

June 16, 2022

Submitted electronically via EnergyStorage41001RFI@ee.doe.gov

Re: Request for Information on the Long Duration Energy Storage for Everyone, Everywhere (LD ESEE) Initiative (DE-FOA-0002777)

To Whom It May Concern:

The National Rural Electric Cooperative Association (NRECA) respectfully submits the following comments to the U.S. Department of Energy (DOE) in response to its request for information (RFI) on the Long Duration Energy Storage for Everyone, Everywhere Initiative (DE-FOA-0002777) and will be funded through Section 41001 of the bipartisan infrastructure law (BIL).

NRECA is the national trade association representing nearly 900 local electric cooperatives and other rural electric utilities. America's electric cooperatives are owned by the people that they serve and comprise a unique sector of the electric industry. From growing regions to remote farming communities, electric cooperatives power 1 in 8 Americans and serve as engines of economic development for 42 million Americans across 56 percent of the nation's landscape.

Electric cooperatives operate at cost and without a profit incentive. NRECA's member cooperatives include 62 generation and transmission (G&T) cooperatives and 831 distribution cooperatives. The G&Ts generate and transmit power to distribution cooperatives that provide it to the end of line co-op consumer-members. Collectively, cooperative G&Ts generate and transmit power to nearly 80 percent of the distribution cooperatives in the nation. The remaining distribution cooperatives receive power directly from other generation sources within the electric utility sector. Both distribution and G&T cooperatives share an obligation to serve their members by providing safe, reliable, and affordable electric service.

We appreciate the opportunity to provide NRECA's perspective to DOE as it implements Section 41001 of the BIL, which provides \$505 million to support energy demonstration projects, an energy storage pilot grant program, and a long-duration demonstration initiative. In particular, the funding provided through the pilot grant program will enable electric cooperatives to invest in storage projects to enhance the resilience of their systems while also supporting other important benefits to the communities they serve.

We strongly support the Energy Act of 2020's provision for DOE to ensure regional diversity for projects funded through the pilot grant program, including from rural states and states with high energy costs. Electric cooperatives serve both rural and underserved or disadvantaged communities. Cooperatives serve 92% (364 of 395) of the persistent poverty counties in the United States. Our members also have a strong track record of efficiently using their limited resources. On average, electric cooperatives serve eight customers per mile of line and collect annual revenue of approximately \$19,000 per mile; while the other utility sectors average 32 customers and \$79,000 in annual revenue per mile.

Letter to U.S. Department of Energy

RE: RFI on the Long Duration Energy Storage for Everyone, Everywhere (LD ESEE) Initiative (DE-FOA-0002777)

June 16, 2022

The funding provided in this new grant program via the BIL will be an important down payment to ensuring rural communities are not left behind as the U.S. makes important investments in its energy infrastructure. For example, integrating battery storage systems with solar or wind projects can enable electric cooperatives to reduce emissions more quickly by enabling greater utilization of intermittent renewable resources in their communities. Battery storage can also reduce or defer additional transmission costs, and will prove particularly valuable to sparsely populated, rural co-op territories that may be economically vulnerable as they continue to address aging delivery infrastructure and also work to enhance reliability. It is important that DOE ensure electric cooperatives and the rural communities they serve will have equitable access to opportunities for storage projects as those provided to communities in suburban and urban areas.

We appreciate the opportunity to provide DOE with feedback on the following topics raised in the RFI:

Category 1C. Energy Storage Pilot Grant Program (“Pilot Grants”)

3. b. DOE is required to establish a “competitive grant program ... to carry out demonstration projects for pilot energy storage systems.” The direction also specifies giving consideration to “proposals from eligible entities for securing energy storage through competitive procurement or contract for service.” DOE is evaluating funding mechanisms for Pilot Grants in accordance with the BIL, including investigating innovative structures to fund states and communities, so they can further invest in energy storage. DOE is interested in removing barriers to participation for key communities, particularly underrepresented communities and individuals; DACs as defined by DOE’s Justice40 guidance; and fossil energy communities in transition, as well as organizations or institutions that represent them. Please comment on the ways different funding mechanisms may contribute to equitable selection and community engagement for Pilot Grants.

There is no one-size-fits-all solution so DOE should allow for multiple funding mechanisms to be utilized to administer the program. Direct grants, cooperative agreements, and other similar mechanisms should all be eligible for the pilot grant program. An important way that DOE can remove barriers to participation by electric cooperatives is to enable them to partner with organizations such as NRECA, G&Ts, or statewide associations of cooperatives in the deployment of projects funded through the pilot grant program. The lessons learned thus far from NRECA’s Rural Energy Storage Deployment Program (RESDP)¹, funded in part through a DOE grant, demonstrate that enabling cooperatives to partner with NRECA was a critical component to the successful deployment of these novel storage projects for our members.

