commonwealth's utility and communications systems. Common actions may include the removal and replacement of current infrastructure, upgrading systems to current codes and standards, utility trench installation, and directionally drilled installation of utilities. Hazard mitigation activities may include utility pole replacement and hardening, flood barrier installation, high capacity pump installation, realignment, or relocation of infrastructure to less potentially hazardous locations, and facility hardening. This PEA allows for up to 20 miles of upgrades to existing linear utility projects including pipelines, transmission lines, or distribution lines. Additionally, the Utility PEA establishes Right-of-Way (ROW) limits based on developed and undeveloped sites and urban and rural locations. For both overhead transmission and distribution lines and underground transmission lines, the applicable ROW standard for overhead utilities involving the primary and secondary distribution of power is 10 feet.

The classes of utilities covered under this PEA include: water storage facilities, water pump stations, treatment plants for potable water/wastewater and their associated delivery systems; supplemental power generation, transmission, and distribution facilities, including, but not limited to, wind turbines, solar farms, generators, substations, and power lines; natural gas storage, transmission, and distribution facilities; stormwater, sewage, and wastewater collection systems and treatment plants; and communication systems. Communication systems include cell towers, transmission lines, and towers which may have associated fiber optic lines attached to them or underground conduits with fiber optic lines. Construction areas, including cleared staging areas and access roads that are greater than five acres for previously disturbed areas that require minimal clearing and up to two acres for undeveloped land requiring clearing, grubbing, or ground disturbance, would be considered on a case-by-case basis to avoid any major impacts to sensitive resources.

FEMA developed and considered multiple alternatives to fulfill the purpose and need to address the overall programmatic impacts and effects for an expected large number of utility projects that FEMA anticipates receiving from the recipient and subrecipients for grant funding. The no action alternative ("Future without Federal Project Condition") will result in no FEMA funding supporting protective measures for the Commonwealth of Puerto Rico. The programmatic action

alternatives for this PEA include Utility Repair, Replacement, and Upgrade; Utility Realignment or Relocation of Utilities; and a combination of the alternatives (Preferred Alternative) and represent classes of actions implemented both individually, or in combination with one another.

SUMMARY OF POTENTIAL IMPACTS AND MITIGATION

FEMA anticipates that project thresholds and the Conditions and Permits in Section 6.0 of this PEA will minimize impacts from the Action Alternatives to below the level of major. Project proposals with actions that exceed the thresholds and constraints evaluated in this PEA, including actions that will normally require an EA or EIS, will require additional analysis of impacts.

FEMA anticipates construction impacts will be below the level of major by requiring subrecipients to use best management practices (BMPs), adhere to local and federal ordinances and regulations, and use of ultra-low sulfur diesel fuel. Additionally, FEMA requires subrecipients to perform a general conformity applicability analysis in air quality nonattainment and maintenance areas.

If a project site is located within the floodway or 100-year floodplain, or within or near wetlands, FEMA will conduct the 8-Step Decision-Making Process in accordance with Executive Orders 11988 and 11990, as well as 44 CFR Part 9. Many of the actions undertaken as part of this PEA will result in a positive effect on floodplains by improving the hydraulic flow and protect developed areas from flooding. Hazard mitigation may include raising structures above flood levels, relocating, floodproofing, or otherwise minimizing their impacts on floodplains or wetlands. Avoidance and mitigation measures would minimize any adverse impacts to floodplains and wetlands.

If a proposed project is likely to impact waters of the United States, the subrecipients will be responsible for obtaining all applicable federal, Commonwealth, and local permit approvals and requirements. The implementation of required mitigation measures and erosion controls will minimize water quality impacts by limiting sediment leaving the site and retaining turbid waters within project areas.

Proposed actions located within the Commonwealth-defined coastal zone are subject to review in accordance with the Coastal Zone Management Act and Puerto Rico Coastal Zone Management Program and Policies. Pursuant to Federal Consistency Regulations at 15 CFR Part 930, FEMA and the Puerto Rico Planning Board (PRPB) signed a Federal Consistency Certificate for Category C through G work dated October 3, 2018 (Resolution JP-2018-324). FEMA will submit Federal Coastal Zone Consistency Determinations for scopes of work not included in the resolution to the PRPB for concurrence.

FEMA will determine if a project scope of work (SOW) meets outlined programmatic allowances from the most recent or applicable Programmatic Agreement with the Puerto Rico State Historic Preservation Office (SHPO) or requires standard Section 106 review and consultation. The Programmatic Agreement establishes a compliance review process for the undertaking, including avoidance measures which will aid to minimize and mitigate adverse impacts to historic resources.

If the SOW is within the applicable allowances, FEMA will determine the project compliant with Section 106 of the National Historic Preservation Act and the review process will be complete. If the proposed SOW does not fall within the allowances, the standard Section 106 review process will be followed, FEMA will determine the effect and initiate consultation with the SHPO. Additional archaeological surveys of ground disturbing activities may be required depending on SHPO consultation.

FEMA anticipates the actions covered by this PEA will not adversely affect federally listed or proposed threatened and endangered species or their designated critical habitat (DCH). This PEA does not include actions that would create a level of impact beyond a "not likely to adversely affect" determination for federally listed species or have an adverse modification to DCH. Any such action that would cause an impact beyond not likely to adversely affect will require FEMA to perform additional NEPA compliance. The actions satisfied by this PEA may temporarily displace local wildlife during construction; however, landscape restoration would restore wildlife habitat following completion of utility projects.

