Via email and Overnight Mail
May 2, 2024
Federal Emergency Management Agency
Regulatory Affairs Division, Office of Chief Counsel,
FEMA, 8NE, 500 C Street SW,
Washington, DC 20472

Re: RULEMAKING PETITION

On behalf of the Center for Biological Diversity and 22 additional organizations, enclosed is a Rulemaking Petition for Energy Justice Priorities for Thriving, Resilient Communities (“EJPs”) urgently needed to address the climate emergency, the energy affordability crisis, and environmental injustice. Pursuant to the Administrative Procedure Act, 5 U.S.C. § 553(e), and Federal Emergency Management Agency’s (FEMA) regulations, 44 C.F.R. § 1.8(a), we urge FEMA to accept this Petition and propose the EJPs to redirect FEMA resources away from fossil fuel-based infrastructure and towards distributed renewable energy and related technologies.

Specifically, the proposed regulations would require FEMA to: (1) for energy-related projects, prioritize deployment of resilient distributed clean energy technologies—including, but not limited to, energy-efficiency and weatherization technologies, distributed rooftop and community-based solar and storage (i.e., projects located near the communities they serve), and solar generators and microgrids—over fossil fuel alternatives, except in cases where necessary to address temporary emergency conditions; and (2) for all risks assessments and mitigation strategies, expressly consider and, where applicable, pro-actively choose resilient community technologies over fossil infrastructure.

This new approach is entirely consistent with FEMA’s statutory mandates. Congress has specifically directed FEMA to define “resilience,” and has authorized the Agency to incorporate resilience principles into its planning and funding decisions. 42 U.S.C. § 5172. Congress also amended FEMA’s authorizing statute to explicitly direct that the Agency address “the climate and natural hazard resilience of vulnerable communities.” 42 U.S. Code § 5121(b)(7).

Pursuant to FEMA’s regulations, 44 C.F.R. § 1.8(a), the attached Petition and Appendices set forth the substance of the proposed regulations; explain petitioners’ interests; and provide the data and arguments that support FEMA granting the Petition and proposing the EJPs. In addition, we are enclosing a Flash drive that contains all the Studies and Reports we rely on in the Petition, which are listed in Appendix C.

Feel free to contact us to discuss any questions, and we look forward to hearing from you.

Sincerely yours,

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Before the Federal Emergency Management Agency

PETITION FOR RULEMAKING TO PRIORITIZE DISTRIBUTED ENERGY RESOURCES, SPEED THE CLEAN ENERGY TRANSITION, AND ADVANCE ENVIRONMENTAL JUSTICE

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May 2, 2024
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PETITION FOR RULEMAKING

I. INTRODUCTION

Pursuant to the Administrative Procedure Act (“APA”), 5 U.S.C. § 553(e), and Federal Emergency Management Agency’s (“FEMA” or “the Agency”) regulations, 44 C.F.R. § 1.8(a), the Center for Biological Diversity and 22 additional undersigned organizations hereby submit this Rulemaking Petition for Energy Justice Priorities for Thriving, Resilient Communities urgently needed to address the climate emergency, the energy affordability crisis, and environmental injustice.

The climate crisis is here, and it is impacting millions of communities across the United States, with environmental justice communities suffering the first and worst from climate-driven disasters and historic fossil fuel pollution. In 2023, there were dozens of billion-dollar extreme weather disasters in the U.S.—more than any other year on record.

FEMA spends billions of taxpayer dollars each year rebuilding communities after disasters, as well as helping communities prepare for future disasters. However, FEMA focuses almost exclusively on maintaining communities pre-disaster status quo energy systems—or on returning them to that status quo after a disaster has occurred. This inevitably leads to large investments in re-entrenching the Nation’s status quo fossil fuel infrastructure, which not only exacerbates the very climate-driven disasters that FEMA manages but also perpetuates fossil pollution, disproportionately impacting environmental justice communities. It also means that FEMA pours significant federal resources into rebuilding and repairing buildings and homes across the country each year without leaving them more resilient to future climate disasters, more energy efficient, and more affordable. In essence, FEMA’s work presents a major missed opportunity to build back smarter.
There is a better, more commonsense path forward. The Energy Justice Priorities for Thriving, Resilient Communities ("EJPs") detailed in this Petition would redirect the Agency’s resources toward building resilient, clean energy systems and away from fossil energy and vulnerable infrastructure. Specifically, the proposed regulations would require FEMA to: (1) for energy-related projects, prioritize deployment of resilient community technologies—including but not limited to energy-efficiency and weatherization technologies, rooftop and community-based (i.e. located near the community it serves) solar paired with storage, and solar microgrids—over fossil fuel alternatives, except in cases where necessary to address temporary emergency conditions; and (2) for all risks assessments and mitigation strategies, expressly consider and, where applicable, pro-actively choose resilient community technologies over fossil infrastructure.

As will be discussed in more detail below, resilient community technologies like rooftop solar, community-based solar, and energy efficiency offer increased resilience against the effects of climate change. They simultaneously directly combat climate change by reducing the need to burn fossil fuels. In so doing, they also address long-standing environmental justice issues by reducing exposure to both indoor and outdoor pollution that accompanies the burning of fossil fuels—pollution that has historically disproportionately burdened Black, Brown, and low-income communities. The EJPs will allow FEMA to advance both climate mitigation and climate adaptation simultaneously.

This new approach is entirely consistent with FEMA’s statutory mandates. Indeed, just a few years ago Congress specifically directed FEMA to define “resilience” and authorized the Agency to incorporate resilience principles into its planning and funding decisions.1 And even more recently, Congress amended FEMA’s authorizing statute to explicitly direct that the Agency address “the climate and natural hazard resilience of vulnerable communities.”2

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The proposed regulations also support President Biden’s climate agenda, including his recently issued “Climate Resilience Framework,” which specifically calls on agencies like FEMA to require that all federally-funded and financed infrastructure projects address climate change impacts, and calls for energy-efficiency and distributed energy resource prioritization—the very matters addressed in our proposed EJP regulations. The proposed regulations would also bolster the Biden administration’s commitment to clean energy deployment through the passage of the historic Inflation Reduction Act and the global commitment to transition off fossil fuels secured at the United Nations climate change conference in Dubai 2023.

The Stafford Act empowers FEMA to “prescribe such rules and regulations as may be necessary and proper to carry out any of the provisions of this Act . . . .” 41 U.S.C. § 5201. Under the APA, any interested person may submit a Petition requesting the issuance of any rule the Agency is empowered to enact. 5 U.S.C. § 553(e). Pursuant to that directive, FEMA has expressly authorized such petitions, instructing that they should (a) “set forth the substance of the rule;” (b) “[e]xplain the interest of the petitioner in support of the action sought;” and (c) “[s]et forth all data and arguments available to the petitioner in support of the action sought.” 44 C.F.R. § 1.8(a).

Section II below, and Appendix A, set out the substance of the Energy Justice Priorities for Thriving, Resilient Communities regulations, and Petitioners’ interests are set out in Section III and Appendix B. Finally, Sections IV and V provide the requisite background, data and arguments explaining why FEMA should grant this Petition and initiate a Rulemaking to develop Energy Justice Priorities for Thriving, Resilient Communities.

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II. PROPOSED REGULATIONS

The *Energy Justice Priorities for Thriving, Resilient Communities* are a set of regulations that will drive FEMA’s decision-making toward the clean energy transition and will direct the Agency to prioritize distributed energy and related solutions in its mitigation planning and risk assessment strategies.

*First,* the regulations (proposed Section 200.2) define the term *Energy Justice Priorities for Thriving, Resilient Communities* to include three kinds of priorities: (a) energy demand reductions; (b) zero-carbon energy technologies; and (c) beneficial electrification technologies.

‘Energy demand reductions’ are defined to include weatherization, energy efficiency, and demand response technologies. ‘Zero-carbon energy technologies,’ in turn, are defined to include distributed energy technologies such as solar, wind, geothermal and/or storage projects; community-based solar and/or storage projects; and generators and microgrids powered by renewable energy. Finally, ‘beneficial electrification technologies’ are defined to include electric heat pumps, electric vehicle charging, and induction ovens and stovetops.

*Second,* the regulations (proposed section 200.3(b)) require that when communities undertake the risk assessments required under FEMA’s Part 201 regulations, which call for an evaluation of the risk facing a community, they must take into account greenhouse gas emissions as well as local impacts of fossil-fuel infrastructure, including public health costs and pollution.

*Third,* the regulations (proposed section 200.3(c)) require that when communities prepare mitigation strategies under FEMA’s Part 201 regulations, they maximize opportunities to deploy *Energy Justice Priorities for Thriving, Resilient Communities* like distributed renewable energy, energy demand reduction, and beneficial electrification options like heat pumps.

