



National Electrical Manufacturers Association

The association of electrical equipment
and medical imaging manufacturers
www.nema.org

June 2, 2022

Ms. Patricia Hoffman
Department of Energy
Office of Grid Deployment
1000 Independence Ave., SW
Washington, DC 20585

RE: Formula Grants to States and Indian Tribes for Preventing Outages and Enhancing the Resilience of the Electric Grid [6450-01-P]

Submitted via 40101formulagrants@hq.doe.gov

Dear Ms. Hoffman:

The National Electrical Manufacturers Association (NEMA) is the leading U.S. trade group representing nearly 325 electrical equipment and medical imaging manufacturers that are at the forefront of helping the nation successful transition to an electrified and cleaner economy. Specifically, our member companies have long provided a diverse range of efficient, sustainable, and resilient grid products, including virtually all permitted types of ‘resilience investments’ listed in the Department of Energy’s (DOE) Notice of Intent (NOI) on the Section 40101(d) implementation plan. NEMA is pleased to submit comments regarding this NOI.

State and local policymakers, regulators and oversight boards, and utility owners and operators all bring valuable insight on what strategies can best harden their electric grids. However, no strategy is complete if the capabilities or limitations of the products relied upon to achieve those strategic goals are not fully considered. Hearing directly from manufacturers on what their products can or cannot do creates the foundation on which a successful project is built upon.

At a minimum, **NEMA requests the DOE to directly list and equally involve the manufacturers of ‘resilience investment’ products to be on the same level as ‘eligible entities’ in the strategic planning process.** Further, DOE should specifically list manufacturers, along with public-private partnerships (PPP) and joint ventures (JV), as relevant subgrantees of the program. As will be highlighted below, doing so will help the benefits of this IIJA provision be broadly realized and amplify the effectiveness of the Administration’s Executive Order to deliver environmental and energy justice to disadvantaged communities¹.

Electrification through Comprehensive Planning

In Section 40101(d), Congress recognizes that local voices, perspectives, and approaches are necessary to harden the grid; effective strategies to increase resilience and prevent power outages

need to be developed from the bottom-up while being incentivized from the top-down. The NOI's conceptual strategic planning process specifically identifies policymakers, boards, and utilities as the key entities involved in the formulation of planning objectives and criteria².

NEMA recognizes that these voices are necessary to identifying and understanding local grid needs; however, we believe this list incomplete without the voice of 'resilience investment' equipment manufacturers also being included.

The strategic approach taken by each eligible entity when applying for a grant may differ from all others; there is no one-size-fits-all grid hardening playbook. One utility may determine that tangible upgrades to the grid, including utility pole management, the burying of distribution lines and other electrical equipment, and vegetation management best increase resiliency, while another may apply hardening technologies and similar advanced systems. Each entity will have to consider myriad variables when putting together their plans, including the best ways to achieve various policy goals with limited resources.

A collaborative dialogue between utilities and manufacturers can identify opportunities early in the planning process and thereby allow grants to have a greater impact. Manufacturers can also locate and detect product compatibility issues, especially if projects involve the upgrading of legacy equipment or the installation of modern technologies. Recognizing such variables will also help factor in other planning considerations, including the types of human expertise and labor needed, equipment production lead-times, supply chain complications, and siting and permitting requirements.

Manufacturers understand their products' abilities—insight which can provide planners with alternatives to traditional resilience solutions. For example:

- Coupling solar, wind, and other renewable energy sources with inverters and batteries can store excess energy and redeploy it in times of need or high demand, thereby helping reduce outages.
- An estimated 50% of renewable energy is lost because it is generated out-of-sync with demand.³ Combining renewable generation with smart battery systems allows power to be redeployed when needed and to areas deemed most critical (such as hospitals, water treatment facilities, etc.).
- Battery-storage can function in severe climate conditions. Greater deployment of such technologies can replace carbon-based emergency or back-up fuels, including propane, natural gas, and heating oil, with a greenhouse gas-free electric alternative during a natural disaster.

Creative thinking will be required to successfully harden the grid and increase resiliency, and therefore reliability. Manufacturers who facilitate such creativity and alternative thinking should be considered an equal stakeholder and partner in the development of any strategic planning process. Not having manufacturers at the table runs the political risk of overpromising and underdelivering on these investments.

Amplification of Justice Goals

President Biden's Executive Order, *Tackling the Climate Crisis at Home and Abroad*, includes the Justice40 Initiative. The electroindustry stands ready to help America transition to a cleaner and more equitable energy future by domestically producing many of the products required for this shift.

The NOI states that fostering energy justice should be considered a “*key planning objective, in addition to all-hazards resilience,*” by eligible entities as they prepare their grant applications. To support this objective, NEMA believes that eligible entities must take into consideration the ability of ‘resilience investments’ to increase manufacturing presence in disadvantaged communities and thus, support the creation of good-paying jobs. NEMA companies continually invest in communities across the country, with several breaking ground on new manufacturing plants in low-income and disadvantaged communities in recent years. In addition to fulfilling *Buy America* and *Buy American* trade requirements established by the IIJA, ensuring that as much equipment is domestically produced can amplify equity benefits. When constructing their proposals, NEMA encourages eligible entities to consider economic investments made in low-income and disadvantaged communities.