PUBLIC INVOLVEMENT

This Utilities PEA was available for agency and public review and comment for a period of 60 days from October 24 concluding on December 22, 2020. The public information process included a public notice in both Spanish and English with information about the proposed action in the *Primera Hora* newspaper. The public notice included addresses to locations where the documents were available for review. The public notice provided the location of two websites where the document was and is available to download and review: <u>https://www.fema.gov/media-library</u> and <u>https://recovery.pr/es/document-library</u>.

FEMA emailed a copy of the public notice to the recipient for distribution to the 78 municipalities in the Commonwealth with a request to post the public notice to their public facing website. As part of the public involvement campaign, FEMA targeted outreach to environmental justice populations through notices to ten community support organizations within the Commonwealth. The publicly available materials included a Spanish translation of the PEA and Executive Summary. As required by EHP protocol, FEMA has considered comments during the public notice comment period. **Attachment A** includes both agency and public comments as well as FEMA's responses.

PERMITS AND PROJECT CONDITIONS

The subrecipients are responsible for obtaining all applicable Federal, State, and local permits and other authorizations for project implementation prior to construction. The subrecipient will be responsible for adhering to all permit conditions for site-specific project review. Failure to comply with these conditions may jeopardize Federal funds.

FINDINGS

FEMA received comments from agencies as well as the public during the 60-day extended public comment period. FEMA determined that the comments do not substantively change the analysis or outcomes; comments received are addressed in **Attachment A** to this FONSI. FEMA has made the determination that Alternative 4, Preferred Alternative, best fulfills the purpose and need of this PEA. In accordance with NEPA and the FEMA Directive and Instruction, FEMA has determined that the evaluated actions will have no significant adverse impact on the quality of human health and the environment within the constraints evaluated. As a result of this FONSI, an Environmental Impact Statement will not be prepared, and the actions as described in this PEA may proceed with the constraints described. This FONSI serves as the final public notice for the proposed action. Construction activities shall not start until fifteen days after the date of this FONSI.

APPROVED BY:

John McKee Regional Environmental Officer, FEMA Region II

PROGRAM ENDORSEMENT:

Danna E. Planas Ocasio Infrastructure Division Director, Joint Recovery Office

Antonio Busquets Lopez Hazard Mitigation Division Director, Joint Recovery Office

Date

Date

Date

Attachment A: FEMA Responses to Agency and Public Comments

Comment Number	Commenter	Comment	FEMA's Response
1	USEPA, dated September 1, 2020	In the PEA, there are no details of the types of construction equipment and the levels of service that will be expected for the actions in Alternatives 2 and 3, as the projects will be varied in construction equipment use and time. However, under 40 CFR Part 193, each agency must prepare an applicability analysis for an action in a non-attainment area, using estimated equipment emissions data, to determine whether the action meets de-minimus levels, and will not require a full general conformity determination.	Section 4.2 indicates construction activities may use large cranes, excavators, dump trucks, jackhammers, skid-steer loaders, bulldozers, cement trucks, pickup trucks, and flatbed trucks. Section 5.2 notes that FEMA's subrecipients are responsible for preparing a general conformity applicability analysis for projects. As noted in Section 6.0 of the Utilities PEA, subrecipients are required to obtain all applicable local, state, and federal permits, including any air quality permits required.
2	USEPA, dated September 1, 2020	Please edit sentence on page 24 to indicate ultra-low sulfur diesel: "Engines and generators should run on ultra-low sulfur diesel."	Subrecipients will run engines and generators on ultra-low sulfur diesel.
3	USEPA, dated September 1, 2020	Page 16 – Conversion of a Fuel Source. This paragraph should include an example of a "small power marketing plant" and discussion of the likely electrical or power output from such a plant.	Section 4.3 reference is used within branches of the Department of Energy (DOE) to refer to the sale of power from large hydrologic dams was improperly applied to Alternative 3. The appropriate reference is "Utility Scale" energy production.
4	EarthJustice, dated November 18, 2020	EarthJustice requested an extension of the public comment period noting that organizations represented did not receive direct notice of the PEA.	The public notice for the Utilities PEA was initially published on October 22, 2020 ending on Saturday November 21, 2020. FEMA republished the public notice, sent copies to the organizations identified as represented by EarthJustice, and extended the comment period for an additional 30 days beginning November 22, 2020, and ending on December 22, 2020.