In addition, consortiums of cooperatives and communities applying together through a lead entity should be permitted to reduce the application burden to smaller entities. For example, NRECA is coordinating a new Microgrid Consortium representing a coalition of the nation’s rural electric cooperatives seeking to develop resilient, reliable, and economically beneficial microgrid and storage projects for their communities. The consortium will partner with federal, state, and local stakeholders to identify funding opportunities and develop replicable pathways for advanced microgrid deployment in rural

¹ For more information, see: <https://www.cooperative.com/programs-services/bts/Rural-Energy-Storage-Deployment-Program/Pages/default.aspx>

Letter to U.S. Department of Energy

RE: RFI on the Long Duration Energy Storage for Everyone, Everywhere (LD ESEE) Initiative (DE-FOA-0002777)

June 16, 2022

communities. The consortium serves as a forum for co-ops to share lessons learned, identify opportunities for collaboration, network with other co-ops, and learn from microgrid experts.

According to DOE in the Storage RFI, *“Potentially, the eligible entity selected for funding under Pilot Grants need not be the same entity that builds, owns, or operates an energy storage service. The entities selected for funding could potentially use creative contractual mechanisms to structure their energy storage projects.”* We would appreciate confirmation and clarity from DOE that such eligible entities could include consortiums of cooperatives lead by organizations like NRECA which can serve an important coordination, facilitation and/or project management role in enabling storage projects funded under the BIL.

3. c. What is a sufficient individual award size for a pilot project to make a significant difference for its targeted use and technologies? DOE is interested in understanding the award size required across several project sizes and durations that may be required for different applications.

As was mentioned earlier, there is not a one-size-fits-all solution and DOE should allow for different funding levels based on the need of the utility and project. Under NRECA’s RESDP, each cooperative received the same amount of grant funding because the cooperatives selected for the program had already committed to matching or exceeding the grant funding making it a win-win solution. However, this approach will not work for all cooperatives. Given their unique business model, many electric cooperatives have limited resources and staffing which makes implementing or funding any novel projects challenging. There may be cases where it makes sense for DOE to fund the entire project because of project need in their community and we would encourage DOE to allow for flexibility in award sizes to mitigate any uncertainty in the market or supply chain.

Category 2A. Storage Technology Opportunity Readiness Evaluation (STORE)

6. What specific metrics or criteria should be added to the STORE scale for further robustness and clarity about which technologies and maturity levels fit into which provisions?

It is important that DOE does not put size requirements on the projects funded through the energy storage programs covered in this RFI. Many cooperatives have built or are building storage projects sized at less than 1 MW based on project and/or on-site resilience needs. If DOE were to put a floor on the size of projects eligible for funding, it could create a barrier to their participation and put them on an uneven playing field with other eligible entities for the program. This could create unintended consequences for DOE in trying to encourage geographic diversity of funded projects and/or more widespread adoption of storage projects across rural states. Additionally, many utilities including cooperatives are new to battery storage projects, and as such DOE should allow utilities with varying levels of experience on storage to apply for funding to allow for diverse projects and stakeholders.

Category 2B. BIL Provision, Requirements and Proposed Implementation

12. Based on EPC Act 2005, Section 988, the cost share requirement for demonstration and commercial application projects is 50% cash and/or in-kind and must come from non-Federal resources (i.e., the total project cost includes both a 50% DOE share and a 50% recipient cost

Letter to U.S. Department of Energy

RE: RFI on the Long Duration Energy Storage for Everyone, Everywhere (LD ESEE) Initiative (DE-FOA-0002777)

June 16, 2022

share). For example, a \$25M award will require \$12.5M in matching nonFederal cost share to the \$12.5M Federal share. Is it feasible for projects to meet this 50% cost share requirement on an invoice-by-invoice basis?

Not-for-profit electric cooperatives are often unable to participate in federal programs where a high cost share is required. We encourage DOE to consider allowing for a lower cost share for electric cooperatives, or eligible entities serving rural and/or disadvantaged communities. As stated above, there may be cases where it makes sense for DOE to fund the entire project because of project need in the cooperative community and, for this reason, we would encourage DOE to allow for flexibility in cost share, particularly in these “key communities.” Overall, DOE should keep cost share to no more than 30% to prevent it being a barrier to participation by electric cooperatives. Requiring a higher cost share could disadvantage rural and underserved communities served by electric cooperatives.

Similarly, we encourage DOE to make the application process and compliance requirements as simple and uniform as possible. Applying to the program should not be overly burdensome or require eligible entities such as electric cooperatives to hire consultants to complete the application process. Cooperatives generally have limited time and financial resources to dedicate to application processes for speculative grant funding or reporting requirements for grant-funded projects and we encourage DOE to take all possible steps to avoid these issues from becoming barriers to cooperatives’ participation.

16. What supportive activities would make energy storage programs successful and sustainable? (e.g., workforce development, community-based organization engagement, domestic manufacturing, etc.)

