



National Electrical Manufacturers Association

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

December 5, 2022

U.S. Department of Energy
Office of Clean Energy Demonstrations
1000 Independence Ave., SW
Washington, DC 20585

RE: DE-FOA-0002841_RFI: Request for Information on Energy Improvements in Rural and Remote Areas

Submitted via: ERA@hq.doe.gov

To whom it may concern:

The National Electrical Manufacturers Association (NEMA) welcomes the opportunity to submit comments in response to the Office of Clean Energy Demonstrations request for information (RFI) on energy improvements in rural and remote areas. We are the leading U.S. trade group representing nearly 325 electrical equipment and medical imaging manufacturers that make safe, reliable, and efficient products and systems. Collectively, our membership provides around 370,000 American manufacturing jobs in more than 6,100 facilities¹. The electroindustry has a robust domestic manufacturing base and supports the fundamental goal of creating good-paying jobs while supplying products to both electrify and decarbonize the economy for the benefit of all Americans, including those who reside in rural and remote areas of the country.

Below are NEMA's responses to applicable questions from this RFI:

Category 1: Respondent Characteristics

• **Question 1.1: What type of organization do you represent?**

As noted above, NEMA is a non-profit organization representing the interests of the electroindustry in the United States. Our companies are at the forefront of helping the nation successfully transition to an electrified, connected, and cleaner economy. An assortment of our members manufacture almost all hardware products, advanced technologies, and integrated systems and controls used in grid construction and modernization projects;² this

¹ For more information, please visit: <https://www.nema.org>

² For a full list of NEMA member products, please visit: <https://www.nema.org/directory/products>

makes the electroindustry an integral partner in the successful implementation of the Energy Improvement in Rural or Remote Areas (ERA) Program.

- **Question 1.2: What role would your organization play in an energy project conducted through this program?**

To maximize the societal, environmental, and economic benefits and impacts of the ERA Program, eligible entities identified in Section 40103 of the Bipartisan Infrastructure Law (BIL) need to collaborate closely with the manufacturers of products to be utilized in program projects. Many grid improvement and modernization projects require a thoughtful consultation with a products' manufacturers to ensure necessary technical details and specifications are captured; rarely are any grid components considered off-the-shelf. Additionally, manufacturers can offer technical support and assistance to electric utility customers, including the best application, integration, and implementation of products to achieve project goals and outcomes. Furthermore, this collaboration between the customer and vendor builds trust and a partnership which can reduce a project's overall deliverability timeline.

Category 2: Potential Project Details

Section 40103(c) of the BIL provides that federal support, including financial assistance to rural or remote areas, may be provided for the purpose of:

- A. Improving the overall cost-effectiveness of energy generation, transmission, or distribution systems;**
 - B. Siting or upgrading transmission and distribution lines;**
 - C. Reducing greenhouse gas emissions from energy generation by rural or remote areas;**
 - D. Providing or modernizing electric generation facilities;**
 - E. Developing microgrids; and**
 - F. Increasing energy efficiency.**
- **Question 2.4: Given the purposes reflected above (bullets A-F), what types of energy projects would be most impactful?**

NEMA believes the purposes listed above are suitable for the ERA Program, with a caveat within Bullet B. Transmission projects, generally, provide energy benefits to communities in population centers far removed from rural and remote areas and with populations of more than 10,000. (An exception to this are transmission lines which are owned and operated by rural electric cooperatives.) Unless the program is referring to direct employment opportunities related to the construction and maintenance of transmission infrastructure

taking place within a rural or remote area, NEMA feels transmission-related projects fall outside the scope of the program. However, NEMA feels siting or upgrading distribution lines is within the scope. Since the New Deal, distribution infrastructure has been considered key to providing electric power benefits to rural and remote areas; in many cases it serves as a regions primary source of energy.³ NEMA requests clarity from DOE around these nuances within Bullet B.

- **Question 2.5: Would this type of project(s) address energy burdens, economic burdens, environmental impacts, lack of quality jobs, or other energy equity and environmental justice considerations? If so, how?**

Modernizing electrical systems in rural and remote areas will require a highly trained and skilled labor force. Due to the high-level of sophistication involved in working with electrical systems, as well as the hazardous nature of the work itself, technicians, engineers, welders, and other related fields all demand employees with specialized skillsets. According to the Bureau of Labor Statistics, there is a shortage of roughly 80,000 electrical technicians annually, a shortfall which is expected to grow an average of 7% each year through 2031.⁴ The strong demand for skilled workers has led to higher pay in order for companies to attract and retain such talent; the 2021 median pay for electricians was nearly \$60,000.⁵ By definition, rural and remote areas are sparsely populated areas, meaning these regions may entice higher salaries to acquire such labor. This could result in ERA Program creating quality long lasting and well-paying jobs which will help raise the standard of living for employees directly and their communities indirectly.

- **Question 2.6: What barriers have been encountered or would be anticipated for these types of projects or relevant analogs?**

Lack of experience among eligible entities in developing and submitting grant proposals to DOE will impact rural and remote communities. Many BIL funding opportunities are conditional and are subject to various rules and stipulations. Given limited financial and professional resources, these communities more so than others struggle to successfully navigate the funding opportunity process. Technical assistance and training are urgently needed in order for these communities to qualify for funding; however, this may prove difficult in the short-term as entities of all sorts are also in need of similar talent as funding for other BIL provisions is made available.

³ <https://obamawhitehouse.archives.gov/administration/eop/cea/factsheets-reports/strengthening-the-rural-economy/strengthening-rural-infrastructure>

⁴ <https://www.bls.gov/ooh/construction-and-extraction/electricians.htm#:~:text=About%2079%2C900%20openings%20for%20electricians,force%2C%20such%20as%20to%20retire.>

⁵ <https://www.zippia.com/electrical-technician-jobs/salary/>

A potential solution is through partnerships. As referred to in Category 3, Question 3.4 of the RFI regarding 'Partnerships,' eligible entities in rural communities lacking technical assistance should be allowed to pool their resources and work with their respective trade associations to develop grant proposals. If awarded a grant, that association should be allowed to manage the grant on behalf of their members. For example, the Iowa Association of Municipal Utilities or the Florida Municipal Power Agency should be allowed to develop and submit grant proposals on behalf of their members for Section 40103(c).

NEMA once again appreciates the opportunity to provide these comments on how the electroindustry can help rural and remote communities benefit as much as possible from BIL investment. Should you have any additional questions regarding these responses, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read 'Spencer Pederson', written in a cursive style.

Spencer Pederson
Vice President, Public Affairs