Comment	Commenter	Comment	FEMA's Response
Number			
5	Rincón chapter of Surfrider Foundation, dated November 18, 2020	First, we have received many comments from individuals and groups who are also reviewing this document that the allotted 15 day period for submitting comments is inadequate for a valid assessment. Thus we respectfully request an extension to this comment period, to allow members of the general public sufficient time to formulate informed comments.	The public notice was initially published on October 22, 2020 ending November 21, 2020 for 30 days and subsequently extended an additional 30 days beginning November 22, 2020 and ending on December 22, 2020.
6	Rincón chapter of Surfrider Foundation, dated November 23, 2020	Climate Change Impacts (CCI): nowhere in the document to find a mention of climate change as a criterion for determining potential environmental impacts to the work that needs to be done.	While the PEA does not use the term 'climate change,' FEMA funds projects that incorporate resiliency measures to withstand the impacts of extreme weather and other threats. The PEA considers impacts to water resources (Sections 5.3-5.6) and air quality impacts, including pollutants that exacerbate the effects of climate change (Section 5.2). FEMA requires projects to comply with local, state, and federal permitting under the authority of various regulatory agencies. This includes complying with Commonwealth laws such as Puerto Rico Climate Change Mitigation Adaptation and Resilience Act. Subrecipients submit projects designed to meet their needs and the risks they anticipate, meeting current codes and standards as established under the 2018 Puerto Rico Building Codes, that FEMA evaluates under its authorities.

Comment Number	Commenter	Comment	FEMA's Response
7	Rincón chapter of Surfrider Foundation, dated November 23, 2020	In general for Puerto Rico CCI would include ongoing Mean Sea Level Rise, predictive modelling that indicates future tropical cyclones will most likely become stronger (average wind speed) and slower (longer duration of hurricane force winds) - and coupled with that, predictive modelling that shows significant changes rainfall patterns (where average annual rainfall totals may remain approximately the same for the island in general, but rainfall events becoming fewer but more intense, with significant regional variation).	See Response to Comment 6
8	Rincón chapter of Surfrider Foundation, dated November 23, 2020	Obviously allowing for CCI will affect the design and (re)construction of specific projects that may, in fact, involve significant environment impacts, ranging from the hardening / seawalls / 'storm proofing' of electric generation facilities and their associated fuel offloading infrastructure to the hardening / 'storm proofing' or relocation of T&D substations.	See Response to Comment 6
9	Rincón chapter of Surfrider Foundation, dated November 23, 2020	Since historically PREPA has been reluctant to factor CCI into their planning, we feel it is incumbent on FEMA to be the agency responsible to acknowledge these impacts, and include CCI mitigation as a specific criterion when determining potential environmental impacts of specific projects, and thus be included in the PEA.	See Response to Comment 6

Comment Number	Commenter	Comment	FEMA's Response
10	Rincón chapter of Surfrider Foundation, dated November 23, 2020	Agricultural Lands not included in Section 5 Affected Environments: a significant percentage of the high voltage transmission lines in the T&D system are located on agricultural land, so we feel that inclusion of this category is required for environmental assessment. More importantly, installations like the 'solar farm' located on agricultural land in Humacao that operated under the aegis of PREPA (which was destroyed by the hurricane) and other similar PREPA proposals that may in fact be approved by the time this document is finalized might be included in this funding - and thus merit a categorical environmental assessment.	Section 5.1 addresses the Prime Farmland under the Farmland Protection Policy Act; projects that affect soils qualifying as prime, unique, or of statewide importance may result in consultation between FEMA and the Natural Resource Conservation Service. Project SOW that exceed the thresholds set in Section 4 of the PEA will be evaluated when FEMA receives them in a Tiered Environmental Assessment or in a project-specific environmental assessment.
11	EarthJustice, dated December 21, 2020	In the major federal action contemplated in the granting of a historic amount of funds, FEMA should be guided by its administrative procedure known as, "A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action".	FEMA prepared the 2020 Utilities PEA in accordance with Section 102 of the NEPA of 1969, <i>as amended</i> ; CEQ regulations for implementation of NEPA (40 CFR §§ 1500 to 1508), FEMA Directive 108-1, and FEMA Instruction 108-1-1.
12	EarthJustice, dated December 21, 2020	Under this statutory framework, actions that "may affect" a listed species or critical habitat may not proceed unless and until the federal agency ensures, through completion of the consultation process, that the action is not likely to cause jeopardy or adverse modification of critical habitat.	All projects submitted to FEMA will be evaluated for adherence to existing programmatic consultations and associated conservation measures or in project-specific consultation with the United States Fish and Wildlife Service (USFWS). Projects which may adversely affect listed species or critical habitat will require a biological opinion in coordination and consultation with the USFWS and any associated public process. Projects that may result in jeopardy or adverse modification through that process may be ineligible for FEMA funding.

Comment Number	Commenter	Comment	FEMA's Response
13	EarthJustice, dated December 21, 2020	The multiple infrastructure projects to be funded by FEMA present a high risk of significant impacts to endangered species and the environment.	See Response to Comment 12
14	EarthJustice, dated December 21, 2020	FEMA cannot exclude public input by subsequently determining that when, "biological impacts are greater than what this PEA includes, FEMA will review those projects on a case-by-case basis to determine appropriate level of NEPA analysis." (p.40).	See Response to Comment 12
15	EarthJustice, dated December 21, 2020	The PEA provides no basis for the allegation that utility projects in, on, or over land, streams, and reservoirs, embankments and in-water work "would likely result in adverse short-term negligible to minor impacts to the habitat during construction activities", (p.43) and fails to address significant adverse impacts to habitat, wildlife and fish.	See Response to Comment 12
16	EarthJustice, dated December 21, 2020	FEMA's proposed review of projects for the potential occurrence of threatened and endangered species ("T&E") species and designated critical habitat ("DCH") in the area should be included in an EIS.	See Response to Comment 12
17	EarthJustice, dated December 21, 2020	Attempts to minimize impacts to T&E Species and DCH through the National Pollutant Discharge Elimination System ("NPDES") permitting program and implementation of a SWPPP might not mitigate significant adverse impacts that could have been determined in an EIS.	See Response to Comment 12