*Finally,* the proposed regulations (proposed section 200.4) create a new presumption for all FEMA financial assistance and disaster spending related to energy, requiring that in all such assistance FEMA will prioritize these clean energy priorities, and will only rely on an
alternative—such as a fossil-fuel resource—where necessary to address temporary emergency conditions that cannot reasonably be satisfied with these priorities. This key provision will ensure that FEMA resources are finally directed to helping to address and mitigate both the climate emergency and the adverse impacts of fossil fuels, particularly on disadvantaged communities.5

The full text of the Energy Justice Priorities for Thriving, Resilient Communities are contained here and in Appendix A for ease of reference.

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ENERGY JUSTICE PRIORITIES FOR THRIVING, RESILIENT COMMUNITIES

Adding 44 C.F.R Part 200 [CURRENTLY RESERVED]

PART 200 – ENERGY JUSTICE PRIORITIES FOR THRIVING, RESILIENT COMMUNITIES

Sec.
200.1 Purpose
200.2 Definitions
200.3 Energy Justice Priorities for Thriving, Resilient Communities in Hazard Mitigation Planning Programs
200.4 Energy Justice Priorities for Thriving, Resilient Communities in Financial Assistance Programs

5 The proposed regulations also provide that they would supersede any existing FEMA regulations or guidance (Parts 200.3(a) and 200.4(a)). In October 2022, FEMA adopted an alternative cost-effectiveness methodology that allows a project to be deemed cost-effective (and therefore allowable) where the Benefit-Cost Ratio is at least .75, and where the project addresses climate change impacts and/or benefits disadvantaged communities. See FEMA, Alternative Cost-Effectiveness Methodology for Fiscal Year 2022 BRIC and FMA Application Cycle (Oct. 6, 2022), [continued] https://www.fema.gov/sites/default/files/documents/fema_alternative-cost-effectiveness-methodology-for-FY2022-BRIC-and-FMA.pdf. Given the cost-effectiveness of the kinds of technologies being prioritized with the proposed EJPs, which will address precisely these issues, they will almost certainly pass this alternative test. Any new regulations should of course also ensure that any project is consistent with local laws intended to speed the transition to distributed renewable energy and not otherwise reduce the amount of fossil-free resources and interventions recipients can receive.
200.1. Purpose

(a) The purpose of this part is to incorporate Energy Justice Priorities for Thriving, Resilient Communities into all facets of FEMA’s work.

(b) Through amendments to the Stafford Act—including in the 2016 Disaster Recovery Reform Act and the Community Disaster Resilience Zones Act of 2022—Congress has directed the agency to incorporate energy resilience into its decision-making and grant-making processes.

(c) Executive Orders 13390, 14008, and 14096 direct FEMA to address the climate emergency by bolstering resilience; reducing climate pollution; and deploying clean energy technologies and infrastructure in a manner that helps to address the disproportionate impacts of the climate emergency on disadvantaged communities.

200.2 Definitions

(a) energy demand reductions are mechanisms that reduce energy usage, including weatherization, energy efficiency, and demand response technologies.

(b) zero-carbon energy technologies are distributed energy technologies that do not require combustion, including local solar, wind, geothermal and/or storage projects; community-based solar and/or storage projects; and microgrids and generators powered by renewable energy. These do not include biomass and biofuel technologies, hydrogen or carbon capture and storage technologies, or other technologies that increase local air or water pollution.

(c) beneficial electrification technologies are technologies that replace direct fossil fuel use with electricity in a way that reduces overall greenhouse gas emissions, including electric heat pumps, electric vehicle charging, and induction ovens and stovetops.

(d) Energy Justice Priorities for Thriving, Resilient Communities are any of the following 

   (i) energy demand reductions;

   (ii) zero-carbon energy technologies; and

   (iii) beneficial electrification technologies.

   Note: Energy Justice Priorities for Thriving, Resilient Communities do not include (a) utility-scale projects; (b) any technologies used to support or prolong fossil fuel production or infrastructure, such as gas or carbon capture and storage; (c) biomass or biofuels, (d) hydrogen; or (e) any electric grid-related infrastructure unless that infrastructure facilitates expansion of zero-carbon energy technologies.

   (e) Resilient and resiliency are terms that refer to the agency’s Energy Justice Priorities for Thriving, Resilient Communities
200.3 Energy Justice Priorities for Thriving, Resilient Communities in Hazard Mitigation Planning Programs

(a) The regulations in this part supersede any inconsistent regulations or guidance concerning FEMA’s hazard mitigation planning in Part 201.

(b) Risk assessments under Part 201 shall address both the greenhouse gas emissions and the local environmental impacts of fossil-fuel energy resources and infrastructure, including impacts on disadvantaged communities.

Mitigation strategies under Part 201 shall maximize opportunities to deploy *Energy Justice Priorities for Thriving, Resilient Communities*

200.4 Energy Justice Priorities for Thriving, Resilient Communities in Financial Assistance Programs

(a) The regulations in this part supersede any other regulations or guidance concerning FEMA project funding, including provisions that limit assistance to restoring damaged facilities to the *status quo*.

(b) In providing any financial assistance related to meeting energy needs, including both disaster assistance and mitigation program assistance, FEMA shall prioritize deployment of *Energy Justice Priorities for Thriving, Resilient Communities*. FEMA may only deploy alternatives to these priorities if necessary for temporary emergency conditions that cannot reasonably be addressed with *Energy Justice Priorities for Thriving, Resilient Communities*. 

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III. PETITIONERS’ INTERESTS

The Center is a non-profit membership organization with more than 1.7 million members and online activists who care about the country’s urgent need to expedite the renewable energy transition and protect human health, the natural environment, and species from the ravages of the climate emergency, extinction crisis, and environmental degradation. As part of that mission, the Center strives to reduce the environmental impacts of energy policy and development, including greenhouse gas emissions and harm to imperiled plants and wildlife.

The Center’s Energy Justice Program advocates for and educates the public about renewable energy, including the need to maximize distributed energy resources and other aspects of the transition from fossil fuels. This includes projects concerning the urgency of FEMA prioritizing investments that will both reduce the Nation’s dependence on fossil fuels and bolster resiliency by addressing community needs through fossil-fuel free infrastructure and technologies.
Details concerning other Petitioners interests are contained in Appendix B.

IV. BACKGROUND

A. FEMA’s Existing Authorities for Energy Justice Priorities

Across the country, through a host of programs and funding mechanisms, FEMA is an indispensable partner for communities struggling to prepare for and address disasters. FEMA funds recovery efforts and also plays a vital role in emergency planning.6

As the climate emergency has fueled increasingly frequent disasters, Congress has repeatedly expanded FEMA’s authorities to ensure the Agency is meeting these challenges. The scope of FEMA’s congressionally granted authorities includes the urgent need to build more energy resilient infrastructure.

For example, the Post-Katrina Emergency Reform Act of 2006 directed FEMA to work to “reduce the loss of life and property and protect the Nation from all hazards,” including “man-made disasters,” and instructed that this work should include efforts to “protect against, respond to, recover from, and mitigate against the risks of natural disasters [and] man-made disasters . . . .”7

A decade later, in response to a series of devastating hurricanes, Congress passed the 2018 Disaster Recovery Reform Act, in which Congress recognized the insufficiency and unsustainability of continuing to simply restore facilities to their pre-disaster status quo. Rather, Congress directed FEMA to specifically define the terms “resilient” and “resiliency” in the context of repairing or replacing public facilities, and expressly instructed that eligible costs of that work should include repairing, restoring, reconstructing or replacing facilities in a manner that meets that definition.8 As of the date of filing, FEMA has failed to fulfill its statutory mandate to define these terms.

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6 42 U.S.C. § 5121 et seq.
More recently, Congress passed the Community Disaster Resilience Zones Act of 2022.\textsuperscript{9} That law amended the core list of purposes for FEMA, for the first time making it explicit that “\textit{it is the intent of the Congress}” that FEMA assist communities by “\textit{identifying and improving the climate and natural hazard resilience of vulnerable communities}.”\textsuperscript{10}

Finally, in January 2024, FEMA announced significant updates to its Individual Assistance Program.\textsuperscript{11} That interim final rule acknowledged that “helping disaster survivors address hazard mitigation measures while repairing their homes from disaster damage will help make their homes more resilient,”\textsuperscript{12} and that “\textit{Section 408(c)(2)(a)(ii)} of the Stafford Act\textsuperscript{13} authorizes FEMA to provide IHP assistance for eligible hazard mitigation measures that reduce the likelihood of future damage to such residences, utilities, or infrastructure, under the Home Repair Assistance provision.”\textsuperscript{14}

\textbf{B. FEMA’s Failure to Systematically Incorporate These Authorities into the Agency’s Decision-making Processes and Regulations}

Despite these authorities, FEMA has to date failed to systematically embed community resilience principles and technologies in their decision-making processes and regulations. On the one hand, consistent with Congressional mandates, FEMA has funded some distributed renewable energy projects, recognizing its authority to move in this direction. On the other hand, the Agency continues to drive the majority of funds relating to energy projects toward entrenching status quo centralized, fossil fuel-based infrastructure—which further exacerbates the very climate-fueled

