



GRID RESILIENCE AND INNOVATION PARTNERSHIPS PROGRAM

Improving Interconnection and Battery Energy Storage Deployment in Maryland

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.

Baltimore Gas and Electric Company (BGE) Interconnection Readiness and Deployment of Storage (BIRDS) project is an initiative aimed at modernizing Maryland's electric grid to meet the state's clean energy goals. As Maryland drives toward a 3,000 MW storage target, BIRDS will deploy modular battery energy storage systems (BESS) across BGE's distribution network while also expanding foundational smart grid capabilities. This effort will enhance grid resilience, support the integration of renewable energy, and manage new demand peaks driven by electrification. The project's impact will be further amplified through workforce development programs designed to prepare Maryland workers for the installation and maintenance of these new technologies.

Anticipated Outcomes and Benefits

Grid modernization and resilience: BIRDS will deploy modular BESS systems across multiple distribution feeders, creating a standardized, utility-operated BESS network that enhances grid stability and supports the state's storage goal.

Enhanced distributed energy resources (DER) integration: BIRDS will replace current substation protection, monitoring, and control devices as well as expand BGE's distributed energy resources management system (DERMS) capabilities. These upgrades will simplify the DER interconnection process, improve coordination of customer-sited generation, provide comprehensive and actionable data on grid operations, and ultimately increase penetration of renewable energy and enable bidirectional power flow for electric vehicles.

Community benefits: Over 40% of the customers impacted by this project reside in Disadvantaged Communities. BIRDS will establish microgrids at two community resilience hubs, providing critical support during grid outages and contributing to local climate resilience.

Workforce development and job creation: The project will retain approximately 30 BGE jobs, create 45 additional contract jobs, and work with local colleges to develop DER-focused workforce training, creating a pipeline of local skilled workers. BGE commits to developing community partnerships and utilizing its existing Collective Bargaining Agreement. BGE is committed to working with the International Brotherhood of Electrical Workers (IBEW) local 410.

Project Details



- **Project:**
Baltimore Interconnection Readiness & Deployment of Storage (BIRDS)
- **Applicant/Selectee:** Baltimore Gas and Electric Company, an Exelon Company
- **GRIP Program:**
Smart Grid Grants
(Bipartisan Infrastructure Law, Section 40107)
- **Federal cost share:**
\$50,000,000
- **Recipient cost share:**
\$55,406,308
- **Project location:**
Maryland
- **Project type:**
Grid Enhancing Technologies and Applications

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