Comment	Commenter	Comment	FEMA's Response
Number			
18	EarthJustice, dated December 21, 2020	The PEA presumably proposes to address the impacts of the proposed permanent work on the damaged structures and other infrastructure work. That is not explicitly stated in the PEA.	Section 4 of this PEA contains anticipated actions for consideration when using the PEA; projects not consistent with these actions are not part of this evaluation and will be reviewed under NEPA and FEMA's authorities as subrecipients submit them to FEMA.
19	EarthJustice, dated December 21, 2020	The mere reference to different alternatives does not satisfy NEPA requirements. The agency must discuss, explain and provide public information of each alternative.	See Response to Comment 18
20	EarthJustice, dated December 21, 2020	Relocation of utilities at greater distances from an existing ROW, could encroach on fence line communities and the environmental impacts could also be significant.	See Response to Comment 18

Comment Number	Commenter	Comment	FEMA's Response
21	EarthJustice, dated December 21, 2020	One of the main shortcomings of the PEA is the total failure to provide specific lists, descriptions, mapping or any other indication of the electric infrastructure grid work that is proposed in each area.	Projects submitted to FEMA under the Stafford Act are developed by the subrecipients for grant reimbursement. Until a subrecipient develops a project proposal, FEMA typically does not have detailed lists, scopes of work, or other details to review. FEMA prepared this PEA as a planning tool to streamline the process of actions that FEMA routinely funds in disaster recovery operations under its authorities while separating out actions that would require more rigorous evaluation, in the absence of specific project proposals. The PEA further reduces the potential for subrecipients to segment projects in order to avoid NEPA review under FEMA's authorities. FEMA requires approved projects to comply with local, state, and federal laws and Executive Orders; the recipient and subrecipients are still required to comply public involvement requirements that the Puerto Rico regulatory entities may have. Recent changes to the President's CEQ regulations implementing the NEPA (40 CFR §§ 1500–1508) became effective on September 14, 2020 (85 Fed. R. 43304-76 (July 16, 2020)). As stated in 40 CFR § 1506.13, the new regulations apply to any NEPA process begun after September 14, 2020. This PEA substantively commenced prior to that date; therefore, this PEA conforms to the CEQ NEPA implementing regulations that were in place prior to September 14, 2020, and procedures adopted pursuant to DHS Directive 023-01, Rev. 01, and FEMA Directive 108-1.

Comment Number	Commenter	Comment	FEMA's Response
22	EarthJustice, dated December 21, 2020	The PEA incorporates a faulty procedural approach, a haphazard scheme for the environmental analysis for the vast array of infrastructure work proposed; (P. 11). This supplemental analysis and tiered EA scheme is problematic and doesn't comply with NEPA for a number of reasons: 1-It promotes segmentation of the environmental analysis; 2-Environmental review and consultation with relevant agencies is left entirely within FEMA's discretion; 3-Public access to information is piecemeal and unduly limited; and 4-Public input and informed participation is undercut by the staggered administrative process. Allowing such broad agency procedural discretion would effectively negate an integral environmental analysis and cancel out public input.	See Response to Comment 21
23	EarthJustice, dated December 21, 2020	The PEA is highly biased and skewed towards replicating the existing centralized T&D system and should not be allowed to block the preparation of an EIS. It not only excludes viable alternatives described in these comments but fails to consider the environmental effects of the preferred and/ or considered alternatives	See Response to Comment 21
24	EarthJustice, dated December 21, 2020	The PEA fails to specify the magnitude and extent of projects that "require replacement or relocation of contiguous portions of the utility to mitigate risk and restore infrastructure."	See Response to Comment 21

Comment Number	Commenter	Comment	FEMA's Response
25	EarthJustice, dated December 21, 2020	The environmental impacts of the project alternatives in the PEA are significant, not conducive to mitigation to less than major and merit the preparation of an Environmental Impact Statement ("EIS"). A Finding of No Significant Impact (FONSI) would not adequately address the multiple significant environmental impacts of the extensive infrastructure work proposed.	To date, FEMA has not received project proposals in Puerto Rico that would rise to the level of significance or that cannot be mitigated to lower levels through applicable local, state, or federal permitting, applicable consultation with federal regulatory agencies, or application of associated project conditions. Recent changes to the President's CEQ regulations implementing the NEPA (40 CFR §§ 1500–1508) became effective on September 14, 2020. 85 Fed. R. (43304-76 (July 16, 2020)). As stated in 40 CFR § 1506.13, the new regulations apply to any NEPA process begun after September 14, 2020. This PEA substantively commenced prior to that date; therefore, this PEA conforms to the CEQ NEPA implementing regulations that were in place prior to September 14, 2020, and procedures adopted pursuant to DHS Directive 023-01, Rev. 01, and FEMA Directive 108-1. Additionally, all projects submitted to FEMA are evaluated under Section 106 of the National Historic Preservation Act, 36 CFR Part 800, and applicable programmatic agreements negotiated between FEMA, the Puerto Rico State Historic Preservation Office, and the Puerto Rico Central Office for Recovery, Reconstruction, and Resiliency. Project proposals that do not meet programmatic agreements require individual consultation between FEMA and the Puerto Rico State Historic Preservation Office.
26	EarthJustice, dated December 21, 2020	The PEA is a highly biased document which cannot serve the purpose of excluding the preparation of an EIS. It not only excludes other viable alternatives as described above, but also fails to consider the environmental effects of the preferred and/ or considered alternatives.	See Response to Comment 25

