



GRID RESILIENCE AND INNOVATION PARTNERSHIPS PROGRAM

Expanding Role of Battery Energy Storage Systems Providing “Green Sync” and Grid Supporting Services

Established by the Bipartisan Infrastructure Law, the Grid Resilience and Innovation Partnerships (GRIP) Program is a \$10.5 billion investment to enhance grid flexibility, improve the resilience of the power system against extreme weather, and ensure American communities have access to affordable, reliable, electricity when and where they need it. GRIP funding is administered by the U.S. Department of Energy’s Grid Deployment Office (GDO). This project was selected through the second round of GRIP funding.

The Elevate Renewables Innovative Inertia Project at the Devon Generating Station in Milford, Connecticut aims to reconfigure an existing fossil-fueled peaking unit and enable the deployment of a battery energy storage system (BESS) to provide synchronous condensing (i.e., “green sync”) and other essential grid services. Elevate is focused on the repurposing of existing energy infrastructure as traditional thermal resources retire, and intermittent and renewable resources increasingly become the predominant resources on the grid. This project will demonstrate the ability to be replicable and scalable, stabilize the grid, enhance resilience, and provide community and decarbonization benefits to historically overburdened areas in the state via offsetting emissions and enabling increased renewables. Elevate will partner with the Connecticut Department of Energy and Environmental Protection and the Connecticut Public Utilities Regulatory Authority on the project.

Anticipated Outcomes and Benefits

Resilience and reliability for grid stability and restoration:

The project will provide about 23 MVA of reactive power for grid stabilization, and up to 20 MW/80 MWh of energy resilience infrastructure from a BESS capable of black-start grid restoration.

Scalability potential: With over 1,000 combustion turbine sites across the United States, the project has potential to be scaled nationwide. By proving efficacy of BESS enable synchronous condensing and other battery-enabled grid services, the project could serve as a model for similar repurposing efforts and support grid reliance and reliability needs expected as traditional thermal generation facilities retire.

Community benefits: Through a \$2.7 million community investment program, the project will prioritize Disadvantaged Communities, including a distressed municipality near the generating station. The project will support the retraining of at least 20 power plant employees. In addition, the project commits to contracting with businesses that are majority owned or controlled by underrepresented persons or groups of underrepresented persons in New England and is committed to hiring workers from vulnerable or underrepresented communities for construction. Some or all of this project is anticipated to be executed in collaboration with the International Brotherhood of Electrical Workers (IBEW) and other existing unions.

Project Details



- **Project:** Innovative Inertia-Providing Clean Energy Pilot Enhancing the Resiliency of Peaking Infrastructure Located at the Devon Generating Station (Innovative Inertia Project)
- **Applicant/Selectee:** Elevate Renewables F7, LLC
- **GRIP Program:** Smart Grid Grants (Bipartisan Infrastructure Law, Section 40107)
- **Federal cost share:** \$27,500,000
- **Recipient cost share:** \$27,500,000
- **Project location:** Connecticut
- **Project type:** Grid Enhancing Technologies and Applications

Published October 2024. Fact sheet information is based on project applications at the time of publication and should not be considered final.