



GRID RESILIENCE AND INNOVATION PARTNERSHIPS PROGRAM

Accelerating the Management of Growing Distributed Energy Resources

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.

Exelon Business Services Company, whose affiliate utilities serve over 9 million electricity customers, is advancing a transformative initiative to enhance the flexibility, efficiency, and resilience of the electric power system. The Renewable-Aware project will deploy cutting-edge technologies including a distributed energy resources management system (DERMS) and Unbalanced Load Flow (UBLF) technology. Exelon's primary objective is to optimize distributed energy resources (DERs) across its service territory, initially benefitting 40,000 customers while prioritizing those in Disadvantaged Communities. This project will address the challenges posed by increasing DER proliferation while ensuring equitable access to clean energy technologies and fostering social responsibility.

Anticipated Outcomes and Benefits

Enhanced DER integration and grid management: The deployment of DERMS and UBLF improves real-time operational capabilities and grid reliability across Exelon's six utilities. This will lead to more-efficient integration of clean energy resources and support of fault location, isolation, and service restoration (FLISR) operations during emergencies, improving reliability.

Improved feeder visibility for enhanced planning: UBLF capabilities improve modeling, forecasting, dispatching, and settling DERs, allowing Exelon to more efficiently use data for hosting capacity calculations and improved interconnections. Increased availability of hosting capacity can empower communities to actively participate in the energy transition.

Community and workforce: Exelon's comprehensive community benefit plan includes 24 engagement-focused commitments, including 40-50 annual engagements. The project emphasizes workforce training, particularly on upskilling employees in Disadvantaged Communities, and collaborative development of safety and operational procedures.

Project Details



- **Project:**
Renewable-Aware Distribution Operations: Pioneering a Cleaner Future for All Our Communities
- **Applicant/Selectee:**
Exelon Business Services Corporation LLC
- **GRIP Program:**
Smart Grid Grants
(Bipartisan Infrastructure Law, Section 40107)
- **Federal cost share:**
\$100,000,000
- **Recipient cost share:**
\$189,678,720
- **Project location:**
Delaware, Illinois, Maryland, New Jersey, Pennsylvania, Washington D.C.
- **Project type:**
Situational Awareness and System Automation Solutions

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