Comment Number	Commenter	Comment	FEMA's Response
27	EarthJustice, dated December 21, 2020	Each project's SOW should be included in an EIS to determine potential significant adverse impacts to historic or prehistoric or paleontological archeological resources.	See Response to Comment 25
28	EarthJustice, dated December 21, 2020	The Programmatic Environmental Assessment fails to adequately consider alternatives to centralized fossil fuel power plants, which could lessen or eliminate the need for expensive transmission system projects.	Section 4 lists the actions considered and evaluated in this PEA; actions that are not addressed by this PEA will be evaluated as subrecipients submit project proposals to FEMA. All projects proposed for FEMA funding are required to comply with local and state requirements as well. FEMA's authorities do not prevent subrecipients from proposing energy efficiency or renewable energy projects. Utility-scale, permanent power generation actions were excluded from analysis for two reasons, the first of which is that FEMA anticipates such actions would well exceed the acreage threshold considered for analysis under this PEA. Secondly, FEMA anticipates such proposals would necessarily include other federal agencies with regulatory jurisdiction for establishing new utilities. Likewise, such actions would warrant a closer look at a project-specific scale which this PEA was not intended to address. The Utilities PEA was prepared in accordance with the Stafford Act, DHS, and FEMA implementing procedures and directives for NEPA. The recipient and subrecipients are responsible for selecting and designing projects for submittal to FEMA for grant funding. FEMA funds eligible projects via grants in accordance with the Stafford Act.
29	EarthJustice, dated December 21, 2020	The principal flaw of the PEA is that it fails to consider viable alternatives to the rebuilding, "hardening" and undergrounding of the existing T&D system.	See Response to Comment 28

Comment Number	Commenter	Comment	FEMA's Response
30	EarthJustice, dated December 21, 2020	The viability of alternatives other than those listed in the PEA has been determined in the IRP and local law and must therefore be considered by FEMA in the corresponding environmental document. This PEA fails to address this issue.	See Response to Comment 28
31	EarthJustice, dated December 21, 2020	The PEA is contradictory as to additional capacity in the electric system that would result from the proposed work, on the one hand referencing "utility retrofits to accommodate greater capacity" (p.25) and subsequently alleging that " Due to limiting capacity to pre-Hurricane Maria levels, there would be no additional long-term energy demands on the Commonwealth's utility networks." (p.63).	Presented in Section 4, this PEA is intended to support supplemental power, in part, rather than new permanent power generation. Page 24 discusses impacts in the context of air quality, whereas, page 65 discusses anticipated impacts in the context of public services and utilities. As indicated in Section 5.2.2, by meeting current codes and standards, this PEA will be in alignment with the Commonwealth's 2019 Energy Public Policy Act. The 2019 Act updates and unifies policy initiatives stated from several Acts regarding Puerto Rico's energy policy. The 2019 Act establishes the Puerto Rican energy public policy and guiding principles for the electric grid based on efficiency, formulates energy policy, and establishes goals and objectives for becoming more energy efficient and independent.
32	EarthJustice, dated December 21, 2020	The Programmatic Environmental Assessment fails to adequately consider impacts to air, water, species habitats, farmland, and flooding risks.	Impacts to air are evaluated in Section 5.2, impacts to water are evaluated in Section 5.3, impacts to species habitats are evaluated as part of Sections 5.7, 5.8, and 5.9, impacts to farmland are evaluated in Section 5.1, and impacts to flood risks are evaluated in Section 5.5.
33	EarthJustice, dated December 21, 2020	The PEA acknowledges that the projects may involve "changes to topography" but fails to discuss how topographical alterations impact superficial and ground water flows, flood levels and sedimentation of water courses.	Section 4.2 illustrates the typical dimensions of excavations associated with the installation of potential actions. During project review, FEMA also evaluates impacts to floodplains and requires mitigation or project changes to avoid a rise in flood elevations. FEMA defers to the regulatory agencies for enforcement of water quality with the Commonwealth under Section 401 of the CWA and with the USACE for Section 404 of the CWA.