\textsuperscript{10} 42 U.S. Code § 5121(b)(7) (emphasis added). This is just the most recent example of Congress’s frequent reference to FEMA’s obligation to addressing resilience. \textit{See, e.g.}, Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. 93-288, \textit{as amended}, May 2019, \textit{Id.} at § 5135, Sec. 203(g)(11) (requiring FEMA to consider “the extent to which the assistance will fund activities that increase the level of resiliency”); \textit{Id.} at §5135, Stafford Act, \textit{as Amended}: FEMA P-592 vol. 1, May 2021, Section 205(b)(1)(E) (requiring efforts “to achieve resilience in a vulnerable area”; \textit{Id.} at §5172, Section 406(b)(3) (referring to state and tribal incentives for “measures that increase readiness for, and resilience from, major disasters”). In addition, Congress has also demonstrated the Nation’s commitment to maximizing the adoption of distributed energy solutions in the clean energy transition with passage of the Inflation Reduction Act, Pub. Law 117-169 (2022).
\textsuperscript{11} 89 Fed. Reg. 3,990 (Jan. 22, 2024).
\textsuperscript{12} \textit{Id.} at 4,004.
\textsuperscript{13} 42 U.S.C. 5174(c)(2)(A)(ii).
\textsuperscript{14} 89 Fed. Reg. at 4,114.
disasters that FEMA manages—instead of systematically redirecting funds toward renewable, resilient energy technologies such as rooftop or community-based solar and storage.

FEMA has not undertaken a comprehensive reform of its priorities and regulatory structure to fully incorporate resilient energy priorities into all of its mitigation planning and funding decisions. The Agency has largely focused so-called “resilience” measures on hardening centralized grids which are majority fossil fueled. This flies in the face of increasing evidence that decentralized power withstands disasters—saving lives by ensuring people have access to everything from life-saving medicine to emergency services\(^{15}\)—whereas centralized power increasingly fails.

For example, in 2021 FEMA issued its *FEMA Resources for Climate Resilience Report*.\(^{16}\) While that report acknowledges the devastating impacts of the climate emergency, and discusses approaches to hardening infrastructure to withstand those impacts, it does not include a single reference to the importance of reducing fossil fuel emissions, or deploying distributed renewable energy and related technologies to reduce community dependence on fossil fuels.

Similarly, when FEMA issued its *Mitigation Assistance: Building Resilient Infrastructure and Communities* Guidance Document in 2022, the Agency included the following limited definition of resilience:


Resilience refers to the ability to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions.\textsuperscript{17}

Once again, this definition entirely misses the opportunity to approach climate resilience in a manner that would address both the impacts and the causes of the climate emergency through explicit directives to invest in distributed renewable energy rather than continuing to rely on fossil fuel infrastructure. Indeed, this limited definition is an example of what FEMA’s National Advisory Council found to be a fundamental weakness in FEMA’s decision-making processes: the Agency’s “inherent and natural bias for maintenance of the status quo.”\textsuperscript{18}

As a result, FEMA appears to be spending the majority of funds related to energy projects on re-entrenching fossil fuel infrastructure. According to FOIA documents obtained by petitioners, between FY2018 and FY2021, FEMA obligated at least an estimated $330 million to fossil fuel projects—approximately 43 times the roughly $7.7 million obligated to fossil-free, renewable energy projects. These amounts concern energy-related projects funded through the Hazard Mitigation Grant Program, Building Resilient Infrastructure and Communities program, Flood Mitigation Assistance Grant program, and the Pre-Disaster Mitigation grant program.\textsuperscript{19} This alarming disparity is likely worse in the Public Assistance program, which encompasses projects that repair and rebuild damaged, fossil-fueled power plants.\textsuperscript{20} Further examples include:

- Puerto Rico’s fossil-fuel driven power grid was largely destroyed by Hurricane Maria in 2017. Rather than prioritizing distributed renewable energy or other resilient approaches to addressing energy needs across the archipelago, FEMA responded by allocating billions in disaster recovery funds to rebuild the existing fossil-fuel based electricity grid.\textsuperscript{21}

\textsuperscript{17} FEMA, Mitigation Assistance: Building Resilient Infrastructure and Communities, FEMA POLICY FP-104-008-05,11 (2022), \url{https://www.fema.gov/sites/default/files/documents/fema_bric-policy-fp-008-05_program_policy.pdf}.
\textsuperscript{20} We have not made the same type of comparison between FEMA’s obligations to fossil fuel and clean energy projects as the responses excluded comprehensive data on Public Assistance-funded projects.
The U.S. Virgin Islands were also hard hit by Hurricane Maria, as well as Hurricane Irma. Again, rather than rebuild with resilience as a top priority, FEMA announced that it would “harden” the Islands’ grid primarily by building stronger poles to hold transmission lines and rebuilding existing power plants.22

In early 2021, Texas experienced a deep freeze and blackouts, principally because its fossil-fuel power systems were not equipped to handle the cold temperatures. FEMA responded with more fossil fuels, supplying diesel and diesel-fired generators.23

Following Hurricane Michael in late 2021, FEMA approved more than a million dollars in investment for Jackson County, Florida to install permanent diesel generators, once again relying on fossil fuels rather than focusing on energy resilient alternatives.24

As recently as last summer, FEMA awarded more than $300 million in “resilience” funding to a Louisiana Coop to harden its fossil fuel grid system by elevating substations and installing steel poles. As the National Rural Electric Coop Association explained, these federal funds not only support continued reliance on fossil fuels there, but also serve to support “national demand for oil and gas pumped through pipelines connected to facilities in the area.”25

With regards to renewable energy, the Agency has recognized its flexibility to fund renewable energy and other energy resilient projects and appears to be increasing investments in recent years. For example, acknowledging the value of solar-powered microgrids and its authority to fund them, FEMA has expressly determined that microgrid projects are eligible for funding through FEMA’s Hazard Mitigation Assistance Programs.26 In 2022, FEMA granted approximately $20 million for a microgrid project at St. Elizabeth Hospital in Washington, D.C.27 and $100,000 to Cupertino, California for a solar-powered microgrid to provide power for a cooling center and emergency operations facility in the city’s center.

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This Petition seeks to systematize these types of community resilience investments in all of FEMA’s energy decision-making.

V. FACTS AND JUSTIFICATION IN SUPPORT OF REQUESTED REGULATIONS

A. The Climate Emergency Is Increasing the Severity and Frequency of Disasters

The climate crisis is here, and it is harming millions of communities across the United States. In 2023, the hottest year in recorded human history,\(^{28}\) the U.S. was hit by an unprecedented 28 weather and climate disasters with losses exceeding one billion dollars, which cost at least 492 lives and 93 billion dollars in damages.\(^{29}\) As highlighted by the National Climate Assessments, climate change is increasing the severity, extent and/or frequency of extreme weather events, including heatwaves, heavy precipitation events, droughts, hurricanes, and extreme fire weather.\(^{30}\)

Heavy precipitation events have become more frequent and intense in most regions of the U.S., as more water vapor is available to fuel extreme rain and snowstorms in a hotter world, leading to more river and stream flooding.\(^{31}\) The destructive power of hurricanes has escalated due to climate change—including increases in intensity, rainfall, and storm surge—and hurricanes are intensifying more rapidly.\(^{32}\) Wildfires are growing in the number of acres burned and length of the wildfire season, particularly in the western U.S., in large part due to hotter, drier conditions...

\(^{28}\) NOAA, 2023 was the world’s warmest year on record, by far: Antarctic sea ice coverage hit record low, NOAA: News & Features (Jan. 12, 2024), https://www.noaa.gov/news/2023-was-worlds-warmest-year-on-record-by-far.


and increasing extreme fire weather.\textsuperscript{33} Heatwaves have become more common and severe on land and in the ocean.\textsuperscript{34} Across 50 large U.S. cities, the average number of heatwaves doubled since the 1980s and the heatwave season increased from 40 days to 70 days in length.\textsuperscript{35} Hotter temperatures have exacerbated drought conditions, particularly in the Southwest, by reducing soil moisture and contributing to earlier spring snowmelt and reduced water storage in snowpack.\textsuperscript{36}

A growing body of attribution studies has determined that human-caused climate change is not only intensifying extreme weather events, but that some extreme weather events could not have happened without human-caused climate change.\textsuperscript{37} For example, in 2016, the intense marine heat wave off Alaska—which drove oyster farm failures, harmful algal blooms, mass seabird die offs, and failed subsistence harvests—was found to be up to fifty times more likely due to anthropogenic warming.\textsuperscript{38} Similarly, the sequence of consecutive record-breaking temperatures in 2014–2016 had a negligible (<0.03%) likelihood of occurring in the absence of anthropogenic warming.\textsuperscript{39}

\textsuperscript{33} Wenying Su et al., \textit{U.S. Global Change Research Program, Ch 2: Climate Trends, Fifth National Climate Assessment} (2023), https://nca2023.globalchange.gov/chapter/2/.

