

Resonant Energy

Resonant Energy is a community-based solar provider based in Boston. Our mission is to build wealth in underinvested communities through solar power. Resonant develops projects for nonprofits, houses of worship, affordable housing providers, and low-income homeowners. Since our founding in 2016, Resonant has installed over 13 MW of solar PV systems, including more than 5 MW of solar for affordable housing. 59% of our projects provide direct benefits to residents of environmental justice communities, and 23% of our projects directly serve low-income customers, compared to the national average of 5%.

<https://www.resonant.energy/>

Energy Storage Grant Comments for DOER

2. Are the rough maximum grant levels by subprogram and the estimated number of projects sufficient to motivate you to apply? If not, what would be?

Yes, the grant levels for Community Resilience for both feasibility studies and capital costs are very motivating. It's worth noting \$2.5 million for half the cost of installation corresponds to a very large project. We believe that most of our nonprofit and multifamily housing clients would be requesting funding for projects under \$1 million. In the final version of the program, it would be good to see a carve out or simplified pathway for smaller, community serving projects.

5. For Community Resilience and LDES Commercialization projects, what is reasonable to expect around interconnection status at the time of application? What are typical determinants of longer interconnection processes? (please indicate the subprogram to which your comments refer)

For Community Resilience, it would be beneficial to smaller organizations if there is no requirement for interconnection status at the time of application. If necessary, proof of application for interconnection could be a lower barrier to entry. For many community organizations, the ability for a project to move forward will be strongly dependent on grant funding so they will want to secure funding before expending too much money on a project. Projects located in utility group studies are subject to longer interconnection timelines and typically we can identify these group studies fairly early in the design and permitting process.

6. For Community Resilience and LDES Commercialization projects specifically in EJ/LMI communities (please indicate the subprogram to which your comments refer):

a. What existing funding sources have you pursued or secured for clean energy or resilience projects? What barriers have you encountered in pursuing or securing those funds?

We have helped clients secure funds through the Massachusetts Clean Energy Center's EmPower program and the BERDO Equitable Emissions Investment Fund (EEIF), including a battery storage feasibility project with Housing Corporation of Arlington that was funded by EmPower, but ultimately deemed infeasible. EmPower has been a very useful resource for many of our clients as they explore solar PV but EmPower limits the use of funds for capital costs to 25% of the total grant amount. The BERDO EEIF is a great resource for Boston-based organizations looking to fund emissions reduction work but is not battery-specific and has a relatively limited funding amount. By providing funding for both feasibility studies and capital costs, the DOER AMP program will fill a significant gap in the funding landscape that has made battery storage relatively infeasible for many nonprofit organizations.

b. What cost-sharing arrangements would be reasonable or feasible for your community or organization? Are there innovative or non-financial approaches to cost-sharing that you would recommend?

9. What specific benefits (resilience and non-resiliency) do you expect an energy storage project to deliver to your community, and who would be the beneficiaries?

Many of our affordable housing clients and community partners have expressed interest in using battery storage in tandem with solar PV to create a resiliency hub that would provide support to residents and community members in the event of a power outage. They are interested in creating spaces where, in the event of a power outage or other disaster, community members can have access to a refrigerator to store medications and a climate-controlled community room. Additionally, energy storage and onsite generation can provide nonprofit organizations with significant cost savings, both from the electricity savings as well as incentive programs. Many of these organizations are feeling overwhelmed by funding cuts and increasing costs (including electricity) so the financial benefits of clean energy are often a stronger motivator than the "feel good" aspect of sustainability.

10. What site/site loads would you be most interested in making more resilient by installing an energy storage system? What duration of operation (e.g. during a grid outage) would be most valuable?

Common site loads for multifamily housing and nonprofits include elevators, refrigerators, lights and cooling. Operation during a grid outage is likely the most sought-after benefit of a battery system for our nonprofit and multifamily housing clients.

11. How do you balance resilience needs with revenue opportunities (e.g. market participation vs. emergency reserve requirements)?

a. Is it reasonable to expect these projects to maintain a high state of charge (e.g., 90%) before severe weather events to ensure resilience? How might this affect your project's revenue potential?

Yes, particularly for small to medium-sized projects, it should be relatively easy for projects to prioritize maintaining an emergency reserve ahead of severe weather, without significantly impacting project economics.

12. What barriers do EJ or LMI communities face in owning and operating energy storage projects? What technical, financial, or operational support is needed to overcome those barriers? What ownership and business models help communities realize the benefits of energy storage systems?

The most significant barriers we've observed preventing EJ and LMI communities from owning and operating energy storage projects are upfront cost and project complexity. Many of these organizations are resource-limited and understaffed, which can make it difficult for them to take on capital improvement projects that are nonessential and complex, like battery storage. Significant technical and financial assistance will help organizations prioritize battery storage projects. In our work with solar PV, we have found that providing staff time support stipends for organizations helps understaffed organizations prioritize exploring solar energy.

a. What types of support (e.g. technical assistance, training, partnerships) would increase your community's capacity to own and manage these systems?

Other Questions/Comments

Are projects that are already under development eligible for funding?

Do you anticipate an increase in demand for these types of projects given that the federal battery tax credit was preserved by the recent tax bill, even as solar and wind tax credits are going to sunset?