Comment Number	Commenter	Comment	FEMA's Response
34	EarthJustice, dated December 21, 2020	The PEA does not specify which projects or even how many projects involve the permanent installation of generators and would require additional permitting from PREQB and additional studies, a tiered EA or stand- alone EA if emissions exceed NAAQS levels.	Until subrecipients identify projects and scopes of work, FEMA does not have an estimate of projects incorporating generators. FEMA defers to the respective regulatory agencies responsible for setting emission standards, issuing permits, and other regulatory actions. As noted in Section 5.2, subrecipients are responsible for preparing a general conformity applicability analysis in air quality nonattainment areas and adhering to any applicable State Implementation Plans.
35	EarthJustice, dated December 21, 2020	FEMA failed to account for the context and intensity of the upstream and downstream emissions impacts resulting from the activities proposed in the PEA.	See Response to Comment 34
36	EarthJustice, dated December 21, 2020	Furthermore, the PEA fails to specify the extent and magnitude of "utility retrofits to accommodate greater capacity" (p.25) which would not only increase short- term minor emissions but may exceed NAAQS.	The upgrade of utilities shall comply with current codes and standards. Puerto Rico's 2018 Building Codes and Standards were prepared in accordance with the International Codes Council standards. The American Society of Heating and Air-Conditioning Engineers and the International Codes Council in cooperation with the DOE develop codes and standards that incorporate materials and technologies in both designs and construction that encourage energy conservation.
37	EarthJustice, dated December 21, 2020	The PEA fails to acknowledge that noise from realignment or relocation of utilities could impact communities with long-term noise effects.	Noise impacts are addressed in Section 5.13.2 of the Utilities PEA. Noise impacts are regulated by the PRDNER/PREQB under the Noise Pollution Control Regulation of 2011.
38	EarthJustice, dated December 21, 2020	The PEA notes the significant adverse impacts to water resources from the four thermoelectric power plants that use large amounts of saline (seawater) for cooling	As indicated in Section 5.3.1, FEMA notes that four thermoelectric power plants use up to 2,262 Mgal/d of seawater. The potential actions discussed in Section 4.0 do not include activities that will require the use of additional seawater withdrawals.

Comment Number	Commenter	Comment	FEMA's Response
39	EarthJustice, dated December 21, 2020	The PEA's allegation that, "relocating utilities within a new or expanded ROW would have similar impacts and mitigation measures as those described for Alternative 2" (p.31) and "may have a negligible to minor direct or indirect on impact water resources, including wetlands and waterways; but would have mitigation through Section 401 and Section 404 permitting" (p. 32) is wholly unsubstantiated.	Impacts to wetlands are addressed in Section 5.4 and impacts to water quality are addressed in Section 5.3 of the PEA. FEMA defers to the regulatory agencies for enforcement of water quality with the Commonwealth under Section 401 of the CWA and with the USACE for Section 404 of the CWA. Projects with greater than one acre of ground disturbance require a state discharge pollution prevention plan and associated permitting and conditions from the USEPA.
40	EarthJustice, dated December 21, 2020	The PEA acknowledges that, "certain sites could result in some fill placed within the wetland boundaries during construction" and proposes that, "Where individual projects may impact wetlands, streams, or WOTUS, FEMA would consider further tiered review".	See Response to Comment 39
41	EarthJustice, dated December 21, 2020	The PEA erroneously and repeatedly alleges that the, "process of relocating utilities within a new or expanded ROW would have the same impacts and mitigation measures as those described for Alternative 2". (p.34). Similarly, the allegation that expanding a ROW including embankment and in-water work that may impact wetlands will have "minor short-term direct or indirect impacts on wetlands" (p.34).	See Response to Comment 39

Comment Number	Commenter	Comment	FEMA's Response
42	EarthJustice, dated December 21, 2020	The extent of the damages including flow impediment and other adverse impacts to stream and floodplain hydraulics and function cannot be characterized as "moderate". Relocation of utilities in El Yunque National Forest or a Wild and Scenic River and other sensitive ecologic areas require the preparation of an EIS. The sheer magnitude of potential relocation work mandates an EIS.	Any project proposal within El Yunque will be closely coordinated with the National Park Service who has jurisdiction over the land and project proposals will follow the Wild and Scenic Rivers prohibitions and management activities noted in Section 5.3.1. Relocation of utilities within the NPS would require additional NEPA analysis as noted in Section 5.3.2.
43	EarthJustice, dated December 21, 2020	A determination of the extent and magnitude of the projects in the CZMA that allows for public information and participation is required.	Coastal Zone Management Act is addressed in Section 5.6 of the PEA. Project proposals submitted to FEMA will be reviewed under existing general consistency determinations or project-specific consultation with the Puerto Rico Planning Board.
44	EarthJustice, dated December 21, 2020	The Allowances in the Second Amendment Programmatic Agreement cannot be used as a subterfuge to avoid NEPA analysis of significant adverse impacts on historic or prehistoric or paleontological archeological resources.	All projects submitted to FEMA are evaluated under Section 106 of the National Historic Preservation Act, 36 CFR Part 800, and applicable programmatic agreements negotiated between FEMA, the Puerto Rico State Historic Preservation Office, and the Puerto Rico Central Office for Recovery, Reconstruction, and Resiliency. Project proposals that do not meet programmatic agreements require individual consultation between FEMA and the Puerto Rico State Historic Preservation Office.
45	EarthJustice, dated December 21, 2020	A subsequent Section106 review process and consultation with the SHPO and "appropriate consulting parties" will not comply with NEPA standards.	See Response to Comment 44