\textsuperscript{34} Id.

\textsuperscript{35} Id.


B. Energy Justice Priorities For Thriving, Resilient Communities Will Help the Most Climate-Vulnerable Communities, Including by Mitigating the Adverse Impacts of Fossil Fuels and the Climate Emergency

1. Fossil Fuel Infrastructure Disproportionately Harms Disadvantaged Communities

The burden of the pollution associated with our fossil fuel-dominated and centralized energy system falls disproportionately on communities of color and low-wealth communities. At every stage of their life cycle—extraction, processing, transport, and combustion—fossil fuels generate harmful pollutants, including known cancer-causing chemicals like benzene and formaldehyde, ozone-forming chemicals like nitrogen oxides, volatile organic compounds, heavy metals like lead, and particulate matter including black carbon and silica dust that cause lung and heart disease.40 Burning coal also produces large amounts of coal ash (over 100 million tons each year), which contains mercury, cadmium, and arsenic, and which makes its way into waterways and contaminates drinking water supplies.41 These pollutants find their way into air and water, and can cause a wide range of health impacts, including asthma and other respiratory problems, brain and neurological damage, heart problems, cancer, and premature death.42

Fossil fuel infrastructure—including oil and gas wells, refineries, fossil fuel power plants, and processing, transmission and storage facilities—is often concentrated in communities of color and low-wealth communities, causing asthma, cancer, and other serious health harms to residents exposed to hazardous air and water pollution from these facilities.43 For example, research

41 EPA, Coal Ash Basics (last updated Jun. 14, 2023), https://www.epa.gov/coalash/coal-ash-basics#03.%0A
shows that people of color, particularly Black Americans, disproportionately live near toxic fracking wells,\footnote{Klara Zwickl, The demographics of fracking: A spatial analysis for four U.S. states, 161 Eco. Econ. 202 (Jul. 2019), \url{https://www.sciencedirect.com/science/article/abs/pii/S092180091830661X}; Emanuele Massetti et al., Environmental Quality and the U.S. Power Sector: Air Quality, Water Quality, Land Use and Environmental Justice, ORNL/SPR-2016/772, 155 (Jan. 4, 2017), \url{https://info.ornl.gov/sites/publications/files/Pub60561.pdf}.} and that the share of people of color living within three miles (five kilometers) of a coal- or oil-fired power plant is 12% larger than the national average.\footnote{Id.} Black Americans are also exposed to 38% more polluted air than white Americans, on average, and more than one million Black Americans live within a half-mile of gas facilities, resulting in higher risks of cancer and other health problems.\footnote{See NAACP et. al., Fumes Across the Fence-Line: The Health Impacts of Air Pollution from Oil & Gas Facilities on African American Communities (2017), \url{https://www.catf.us/wp-content/uploads/2017/11/CATF_Pub_FumesAcrossTheFenceLine.pdf}.}

This means that where FEMA supports the rebuilding of the existing fossil fuel status quo, as occurs routinely under the Agency’s existing regulatory scheme, it all too often only exacerbates the inequities that pervade communities across the country.

2. Climate Change Itself Also Disproportionately Harms Disadvantaged Communities

The broader harms from climate disasters are likewise not felt equally, but instead are felt first and worst by Black, Brown, Indigenous, and low-wealth communities.\footnote{Tim Donaghy et al., Fossil Fuel Racism: How Phasing Out Oil, Gas, and Coal Can Protect Communities (Apr. 13, 2021), \url{https://www.greenpeace.org/usa/wp-content/uploads/2021/04/Fossil-Fuel-Racism.pdf}; U.S. EPA, Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts, EPA 430-R-21-003 (2021), \url{www.epa.gov/cira/social-vulnerability-report}.} A 2021 EPA analysis concluded that communities of color are particularly vulnerable to the greatest impacts of climate change, including health harms, heat waves, poor air quality, and flooding.\footnote{U.S. EPA, Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts, EPA 430-R-21-003 (Sept. 2021), \url{www.epa.gov/cira/social-vulnerability-report}.} Heat is the leading...
cause of weather-related deaths in the U.S., and also causes many other adverse health effects, such as cardiovascular and respiratory complications, renal failure, and preterm birth.\textsuperscript{49} Climate change is worsening the problem, with one-third of heat-related deaths between 1991 and 2019 attributable to climate change.\textsuperscript{50} Black Americans are 40\% more likely to currently live in areas with the highest projected increases in extreme temperature deaths under a 2°C warming scenario.\textsuperscript{51}

Similarly, low-income communities of color are disproportionately vulnerable to damage from wildfires. For example, in California, “individuals in rural areas, low-income neighborhoods, and immigrant communities do not have access to the resources necessary to pay for insurance, rebuilding, or continual investment in fire safety,” and are also disproportionately burdened by price gouging on rentals that sometimes occurs after wildfires.\textsuperscript{52} A 2018 study by researchers at the University of Washington and the Nature Conservancy found that vulnerability to wildfire tends to increase as the proportion of Native American, Latino, and Black residents increases, and that Native Americans are particularly overrepresented in the areas most vulnerable to wildfires.\textsuperscript{53}

The current centralized fossil fuel-based electricity grid is also highly vulnerable to damage from these climate-fueled extreme weather events. The grid contains hundreds of thousands of miles of long-distance, high-voltage transmission lines connected to high-voltage (HV) transformers. As a result, damage at a small number of locations can cause widespread, extended blackouts.\textsuperscript{54}

For example, in late 2021 approximately 30,000 Missouri homes lost power after a series of

\textsuperscript{53} \textit{Id.}
terrible tornadoes, because the storms destroyed a single key transmission line.55 These electric grid failures that the climate emergency brings with ever-more frequency disproportionately harm disadvantaged communities. When Winter Storm Uri caused widespread blackouts in Texas in 2021, they hit non-white neighborhoods the worst.56 Researchers at Lawrence Berkeley National Laboratory, the Colorado School of Mines, and University of Massachusetts Amherst found that “areas with a high share of minority population were more than four times as likely to suffer a blackout than predominantly white areas” during the Texas storm.57 Problems were compounded by the fact that many of the hardest-hit communities were already suffering from existing infrastructure problems such as poor insulation.58 Similarly, when Hurricane Maria devastated Puerto Rico in 2017, many of the resulting deaths occurred not during the storm but after it, when people living on the margins were unable to run lifesaving medical equipment or refrigerate lifesaving medicine because they had no access to electricity.59

Finally, the climate emergency exacerbates energy insecurity and poverty among communities of color. Black and Latino families on average bear quadruple the energy burdens of white families, with some Black households in the South bearing energy burdens as much as 40% of their total income, due to historical racist redlining policies.60


58 Dobbins & Tabuchi, supra note 28.

59 Ruth Santiago, Puerto Rico’s future is solar. Recovery funds should go there, not to its outdated grid, Grist: Fix Solutions Lab (July 26, 2021), https://grist.org/fx/opinion/puerto-rico-rooftopsolar-energy-fema-recovery-funds/.

increased energy burden and likelihood of shutoffs for inability to pay—with potentially fatal consequences.\textsuperscript{61}

3. **Energy Justice Priorities for Thriving, Resilient Communities Will Help to Address These Harms of Both Fossil Fuels and Climate Change on These Communities**

By helping disadvantaged communities transition to resilient, distributed renewable energy systems and other approaches to meeting their energy needs, rather than continuing to invest in fossil-fuel infrastructure, FEMA’s *EJPs* will provide the Agency with an opportunity to mitigate the harms these communities face from both the fossil fuel economy and the climate crisis.

Distributed energy resources (“DERs”) like rooftop solar, community-based solar, solar, microgrids, and energy efficiency, can reduce or prevent blackouts and make the electricity grid more resilient to damage from climate-fueled storms and other extreme weather events. If a disaster takes a large, centralized generating facility, or a high voltage transmission line responsible for transporting power to a large area, out of service, distributed renewable generation may not be affected at all.\textsuperscript{62} In addition, DERs can be used to create “islandable” generation that operates even when outages do occur.\textsuperscript{63} A 2017 National Academies of Sciences study found that more distributed energy generation (combined with more advanced controls)


\textsuperscript{63} Id.
has the potential to prevent or limit widespread electric grid outages by enhancing power quality and allowing problematic components to be isolated.\textsuperscript{64}

The effectiveness of these technologies in improving the resilience of the electricity grid have been demonstrated repeatedly. After the extended outages caused by Hurricane Maria in 2017, many residents and businesses in Puerto Rico installed rooftop solar with battery storage. When Hurricane Fiona hit the archipelago in 2022, homes and essential community services, including a local fire station, that had installed rooftop solar with battery storage kept their power on.\textsuperscript{65} Hurricane Irma knocked out electricity to 6.8 million customers across Florida in 2017, but homeowners and businesses with off-grid solar had electricity.\textsuperscript{66} The same was true when Florida was struck by Hurricane Ian in 2022.\textsuperscript{67}

According to the EPA, energy efficiency improvements likewise improve “the reliability of the electricity system and [lower] the risk of blackouts.”\textsuperscript{68} They do so in unique ways. They lower the cost and risk of meeting reliability needs. This is because they minimize energy use and demand, reducing the likelihood that load exceeds generation and providing greater assurance that the system has adequate resources.\textsuperscript{69} For distribution systems, energy efficiency decreases the likelihood of equipment failure as lower loads cause less overloading and thermal wear and tear.

