

Rappahannock Electric Cooperative (REC) is seeking federal funding from the Infrastructure Investment and Jobs Acts (IIJA) to provide cost-sharing for its proposed smart grid project titled *Enabling EV and DER Adoption Through DERMS, AMI, and Fiber Integration*.

The rapid growth of distributed energy resources (DERs) and electric vehicle (EV) adoption continues throughout Rappahannock Electric Cooperative's (REC) territory. This project will modernize REC's distribution system to benefit its customers and the environment more broadly through better energy decisions. The Cooperative recently launched Vividly Brighter™, a suite of energy products and services that will promote the adoption of DERs and EVs focusing on energy solutions for the future. While these solutions present an opportunity for the member and the Cooperative, how REC manages these resources will help the utility reduce peak power consumption, avoid costly system upgrades, drive resiliency and reliability, and improve the flexibility of the grid.

Further, leveraging smart metering data beyond the primary business case of consumption and billing will further allow leveraging advanced metering infrastructure (AMI) to gain operational efficiencies, reliability improvements, better consumer engagement, and effective integration of distributed energy resources. To address both of those upgrades, REC is deploying an effective fiber utility network that connects various nodes and devices for fast and effective data communication is essential.

REC will partner with OATI to deploy a distributed energy resources management system (DERMS) that will be enabled through an advanced metering upgrade supplied by Landis+Gyr. The fiber optic network serving as the Cooperative's communication backbone is being designed and constructed by Atlantic Engineering Group. Project management services required to integrate the systems are being provided by The Shpigler Group, a Georgia-based management consulting firm with extensive experience in the energy sector.

If awarded funding, REC and its partners plan to begin the project in 2024 and install approximately 175,000 advanced meters and associated equipment over five years.