Comment Number	Commenter	Comment	FEMA's Response
46	EarthJustice, dated December 21, 2020	The Programmatic Environmental Assessment fails to include adequate public participation measures, especially concerning impacts to environmental justice communities.	The Public Comment Period was originally 30 days and subsequently extended an additional 30 days. As part of the outreach effort a public notice was published in the Commonwealth-wide newspaper <i>Primer</i> <i>Hora</i> , ten community organizations were contacted via email, English and Spanish versions of the document were posted at four locations within the Commonwealth and made available for download on both FEMA's website and COR3's website. Environmental Justice concerns will be evaluated for individual projects submitted to FEMA. Recipients and subrecipients may assist with carrying out requirements of Executive Order 12898, particularly with public involvement, but FEMA will make the final determination of compliance.
47	EarthJustice, dated December 21, 2020	Effective public participation requires specific information about realignment in farmland. It is wholly inadequate if FEMA has discretion to "consult with USDA NRCS to avoid, minimize, or mitigate the impacts" (p.21) but does not discuss the potential significant adverse impacts in a public-facing document.	The Public Comment Period was originally 30 days and subsequently extended an additional 30 days. Section 5.1 addresses the Farmland Protection Policy Act; projects that affect soils that qualify as prime, unique, or of statewide importance result in consultation between FEMA and the Natural Resource Conservation Service. Project proposals that exceed the thresholds set in Section 4 of the PEA will be evaluated when FEMA receives them in a Tiered Environmental Assessment or in a project-specific environmental assessment.
48	EarthJustice, dated December 21, 2020	The assertion in the PEA that relocation of a utility "would have a minor impact on geology and soils, negligible to minor impacts on prime or important farmland, and no impacts on seismicity" (p.21) is unfounded.	See Response to Comment 47

Comment Number	Commenter	Comment	FEMA's Response
49	EarthJustice, dated December 21, 2020	Rebuilding and hardening the existing T&D system would perpetuate South to North transmission and central station fossil fuel plants in Southern Puerto Rico thus cementing air, water and land pollution that have significant impacts on EJ communities and would continue to disproportionately and adversely affect these low income and afro descendent populations.	The Utilities PEA was prepared in accordance with the Stafford Act, DHS, and FEMA implementing procedures and directives for NEPA. The recipient and subrecipients are responsible for selecting and designing projects for submittal to FEMA for grant funding. FEMA funds eligible grants in accordance with the Stafford Act.
50	EarthJustice, dated December 21, 2020	The PEA is contradictory, on the one hand erroneously concluding that the percentage of households below the poverty level does not vary a great deal across municipalities or towns in Puerto Rico and subsequently acknowledging variations in racial makeup, income levels, and poverty rates within Puerto Rico. While noting that, "the southeast Municipalities near Arroyo and Yabucoa generally have a higher percentage of black Hispanic population than many other Municipalities", (p.55).	As indicated in Section 5.11.1 of the PEA, small variations in racial makeup, income levels, and poverty rates differ slightly between regions and Municipalities within Puerto Rico. Both state and federal governments rely on the federal poverty level, which is published by the Department of Health and Human Services. Government programs typically measure households on a sliding scale of incomes against the federal poverty level.
51	EarthJustice, dated December 21, 2020	The PEA fails to document the high numbers of afro descendant population in Guayama, Salinas and other municipalities where the most contaminating electric power plants are located.	As noted in Section 5.11.1 of the PEA, FEMA acknowledges the prevalence of afro descendant (black Hispanic) populations throughout the Commonwealth.
52	EarthJustice, dated December 21, 2020	The PEA indicates that the public information process would include "targeted outreach to environmental justice populations through notices to community organizations." (p.79). Yet, no known environmental justice organizations were contacted or notified of the PEA or the comment period.	The Public Comment Period was originally 30 days and subsequently extended an additional 30 days. As part of the outreach effort a public notice was published in the Commonwealth-wide newspaper <i>Primer</i> <i>Hora</i> , ten community organizations were contacted via email, English and Spanish versions of the document were posted at four locations within the Commonwealth that agreed to host copies, and made available for download on both FEMA's website and COR3's website.

Comment Number	Commenter	Comment	FEMA's Response
53	EarthJustice, dated December 21, 2020	The PEA erroneously claims that, "data does not exist to support a claim that the existing level of utility service is causing widespread losses of employment and reduced access to health services." (p.55). As noted above, the lack of electric service was linked to hundreds of deaths in the aftermath of Hurricane Maria.	FEMA does not evaluate the immediate impacts caused by an incident. Potential projects to be considered under this PEA or subsequent detailed reviews are in contrast to the emergency actions taken after the disaster; since Hurricane Maria in 2017, emergency repairs have restored power to 99% of the Commonwealth.
54	EarthJustice, dated December 21, 2020	The PEA contains an inadequate discussion of risks to public health and safety.	Sections 5.16 and 5.17 of the PEA address public health and safety and the interaction with hazardous materials, respectively. As indicated in Section 5.16.2, the recipient and subrecipients will be responsible for implementing OSHA standards. Requirements for the discovery of hazardous materials and workplace safety are listed in Section 6.0.
55	EarthJustice, dated December 21, 2020	The Programmatic Environmental Assessment fails to adequately consider resiliency concerns.	Under the Stafford Act, FEMA has authority to provide funding for cost-effective hazard mitigation and resiliency measures for facilities damaged by Hurricane Maria. Subrecipients develop and propose projects for FEMA's consideration. FEMA encourages mitigation and resiliency measures to reduce risk and to protect the federal investment in disaster recovery projects.
56	EarthJustice, dated December 21, 2020	The PEA references recent earthquakes and aftershocks but fails to discuss how seismic activity could impact proposed infrastructure, including impacts to large scale utility solar projects.	Section 4 defines the parameters of projects to be considered under the PEA and is not intended to address large scale utility projects. Such projects would be addressed through either a Tiered Environmental Assessment or site-specific Environmental Assessment. As stated in Section 4.0 of the Utilities PEA, projects must meet current codes and standards. The most recent 2018 Puerto Rico Building Codes and Standards specifically addressed earthquake design criteria (Section 1604 & Section O102.3.2 – Earthquake Loads and Section 1604 General Design Requirements).