Energy efficiency measures can also include weatherization, which involves processes such as insulation installation, duct sealing, and air filtration mitigation. Weatherization can also be

\textsuperscript{69} Id.
complemented with other discrete energy efficiency measures, like the replacement of old and inefficient appliances, lighting, faucets, and showerheads. Energy efficiency also often incorporates building electrification strategies that eliminate the use of fossil fuels, predominantly natural gas, for household functions like space and water heating, cooking, and drying. Gas systems are often replaced with high efficiency heat pumps and induction ranges.\(^70\)

The proposed regulations would create a new presumption that all FEMA financial assistance and disaster spending intended to meet an energy need will go toward these energy resilience priorities. In doing so, the new regulations will ensure that FEMA resources are strategically directed to helping to address and mitigate both the climate emergency and the adverse impacts of fossil fuels, particularly on disadvantaged communities. By providing that FEMA disaster spending will be presumptively directed towards low- or zero-carbon alternatives, FEMA would actually provide these communities with infrastructure that will better meet community needs.\(^71\)

The proposed regulations would also require FEMA to ensure that communities consider greenhouse gas emissions and the local environmental impacts of fossil fuel infrastructure in preparing their Mitigation Planning risk assessments under FEMA’s Part 201 Regulations\(^72\) and, similarly, that in preparing mitigation strategies, communities prioritize opportunities to deploy Energy Justice Priorities for Thriving, Resilient Communities—which, again, include distributed solar, storage and related technologies; energy efficiency and other demand reduction technologies; and heat pumps and other ways to move away from fossil gas. By incorporating the risks of fossil fuel resources into mitigation planning for the first time, and prioritizing opportunities to transition to resilient and renewable alternatives, these new regulatory


\(^71\) As noted, the proposed regulations also contain an appropriate escape valve that would permit reliance on an alternative—such as a fossil-fuel resource—where necessary to address temporary emergency conditions that cannot reasonably be satisfied with these priorities (proposed section 200.4(b)). Any action FEMA takes pursuant to this Petition should also ensure adequate protections for tenants and homeowners against rising costs, displacement, and equity stripping. See, e.g., Nat’l Housing Law Project, *NHLP’s Principles on the Inflation Reduction Act and Other Energy Investments*, [https://www.nhlp.org/wp-content/uploads/NHLP-Inflation-Reduction-Act-Statements-and-Principles-2023.pdf](https://www.nhlp.org/wp-content/uploads/NHLP-Inflation-Reduction-Act-Statements-and-Principles-2023.pdf).

\(^72\) 44 C.F.R. Part 201.
requirements will help communities to move away from fossil fuel resources and thus ameliorate the ongoing harms of fossil fuels.73

Recognizing the “increasing severity and frequency of disasters and their disproportionate impact on underserved communities,” FEMA’s 2021 Equity Action Plan provides that “it is essential” for FEMA “to identify mitigation opportunities to help [the communities] address the impacts of climate change,” including by project “to address mitigation and resilience needs.”74 For all the reasons outlined above, the FEMA Energy Justice Priorities for Thriving, Resilient Communities will further those goals by driving FEMA planning and spending away from fossil fuel infrastructure and towards resilient energy alternatives that will meet the needs of these communities while also helping to reduce climate pollution.75

C. Energy Justice Priorities for Thriving, Resilient Communities Will Advance the Biden Administration’s Commitment to Addressing the Climate Emergency and Disproportionate Impacts on Environmental Justice Communities

1. The Administration’s Commitments to Combatting the Climate Emergency and its Disproportionate Impacts

This Petition’s proposed regulations bolster President Biden’s commitments to fighting climate change primarily through deploying clean energy and seeking to address environmental justice impacts.

The President’s landmark climate achievement is the passage of the Inflation Reduction Act, which contained the country’s largest historic investment in clean energy. In particular, the administration has encouraged investments in community resilience through multiple agency programs and tax credits dedicated to deploying rooftop and community-based solar, battery storage and microgrids, energy efficiency, and beneficial electrification in low-income communities and rural areas.76

Moreover, the Biden administration bolstered this commitment by announcing a temporary pause on the exports of liquified natural gas,77 after agreeing to the global commitment to transition off fossil fuels secured at the United Nations climate change conference in Dubai in 2023.78

Finally, President Biden has taken several executive actions that have emphasized community resilience in the climate emergency. On his first day in office, President Biden instructed all federal agencies to take bold steps to address the climate emergency and access to essential services. In EO 13990, Protecting Public Health and the Environment and Restoring Science to

**Tackle the Climate Crisis**, the President directed all agencies, including FEMA, to “immediately commence work to confront the climate crisis,” including by both “bolster[ing] resilience to the impacts of climate change,” and prioritizing environmental justice.  

The following week, in EO 14008, **Tackling the Climate Crisis at Home and Abroad**, the President further directed that each federal Department:

organize and deploy the full capacity of its agencies to combat the climate crisis to implement a Government-wide approach that reduces climate pollution in every sector of the economy; increases resilience to the impacts of climate change; protects public health; conserves our lands, waters, and biodiversity; delivers environmental justice; and spurs well-paying union jobs and economic growth, especially through innovation, commercialization, and deployment of clean energy technologies and infrastructure.  

Order 14008 also established the Justice40 Initiative (“J40”), a whole-of-government effort that commits to deliver 40% of federal investments “in climate and clean energy to disadvantaged communities.” The Order mandates that agencies “shall make achieving environmental justice part of their missions,” including by “investing in and building a clean energy economy that creates well-paying union jobs, turning disadvantaged communities—historically marginalized and overburdened—into healthy, thriving communities, and undertaking bold action to mitigate climate change while preparing for the impacts of climate change across rural, urban, and Tribal areas.” Similarly, the EO directs that each agency must develop programs that “address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts” in order to “secure environmental justice and spur economic opportunity for disadvantaged communities that have been historically marginalized and

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80 Id. (emphasis added).
81 Exec. Order No. 14,008, Tackling the Climate Crisis at Home and Abroad (2021), § 201.
82 Id. § 219.
overburdened by pollution and underinvestment in housing, transportation, water and wastewater infrastructure, and health care.”

In furtherance of these goals, the White House identified priority programs to “immediately begin enhancing benefits for disadvantaged communities”—specifically including FEMA programs.

In addition, the White House has announced a series of Administration initiatives for “cost-saving clean energy opportunities to combat the climate crisis.” In making this announcement the administration emphasized that “Distributed Energy Resources (DERs)—like rooftop solar, battery storage, heat pumps, and electric vehicles—will cut consumer costs, improve public health, strengthen U.S. energy security, and help meet the President’s goal to reduce emission 50-52% below 2005 levels in 2030.”

Most recently, in 2023 President Biden issued EO 14096, which further addresses the Administration’s commitment to environmental justice. That EO sets out the Administration’s commitment to advancing environmental justice through, inter alia, “resilient communities in which every person has safe, clean, and affordable options for housing, energy, and

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87 Id.

transportation,” and specifically directs agencies to “ensure that recipients of federal funds . . . advance environmental justice.”

2. The Many Ways EJPs Will Serve These Priorities

For all the reasons detailed in the preceding section, promulgating the *Energy Justice Priorities for Thriving, Resilient Communities* will further each of these agency priorities:

- They will “bolster resilience to the impacts of climate change” by providing communities with fossil-free and resilient alternatives to meeting their energy needs without continuing to rely on our broken, polluting, centralized fossil-fuel energy system.  
- They will “protect[] public health” and spur “deployment of clean energy technologies and infrastructure” by helping communities plan for and deploy energy solutions that reduce pollution and take advantage of innovative technology opportunities.  
- They will help bring the benefits of public investments in distributed renewable energy to disadvantaged communities and spur economic development in communities “historically marginalized and overburdened by pollution and underinvestment” by requiring public funds to be invested in distributed renewable energy and similar alternatives.  
- They will help to meet the Administration’s goal to “ensure that recipients of federal funds . . . advance environmental justice,” by relying on precisely the DERs that the Administration has identified as critical to addressing the Nation’s pressing needs to energy security, climate protection, and environmental justice.

D. Energy Justice Priorities for Thriving, Resilient Communities Will Further FEMA’s Own Climate Action Requirements and Goals

FEMA’s own stated goals call for the Agency to increase climate resilience, reduce greenhouse gas emissions, and address environmental justice issues. By promulgating the proposed regulations FEMA can advance all three objectives simultaneously.