Currently, 85 NEMA’s member companies produce grid resilience equipment in 49 states. Within these states, goods are manufacturers in 311 counties. Based on 2019 data, the aggregate poverty rate of these specific counties is 12.51%⁴. The five most impoverished of these 311 counties include Hidalgo County, TX (29.7%); Clarke County, GA (29.6%); Cameron County, TX (28.9%); Adair County, OK (27.8 %); and Evans County, GA (26.9%). Table 1 below shows the aggregate poverty rate of all the counties where NEMA utility members have a facility.

Table 1: Aggregate County Poverty Rate Per Utility Facility

State	Number of Counties w/ NEMA Utility Member	Aggregate Poverty Rate (%)
WV	1	18.6
AR	11	18.1
OK	4	18.02
MT	1	17.4
LA	1	17.3
TX	13	16.99
MS	9	16.8
NM	1	16.7
MO	10	14.98
SC	9	14.95
NC	17	14.93
AL	7	14.92
IA	5	14.82
ID	2	14.45
IN	6	14.38
GA	12	13.97

CA	16	13.9
AZ	1	13.8
TN	11	13.53
FL	16	13.26
OR	2	13.25
KY	4	13.175
NE	4	13.05
MI	7	13.02
OH	19	12.7
VA	12	12.64
NV	2	12.5
VT	1	12.1
NY	15	12.08
IL	13	11.69
DE	1	11.4
WA	4	11.25
PA	15	10.9
WI	7	10.55
MA	5	10.48
RI	3	10.46
WY	1	9.9
MN	7	9.7
ND	2	9.4
UT	1	9.2
CT	6	9.1
ME	1	9
HI	1	8.3
CO	5	8.26
AK	3	8.2
MD	5	7.98
NJ	7	7.9
NH	4	7.87
KS	1	5.4

Methodology: Proprietary NEMA membership data cross referenced with povertyusa.org poverty map.

Column 3 results determined by averaging all counties where facilities are located in a given state.

Benefiting these disadvantaged communities will require substantial, long-term investments. As the economy continues to electrify there will be increased reliance on the grid, which will demand that it remain resilient. Resiliency products made by electromanufacturers within these communities can provide stable and high-paying employment opportunities to local residents, as well as societal benefits through increased gross domestic product output and tax revenue.

Again, NEMA strongly encourages DOE to involve manufacturers as a collaborating partner in the strategic planning process for these grants. Eligible entities can then consider the disadvantaged communities who will benefit through the production of grid hardening products in addition to the benefits which will come through the actual hardening of the grid itself. And

due to the Justice40 Initiative, some of these disadvantaged communities may receive and realize these equity benefits in tandem.

Expand the List of Subgrantees

The NOI lists the entities eligible to receive grants as part of Section 40101(d), including the option for DOE to determine other entities it considers relevant. Listing manufacturers as a subgrantee will help grant dollars flow more efficiently and maximize a project's return on investment. Additionally, listing manufacturers as a subgrantee will deliver more resources to disadvantaged communities directly by cutting out unnecessary bureaucracy and middlemen. For these reasons, **NEMA strongly encourages DOE to add manufacturers to the list of subgrantees.**

Furthermore, NEMA recognizes that the IIJA investment of \$2.5 billion alone will not address all of the nation's grid resiliency needs. DOE itself has stated in public forums regarding this provision that it may prioritize hardening upgrade projects over new ones in order to maximize benefits.⁵ To encourage additional financial investment to complement IIJA goals, **NEMA encourages DOE to also expand the list of subgrantees to include PPP and JV entities.** Many of these currently unlisted entities have the technologies and expertise to implement hardening projects. Additionally, they can meet the 100% subgrant match funding requirement by offering upfront financing for long-term projects.

Additional Recommendation

To further collaboration among all stakeholders in the strategic planning process, NEMA recommends that DOE publish a list of the officials and offices who are a state/tribe's designated program lead for the implementation of this provision. This will bring greater transparency to this program and allow for more constructive conversations and meetings between stakeholders.

Again, NEMA appreciates the opportunity to submit comments regarding these rebates.

Sincerely,

Spencer Pederson
Vice President, Public Affairs

¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/27/fact-sheet-president-biden-takes-executive-actions-to-tackle-the-climate-crisis-at-home-and-abroad-create-jobs-and-restore-scientific-integrity-across-federal-government/>

² <https://netl.doe.gov/sites/default/files/2022-05/IIJA%2040101d%20-%20Notice%20of%20Intent.pdf>

³ <https://www.energylivenews.com/2021/01/13/enough-wind-power-was-curtailed-in-2020-to-power-a-million-homes-for-a-year/>

⁴ <https://www.povertyusa.org/data>

⁵ <https://www.energy.gov/oe/events/grid-resilience-statetribal-formula-grant-program-webinar>