Applicants should have the flexibility to design project partnerships using different models that best suit their specific needs. For example, allowing for energy storage projects to include NRECA in their execution will help facilitate and encourage information exchange among cooperatives interested in storage. This should include allowing projects managed by NRECA to access national lab expertise, which has already demonstrated success through NRECA’s RESDP. As a result, lessons learned from early adopters of storage projects can be leveraged by additional cooperatives as they begin development of their projects and lead to more widespread adoption. Currently, the energy storage market is mainly focused on 1 MW sized-projects or greater. As was mentioned earlier, this scale of system may be too large for many deployment opportunities in the rural areas served by electric cooperatives. We encourage DOE to consider using this funding to promote a robust supply chain inclusive of smaller energy storage deployment projects.

17. What types of outreach and engagement strategies are needed to make sure all relevant project stakeholders are involved for each provision? Are there best practices for equitably and meaningfully engaging stakeholders?

Rural and disadvantaged communities that many electric cooperatives serve may have less access to communications channels such as through broadband access at home. Efforts to communicate with these communities to solicit feedback about storage project objectives that can help meet their unique needs should account for these barriers and incorporate strategies to reach out to them via other channels, such as community spaces that are frequently used, to ensure the widest awareness and participation rate

Letter to U.S. Department of Energy

RE: RFI on the Long Duration Energy Storage for Everyone, Everywhere (LD ESEE) Initiative (DE-FOA-0002777)

June 16, 2022

possible. In addition, leveraging organizations like NRECA who have established communication channels with its members can be utilized to disseminate information about program opportunities and solicit feedback from communities served by electric cooperatives.

21. What data should DOE collect from the energy storage recipients to evaluate the impact of the programs? How should this data and the program outcomes be disseminated to the public?

Data collection requirements should be balanced and not pose a burden on the recipients that would deter their participation. Most of our members have limited time and financial resources that must understandably be concentrated first and foremost to the delivery of affordable, reliable power to their consumer-members. However, gathering information from grant recipients about lessons learned so they could be shared with others could help in supporting this nascent area and building a knowledge base among stakeholders.

Category 4: Equity, Environmental and Energy Justice (EEEJ) Priorities

52. What might make 41001 energy storage programs more accessible to rural & remote communities?

To maximize the benefit of federal assistance, DOE could give priority to small entities which may have less opportunity to access traditional financing support mechanisms. Giving priority to small entities could support DOE's objectives of making storage more accessible to rural and remote communities. Another option would be to carve out a portion of funding for storage projects for electric utilities that average less than 20 customers per mile of line. That way, DOE could ensure that the utilities receiving federal assistance are those able to serve more rural communities and in most need of financial support to pursue new solutions they might otherwise not be able to take the risk on because they bring in less revenue per customer to deliver the same reliable electric service as other utilities. Finally, as discussed above, not-for-profit electric cooperatives are often unable to participate in federal programs where a high cost share is required. We encourage DOE to consider fully funding projects in "key communities" and allowing for a lower cost share for electric cooperatives, or eligible entities serving rural and/or remote communities. Overall, DOE should keep cost share to no more than 30% to prevent it being a barrier to participation by electric cooperatives.

54. How can 41001 energy storage programs be more accessible to community-owned microgrids, publicly owned utilities, and utility cooperatives? What are the specific needs of community ownership models?

Electric cooperatives focus on member needs while working for the sustainable development of their communities. NRECA's members are dedicated to improving the communities in which they serve and are active in rural economic development efforts. Again, keeping the required cost share reasonable and the time and resource burden for the application process and reporting requirements to a minimum will make these energy storage programs more accessible to electric cooperatives. Cooperatives are not-for-profit and operate at cost so any new costs imposed on the cooperative are ultimately passed on to the end-of-the-line consumer-members. That is why cooperatives will only commit to storage projects and the costs to implement them if they are reasonable and will meet the needs of their communities.

Letter to U.S. Department of Energy

RE: RFI on the Long Duration Energy Storage for Everyone, Everywhere (LD ESEE) Initiative (DE-FOA-0002777)

June 16, 2022

Summary

Electric cooperatives look forward to the opportunity to enhance the resilience on their systems with storage projects funded through DOE's new pilot grant program funded under Section 41001 of the BIL and the other storage programs covered in this RFI. Electric cooperatives will make excellent partners as they have the knowledge and expertise to support robust planning and implementation of projects that will ensure federal dollars are expended efficiently, infrastructure appropriately sized to account for current and planned energy needs, and reliability of the electric grid maintained. Not-for-profit electric cooperatives are interested in applying for funding provided by the BIL so they can implement projects that might otherwise be cost-prohibitive and to ensure that rural communities are not left out of realizing benefits of storage technologies.

Thank you for considering our comments. Please contact me at 703-907-5732 if you have any questions regarding these comments.

Sincerely,

Stephanie Crawford
Senior Regulatory Manager
National Rural Electric Cooperative Association