As discussed, DERs can reduce or eliminate blackouts resulting from climate-fueled storms. The proposed regulation will help FEMA to advance climate resilience by helping to keep the lights on when climate-fueled storms, likely saving lives. This is particularly critical for historically disadvantaged communities, who, again, are likely to suffer the most acute harms as a result of

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89 *Id.*  
90 Exec. Order No. 13,990.  
91 Exec. Order No. 14,008.  
92 *Id.*  
93 Exec. Order No. 14,096.
power outages. By adopting an agency-wide requirement to prioritize DERs wherever possible, FEMA will simultaneously reduce greenhouse gas emissions and directly combat the climate crisis, because DERs reduce the need for fossil fuel-based electricity generation. This in turn will reduce emissions of dangerous fossil fuel co-pollutants, like benzene, ozone, lead, and particulate matter. Because Black, Brown, Indigenous, and low-income communities have historically disproportionately borne the brunt both of climate disasters and of fossil fuel pollution, implementing the proposed regulation can be an integral part of FEMA’s meeting its environmental justice requirements and goals, including the Biden Administration’s Justice40 initiative.

In short, because DERs accomplish climate mitigation and climate adaptation at the same time, prioritizing investing them wherever possible will advance FEMA’s goals and obligations with respect to resilience, emissions, and environmental justice all at once.

E. Energy Justice Priorities for Thriving, Resilient Communities Will Have Myriad Additional Benefits

In addition to the resilience, climate, and environmental benefits that the EJPs will bring—particularly to environmental justice communities—enacting the proposed regulations will also bring myriad additional benefits to our Nation as a whole.94

First, greater reliance on renewable energy alternatives and energy efficiency will help address the challenges of peak demand for centralized energy resources on the grid.95 When communities can rely on distributed resources, those resources can be available not just in the case of an

emergency, but on a regular basis to help shave peak load and address other system stressors.\textsuperscript{96}

For example, in researching the widespread outages from the Texas cold weather event in 2021, analysts found that if “homes had efficient building envelopes and heating systems, ERCOT’s electricity demand could have been reduced by at least 15 gigawatts, which would have dropped the peak enough to offset the loss of most of the generators that failed during the event.”\textsuperscript{97}

Second, investments in distributed resources will also reduce some of the need for expensive new transmission lines and other centralized power infrastructure. DOE’s National Renewable Energy Laboratory found that greater use of rooftop solar can reduce the need for new transmission lines, displace expensive power plants, and save the energy that is lost when electricity is moved long distances.\textsuperscript{98} Displacing centralized-power infrastructure can also help to reduce the devastating risks and consequences of grid-caused wildfires and other grid-related and costly accidents.\textsuperscript{99}

Third, even as compared to utility-scale renewable energy alternatives, the distributed energy-related technologies called for in the EJPs will provide greater social and environmental benefits of climate resilience and reliability, avoided environmental costs, electricity affordability, energy democracy and local job generation.\textsuperscript{100} Further, even simply as an economic proposition, studies


\textsuperscript{100} Studies have shown that DERs offer economic, social, and environmental benefits that policymakers should take into account and that should inform favorability for DERs over incumbent utility-scale systems. \textit{See, e.g.}, Paul
have demonstrated that renewable electricity generation would be hundreds of billions of dollars cheaper with rooftop solar and battery investments, as compared to status quo investments in centralized, utility-scale solar and wind farms. Indeed, for this very reason Green Mountain Power, a utility in Vermont, recently proposed to provide customers with batteries rather than building new power lines, because it found that this distributed energy solution would be less expensive than new power lines and power plants.


Utilities also now frequently have to contend with extremists who seek to target vulnerabilities in the grid. For example, in 2022 three men associated with white supremacist ideology pled guilty to planning attacks of regional power substations in the hopes of creating widespread blackouts and stirring civil unrest. And in 2021 Colonial Pipeline, which transports refined oil products, was subject to a ransomware attack that forced the pipeline company to shut the pipeline down for days. Increasingly belligerent behavior by Russia—which has carried out serious cyberattacks on Ukraine’s electricity grid that have resulted in significant power outages there, and is known, in 2016, to have planted malware inside as many as 10 U.S. utilities—even further elevates concerns about cyberattacks on the U.S. grid. Once again, the kinds of solution FEMA will prioritize with the EJPs will improve grid resilience against these kinds of hazards by creating islandable generation and limiting dependence on a comparatively small number of high-voltage nodes.

Further, the weatherization and energy efficiency priorities embedded in the EJPs will also bring benefits not only to environmental justice communities but to all communities. Buildings play an outsized role in energy use and greenhouse gas emissions, accounting for 75% of electricity use, and 34% of U.S. greenhouse gas emissions. It is well-recognized that energy efficiency...
measures, especially when paired with demand response strategies, can dramatically reduce buildings’ energy consumption, thereby furthering emissions reduction goals.

Among the opportunities for energy efficiency planning and deployment are building electrification strategies that eliminate the use of fossil fuels, predominantly natural gas, for household functions like space and water heating, cooking, and drying. By helping homes, businesses, and communities to replace gas systems with high efficiency heat pumps and induction ranges,110 the EJPs can help reduce fossil fuel emissions while also improving indoor air quality and public health across communities.111

Finally, it is well recognized that distributed generation avoids significant environmental impacts from avoided transmission and utility-scale renewable buildout. Poorly sited large-scale energy development, for instance, can result in habitat fragmentation, loss of connectivity for terrestrial wildlife, destruction of carbon sequestration of soils, and introduction of predators and invasive weed species on intact habitat.112 Accordingly, it is evident that the change in agency focus

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called for in the *Energy Justice Priorities for Thriving, Resilient Communities* will bring far-ranging benefits to all the communities and environments that FEMA serves.\(^{113}\)

### VI. CONCLUSION

For all the foregoing reasons, Petitioners request that FEMA initiate a rulemaking process to craft *Energy Justice Priorities for Thriving, Resilient Communities* as described in this Petition. These *EJPs* will ensure that FEMA prioritizes renewable energy options, energy efficiency and beneficial electrification in meeting community energy needs, and no longer unnecessarily reinforces and perpetuates the *status quo* centralized fossil fuel-based energy system that we must desperately transition away from to protect public health and the environment from the ravages of the climate emergency. Petitioners also respectfully request that FEMA hold a public comment period on this Petition.

\(^{113}\) As discussed above, there are myriad advantages of distributed solar, which can also make smart use of existing sprawling housing developments, commercial and institutional rooftops and parking lots to avoid further impacts to open spaces, agricultural land and ecologically sensitive areas. Rooftop solar installations also add value to the structures and promote local wealth. For all these reasons, and others, rooftop solar enjoys broad support.
Respectfully submitted,

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APPENDIX A

ENERGY JUSTICE PRIORITIES FOR THRIVING, RESILIENT COMMUNITIES

Adding 44 C.F.R Part 200 [CURRENTLY RESERVED]

PART 200 – ENERGY JUSTICE PRIORITIES FOR THRIVING, RESILIENT COMMUNITIES

Sec.
200.1 Purpose
200.2 Definitions
200.3 Energy Justice Priorities for Thriving, Resilient Communities in Hazard Mitigation Planning Programs
200.4 Energy Justice Priorities for Thriving, Resilient Communities in Financial Assistance Programs

200.1. Purpose

(a) The purpose of this part is to incorporate Energy Justice Priorities for Thriving, Resilient Communities into all facets of FEMA’s work.

(b) Through amendments to the Stafford Act—including in the 2016 Disaster Recovery Reform Act and the Community Disaster Resilience Zones Act of 2022—Congress has directed the agency to incorporate energy resilience into its decision-making and grant-making processes.

(c) Executive Orders 13390, 14008, and 14096 direct FEMA to address the climate emergency by bolstering resilience; reducing climate pollution; and deploying clean energy technologies and infrastructure in a manner that helps to address the disproportionate impacts of the climate emergency on disadvantaged communities.

200.2 Definitions

(a) energy demand reductions are mechanisms that reduce energy usage, including weatherization, energy efficiency, and demand response technologies.

(b) zero-carbon energy technologies are distributed energy technologies that do not require combustion, including local solar, wind, geothermal and/or storage projects; community-based solar and/or storage projects; and microgrids and generators powered by renewable energy. These do not include biomass and biofuel technologies, hydrogen or carbon capture and storage technologies, or other technologies that increase local air or water pollution.

(c) beneficial electrification technologies are technologies that replace direct fossil fuel use with electricity in a way that reduces overall greenhouse gas emissions, including electric heat pumps, electric vehicle charging, and induction ovens and stovetops.
(d) *Energy Justice Priorities for Thriving, Resilient Communities* are any of the following

(i) *energy demand reductions*;

(ii) *zero-carbon energy technologies*; and

(iii) *beneficial electrification technologies*.

Note: *Energy Justice Priorities for Thriving, Resilient Communities* do not include (a) utility-scale projects; (b) any technologies used to support or prolong fossil fuel production or infrastructure, such as gas or carbon capture and storage; (c) biomass or biofuels; (d) hydrogen; or (e) any electric grid-related infrastructure unless that infrastructure facilitates expansion of *zero-carbon energy technologies*.