Comment Number	Commenter	Comment	FEMA's Response
57	EarthJustice, dated December 21, 2020	The environmental analysis in this case should include the joint projects generally referenced in the PEA. The PEA references the magnitude of impacts "described in this PEA" but contains no such description.	The 2020 Utilities PEA was prepared in accordance with Section 102 of the NEPA of 1969, <i>as amended</i> ; and the Regulations for implementation of the NEPA (40 CFR §§ 1500 to 1508) and FEMA Directive 108-1, and FEMA Instruction 108-1-1.
58	EarthJustice, dated December 21, 2020	No basis is provided for the allegation that the Action Alternatives in the PEA "would not result in major cumulative impacts".	Section 5.18.1 states that FEMA expects the Action Alternatives in this PEA would not result in major cumulative impacts since FEMA is funding actions that involve the repair, replacement, or rehabilitation of projects that are similar in function, size, and locality to the existing systems. Additionally, local state, and federal permitting and permit requirements such as mitigation will assist in minimizing cumulative impacts. Project proposals that exceed the thresholds within this PEA will be addressed through either a Tiered Environmental Assessment or as a project-specific Environmental Assessment.
59	EarthJustice, dated December 21, 2020	The PEA acknowledges that multiple simultaneous utility projects within the same watershed will have a cumulative impact to vegetation, water quality, and soil could but for some unspecified reason, FEMA erroneously assumes "that cumulative impacts from the utility projects covered under this PEA would be short- term and less than major." (p.75). In sum, the PEA fails to consider the cumulative impacts of the infrastructure projects.	See Response to Comment 58
60	EarthJustice, dated December 21, 2020	A programmatic environmental impact statement that discusses alternatives such as onsite, rooftop solar coupled with battery energy storage systems instead of rebuilding the existing electric transmission and distribution system is required.	Subrecipients develop and propose projects to FEMA for evaluation; should a subrecipient submit a project proposal that would require an environmental impact statement, FEMA will consider whether or not to fund it, and if so, then initiate an EIS as needed.

Comment	Commenter	Comment	FEMA's Response
Number			
61	FEMA Office of Chief Council,	Requested consistency in the reference to federal codes	FEMA's preferred nomenclature for the statement of federal
	dated December 29, 2020	and regulations.	regulations within the 2020 Utilities PEA is the use of the symbol § when referring to sections and subsections of federal code.
62	FEMA Office of Chief Council,	Requested the addition of a statement that states that	FEMA acknowledges that federal air quality regulations apply to the
	dated December 29, 2020	federal air quality regulations apply to the	Commonwealth of Puerto Rico. As such, the application of the 2020
		Commonwealth of Puerto Rico as they would any state.	Utilities PEA will comply with all applicable federal air quality
			regulations.
63	FEMA Office of Chief Council,	Requested consistency in the application of acronyms	The list of acronyms provided in the 2020 Utilities PEA is inclusive of
	dated December 29, 2020	throughout the document.	all acronyms used within the document.
64	FEMA Office of Chief Council,	Clearly indicate that the CZMA applies to the areas	For FEMA's application of the 2020 Utilities PEA, please note that the
	dated December 29, 2020	protected under the act.	CZMA applies to all applicable areas protected under the CZMA.
65	FEMA Office of Chief Council,	Requested that references to areas be consistent with the	As indicated in Section 4.0, the stated geographic thresholds apply to
	dated December 29, 2020	geographic thresholds listed in Section 4.0 of the PEA.	all applicable projects satisfied by the Utilities PEA.
66	FEMA Office of Chief Council,	Requested that FEMA fully describe the details of	In Section 5.10.1.2, the first Programmatic Agreement between
	dated December 29, 2020	agency's Programmatic Agreement at first mention.	FEMA and Puerto Rico SHPO for Section 106 Review was executed
			on May 2016 and amended in April 2018. A Second Amendment
			Programmatic Agreement between FEMA and Puerto Rico SHPO was
			executed on November 13, 2019. The first and second Programmatic
			Agreements are known collectively as the Programmatic Agreement.

Comment	Commenter	Comment	FEMA's Response
Number			
67	FEMA Office of Chief Council, dated December 29, 2020	Requested that FEMA update Section 7.0 based on the final details of the agency coordination and public involvement.	The Public Comment Period was originally 30 days; however, FEMA subsequently extended the comment period for an additional 30 days. As such, the public comment period for the 2020 Utilities PEA was 60 days. As part of the outreach effort, a public notice was published in the Commonwealth wide newspaper <i>Primer Hora</i> . FEMA provided the public notice to ten relevant community organizations via email. English and Spanish versions of the 2020 Utilities PEA were posted at four locations throughout the Commonwealth. Finally, the Utilities PEA was made available for public download on both FEMA's
			website and COR3's website.