(e) *Resilient* and *resiliency* are terms that refer to the agency’s *Energy Justice Priorities for Thriving, Resilient Communities*

200.3 *Energy Justice Priorities for Thriving, Resilient Communities in Hazard Mitigation Planning Programs*

(a) The regulations in this part supersede any inconsistent regulations or guidance concerning FEMA’s hazard mitigation planning in Part 201.

(b) Risk assessments under Part 201 shall address both the greenhouse gas emissions and the local environmental impacts of fossil-fuel energy resources and infrastructure, including impacts on disadvantaged communities.

Mitigation strategies under Part 201 shall maximize opportunities to deploy *Energy Justice Priorities for Thriving, Resilient Communities*

200.4 *Energy Justice Priorities for Thriving, Resilient Communities in Financial Assistance Programs*

(a) The regulations in this part supersede any other regulations or guidance concerning FEMA project funding, including provisions that limit assistance to restoring damaged facilities to the status quo.

(b) In providing any financial assistance related to meeting energy needs, including both disaster assistance and mitigation program assistance, FEMA shall prioritize deployment of *Energy Justice Priorities for Thriving, Resilient Communities*. FEMA may only deploy alternatives to these priorities if necessary for temporary emergency conditions that cannot reasonably be addressed with *Energy Justice Priorities for Thriving, Resilient Communities*. 
APPENDIX B

Additional Petitioners and their Statements of Interest:

350 Bay Area

350 Bay Area builds a grassroots climate movement in the Bay Area and beyond to eliminate carbon pollution and achieve a clean energy future with racial, economic, and environmental justice. Our focus is on passing policies to reduce climate and health harming emissions from combustion of fossil fuels. 350 Bay Area recognizes that the climate crisis is the justice issue of our times, magnifying the accumulation of past injustices: racial, economic and environmental. 350 Bay Area welcomes and mobilizes growing numbers of people to act for climate & climate justice, and builds deep civic engagement and advocacy essential to solve the climate crisis. 350 Bay Area organizes, lobbies and educates to push policy makers to meet the urgency of the climate emergency.

350 Network Council

The 350 Network Council (350NC) is an association of the 12 largest independent 350 affiliate organizations in the USA. Together, we leverage our collective grassroots power to end the era of fossil fuels and advance a just and renewable energy future. We recruit, train and support tens of thousands of volunteers and onboarding thousands of young people and frontline community members into the climate movement.

Shining a light on how monopoly and privately-owned investor utilities are blocking the transition to clean and affordable energy is key to our work. Like private utilities, HUD and FEMA are making the wrong investments when it comes to our energy future. We stand with our national partners to demand HUD, FEMA and other federal agencies choose fossil-free infrastructure to avoid the worst of the climate crisis.

Asian Pacific Environmental Network

Asian Pacific Environmental Network is an environmental justice organization with deep roots in California’s Asian immigrant and refugee communities. Since 1993, we’ve built a membership base of Laotian refugees in Richmond and Chinese immigrants in Oakland. Together, we’ve fought and won campaigns to make our communities healthier, just places where people can thrive.
California Environmental Justice Alliance

The California Environmental Justice Alliance (CEJA) is an alliance of grassroots environmental justice organizations situated throughout California. CEJA’s mission is to build the power of communities across California to create policies that will alleviate poverty and pollution through a statewide movement and advocacy for environmental health and social justice.

Center for Popular Democracy

The Center for Popular Democracy is a national organization committed to advancing equity, opportunity, and inclusive democracy in partnership with grassroots organizations, local organizing groups, and progressive unions. Our vast membership is composed of working class, communities of color who face the brunt of the climate crisis by increasingly dangerous super storms, extreme flooding, wildfires, record breaking heat waves and many more devastating impacts. Our combined membership of over a million people, many already living in cities and neighborhoods that have experienced decades of environmental racism, are amongst the most vulnerable to impacts scientist say will continue to intensify. Our communities organize on a wide array of social justice issues like affordable housing, healthcare access, immigration, economic and worker justice — all of which the climate crisis serves as a threat multiplier.

As part of our mission the center for popular democracy advocates for policies that address the immediate needs of our communities while also seeking to address the root cause of issues. In the case of climate change this includes advocating for the urgently needed transition away from fossil fuels to just and resilient renewable energy, including maximizing distributed energy resources as a pathway to providing long-term adaptation and mitigation measures for climate change. This work encompasses projects urging FEMA to provide federal assistance to frontline communities bearing the consequences of the climate crisis and who want to move to this distributed clean energy future.

Climate Justice Alliance

The Climate Justice Alliance is a member-based organization with 88 members represented across the United States, including Guam, Puerto Rico and Indigenous territories. Our translocal organizing strategy and mobilizing capacity is building a Just Transition away from an extractive fossil fuel based economy towards resilient, regenerative, and equitable economies reliant on community led-renewable, distributed, and climate-resilient energy infrastructure.

Part of our Just Transition strategy is also engaging in Just Recovery work. When disasters hit a community, we not only work towards moving resources for their immediate needs, but also to build better, more just, and resilient communities. We believe that FEMA and HUD should lead
with ambition and provide long-term adaptation strategies for frontline communities to rebuild without the need for fossil fuel infrastructure. Those funds could then be put into community controlled renewable energy sources and sound strategies that have been proven to address the impact of the climate crisis without adding to historical harm for those on the frontlines.

Comite Dialogo Ambiental

Comité Dialogo Ambiental, Inc. (“CDA”) is a nonprofit community environmental corporation composed of residents of the Municipality of Salinas and the Guayama Region of Puerto Rico. Since 1997, CDA has worked to protect and restore the environment of the communities it serves and to promote conditions under which human beings and the environment can exist in harmony to fulfill economic, social, and other needs of present and future generations. To further its mission, CDA engages in education and community organizing around the adverse impacts of human activities on the ecological balance of natural systems. This includes the harms from substantial fossil fuel energy infrastructure, including centralized transmission and distribution systems, in and near the communities of its members.

El Puente

El Puente de Williamsburg, Inc. (“El Puente”) is a nonprofit organization with offices in Puerto Rico and Brooklyn, New York. In New York, El Puente founded the Community Alliance for the Environment and co-founded the New York City Environmental Justice Alliance. Its Puerto Rico program, Latino Climate Action Network, is comprised of a group of Puerto Rican residents concerned about the impacts of air pollution and climate change in Puerto Rico.

El Puente seeks to build community sustainability through strategies to mitigate and plan for climate change. The organization works with communities affected by Hurricane Maria and other environmental crises by providing support and resources, including supplies and efforts to transform communities to sustainable solar energy. Through community organizing and policy advocacy, El Puente promotes environmental justice and climate change preparedness and prevention. El Puente has long made efforts to address planning for climate change, sea level rise, food security, water availability, and the impacts of power generation on climate change. By further entrenching Puerto Rico’s energy systems’ reliance on fossil fuels, and by impeding a rapid transition to clean renewable energy in Puerto Rico, FEMA’s disaster response harm El Puente and its interests in a more sustainable and healthier energy future.
Food & Water Watch

Food & Water Watch (FWW) is a national non-profit membership organization headquartered in Washington, D.C., with approximately 1.4 million members nationwide. It was founded in 2005 to ensure access to clean drinking water, safe and sustainable food, and a livable climate. FWW uses grassroots organizing, policy advocacy, research, communications, and litigation to further its mission. FWW advocates for the cessation of fossil fuel use and the transition to truly clean and efficient renewable energy.

GRID Alternatives

GRID Alternatives is the nation's largest nonprofit builder of community-powered solutions to advance economic and environmental justice through renewable energy. GRID partners with communities, utilities, industry, governments and public entities at federal, state, and local levels to design, administer, and implement distributed solar, battery storage, and clean mobility programs serving low-income, environmental justice, and tribal communities. For 20 years and across 18 states, and recently expanding into Puerto Rico, GRID’s communities-first approach has maximized benefits including resilience and local wealth-building for underserved communities who need and deserve clean, affordable energy. GRID achieves these results through direct installation, program administration, hands-on job training, entrepreneurship and capacity-building support, policy analysis and advocacy, and more.

The communities that GRID partners with are often hit first and worst with the impacts of natural and climate-driven disasters. GRID’s renewable energy work therefore increasingly prioritizes resilience measures for households, multifamily affordable housing facilities, and community hubs. GRID works with these communities and the nonprofits and public entities that serve them to develop, build, and maintain solar and storage projects, alongside aligned efficiency and beneficial electrification measures and workforce development, that can keep essential services running during outages or power shutoffs.

Healthy Gulf

Healthy Gulf (formerly Gulf Restoration Network) collaborates with and serves communities who love the Gulf of Mexico by providing the research, communications, and coalition-building tools needed to reverse the long pattern of over exploitation of the Gulf’s natural resources. Healthy Gulf’s vision is for the Gulf of Mexico to be returned to its former splendor that supports a thriving ecosystem that includes the Gulf’s natural resources and, just as importantly, the people, communities, and cultures that depend on those resources.
One of Healthy Gulf’s campaigns fights to make Gulf communities’ infrastructure stronger and more resilient. Since fines from the BP disaster started rolling out, Healthy Gulf has been monitoring and watchdogging how these restoration dollars are being spent to protect not just our environmental resources, but also the people who live, work, and play along the Gulf coast. Similarly, as federal dollars from disasters like hurricanes and COVID-19 have flowed into the Gulf, Healthy Gulf has worked with partners like Taproot Earth, National Audubon Society, National Wildlife Federation, Sierra Club, The Nature Conservancy, and faith-based groups working on affordable housing and utilities to ensure that these funds hasten a just transition to a more sustainable and fair economy for Gulf coast communities.

Mountain Association

The Mountain Association invests in people and places in Eastern Kentucky to advance a just transition to a new economy that is more diverse, sustainable, equitable and resilient. A building block of this new economy is ensuring government and private industry are accountable, actively support, and invest in infrastructure improvements necessary for thriving communities.

National Housing Law Project

The National Housing Law Project’s mission is to advance housing justice for poor people and communities. We achieve this by strengthening and enforcing the rights of tenants and low-income homeowners, increasing housing opportunities for underserved communities, and preserving and expanding the nation’s supply of safe and affordable homes.

As part of its mission, the National Housing Law Project is committed to ensuring that public investments in energy efficiency and climate resiliency of residential properties (1) provides direct benefits to low-income tenants and homeowners; and (2) does not result in displacement or housing instability.

NC WARN

NC WARN is a nonprofit based in Durham, NC with over 2,000 members and supporters in the state and beyond. We are committed to tackling the accelerating crisis posed by climate change by building people power for a swift transition to clean power, and by promoting energy and climate justice. In partnership with other groups, and using sound scientific research, NC WARN informs and involves the public in key decisions regarding their health and economic well-being. Dedicated to climate and environmental justice, NC WARN seeks to address the needs of all of the public by intentionally including those often excluded from participation because of racism, sexism, classism, and other forms of oppression. Our focus on climate justice includes promoting
better policy at the local, state and national level, like the FEMA and HUD petitions presented by the Center for Biological Diversity.

**New Energy Economy**

New Energy Economy is a registered nonprofit organization established in 2004 to create economic opportunity in New Mexico with less carbon pollution and more clean energy and grounded in principles of environmental and economic justice. New Energy Economy works in partnership with diverse allies to encourage job growth, investment and innovation in a more efficient, sustainable and equitable energy sector. New Energy Economy grounds its work in the research and findings of the world’s leading scientific and technological authorities.

New Energy Economy is a supportive co-petitioner because the Energy Justice Priorities for Thriving, Resilient Communities rulemaking offers a sensible and tangible solution that will uplift communities post disaster; instead of repeating the same kinds of dead-end harms that caused the problems in the first place, these investment guidelines offer real solutions that demonstrate care and repair. This alternative path, especially in a time of extreme vulnerability and pain, will instill hope and expose the benefits of distributed renewable energy and other clean energy technologies and will result in actual health and financial advances.

**New York Communities for Change**

New York Communities for Change (NYCC) is a non-profit community-based organization with 20,000 low- and moderate-income Black and Latinx members in New York City and Long Island, NY. NYCC advocates for safe and healthy communities for all – regardless of race or income level – including a safe and thriving planet that includes abundant green housing as part of the renewable energy transition. For NYCC, expediting this transition is especially relevant since effects of the climate crisis (including property damage and loss and temporary and permanent displacement as a result of floods, tropical storms, and hurricanes) and other environmental hazards stemming from fossil fuel use (such as instances of respiratory illness) disproportionately impact the NYCC membership base and other low-income communities of color. As a result, NYCC stresses the need for FEMA to prioritize investments in fossil fuel-free infrastructure that will reduce greenhouse gas emissions and therefore lessen the disproportionate climate and environmental harms experienced by the NYCC membership base.
Sanibel Captiva Conservation Foundation

The Sanibel-Captiva Conservation Foundation (SCCF) is a non-profit organization with almost 7,000 members located on the island of Sanibel, Florida. The organization started as a land trust in 1967 with the goal of protecting the wild spaces that make Sanibel and Captiva special. Since its inception the organization has grown to include an active marine lab, the Sanibel Sea school focusing on youth education and outreach, shorebird and sea turtle monitoring programs, a policy and advocacy department focusing on water quality, land use, and climate resilience, a native plant center and nursery, and is responsible for managing over 2,000 acres of conservation lands. All of these activities are undertaken to further the organization’s mission: to protect and care for southwest Florida’s coastal ecosystems.

Situated on a barrier island, SCCF and the communities that it serves are on the frontlines of the climate crisis, dealing first-hand with the impacts of a warming world. While our communities are working on adapting to the effects of sea-level rise, increasing numbers of high-heat days, and more intense storm seasons, it is imperative that we collectively are working towards mitigation solutions to stave off further impacts. In order to do this it will be necessary to transition from fossil fuels and help communities tackle any impediments to adaptation and mitigation. It is imperative that FEMA work with these frontline communities to solve these issues and help implement distributed clean energy solutions to protect our coastal ecosystems and the communities that rely on them.

Solar United Neighbors

With more than 800,000 members and supporters throughout the U.S., Solar United Neighbors (SUN) is a national 501(c)3 nonprofit organization formed in 2007 to represent the interests and needs of solar owners and those who would like to go solar. SUN provides objective, vendor-neutral consumer education to assist individuals and small businesses to install rooftop solar systems or to participate in a local community solar project. SUN’s advocacy is rooted in the premise that distributed solar (and storage) rooftop will drive down the costs of electricity for ratepayers, create thousands of good-paying local jobs, keep energy dollars local, strengthen communities, benefit the environment, and help build a cost-effective, safe, and resilient electric grid for everyone.

Sunrise Movement

The Sunrise Movement is a youth movement to stop climate change and create millions of good jobs in the process. We unite to make climate change an urgent priority across America, end the corrupting influence of fossil fuel executives on our politics, and elect leaders who stand up for the health and wellbeing of all people.
Sunrise campaigns for a government-wide mobilization to build renewable energy, create green union jobs, and make communities more resilient to climate disaster. Revamping FEMA and HUD rules to address climate impacts head-on is an important tactic towards achieving that goal and saving lives, especially in communities on the frontlines of the crisis.

**The Climate Center**

The Climate Center is a non-profit organization working to rapidly reduce climate pollution at scale. The Climate Center’s Community Energy Resilience Program is working to accelerate development of clean energy resilience in disadvantaged communities that suffer the most from air pollution and power outages.

**Vessel Project**

The Vessel Project of Louisiana (“The Vessel Project”) is a Louisiana nonprofit grassroots mutual aid, disaster relief, and environmental justice organization founded in Southwest Louisiana in response to several federally declared disasters, including hurricanes Laura and Delta, winter storm Uri, and the May flood of 2021. The Vessel Project realizes the intersectionality of the challenges that plague BIPOC communities and works holistically to achieve environmental and climate justice, voting rights, and access to housing, energy, clean water, safe fresh produce, and healthcare. After a disaster, The Vessel Project assists the affected with their most immediate needs, including emergency shelter, food, formula, diapers, oxygen tanks, cleaning supplies, and disaster assistance applications. The Vessel Project also provides people with the opportunity to connect with each other by hosting free holiday events, game nights, and community meals.

**WE ACT for Environmental Justice**

*WE ACT for Environmental Justice* was founded in 1988 by community leaders to address the environmental racism that was rampant in their West Harlem neighborhood. Our mission is to build healthy communities by ensuring that people of color and/or low-income residents participate meaningfully in the creation of sound and fair environmental health and protection policies and practices.

In 2023, WE ACT for Environmental Justice published our *Out of Gas, In with Justice* report. This report examined the indoor air quality impacts of switching from gas stoves to electric induction stoves, for residents living in New York City Housing Authority apartments in the Bronx. We found that toxic nitrogen dioxide emissions and carbon monoxide concentrations were severely higher in gas stove kitchens than those with induction stoves. These dangerous pollutants harm major organ systems of the body including the nervous system and respiratory systems, leading to asthma and other major health issues.
WE ACT calls on FEMA and HUD to ensure that frontline families are not forced to rebuild their homes with profoundly unhealthy, dangerous fossil fuel equipment, after already facing the undue and disproportionate impacts of climate change. These communities must not be locked into decades of polluted indoor air and associated negative health impacts, as well as high energy bills and threats of blackouts. Instead, FEMA and HUD must direct their funding to climate mitigating, resilient, and renewable energy infrastructure in order to reduce climate vulnerability, while promoting public health and alleviating energy burden.
APPENDIX C

References Cited In Petition
(.pdfs provided via Flash Drive)

Listing By Title
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