



FACT SHEET

## GRID RESILIENCE AND INNOVATION PARTNERSHIPS PROGRAM

Established by the Bipartisan Infrastructure Law, the U.S Department of Energy's Grid Deployment Office is administering a historic \$10.5 billion investment via the Grid Resilience and Innovation Partnerships (GRIP) program to enhance grid flexibility, improve the resilience of the power system against growing threats of extreme weather and climate change, and ensure American communities have access to affordable, reliable, clean electricity when and where they need it.

# ADVANCING CLEAN, RELIABLE ENERGY WITHIN THE RAPPAHANNOCK ELECTRIC COOPERATIVE

Rappahannock Electric Cooperative (REC) will deploy a distributed energy resources management system (DERMS), coupled with an advanced metering upgrade and a fiber utility network connecting various nodes and devices throughout REC's service territory. The project will advance REC's capabilities in managing distributed energy resources (DERs) and electric vehicles (EVs), providing consumers with more flexibility and ensuring that <u>disadvantaged communities</u> (DACs) can participate in an equitable energy future that is affordable, reliable, safe, and sustainable.

### **Anticipated Outcomes and Benefits**

- Advanced metering infrastructure (AMI) will enable consumers to make data-informed behavioral changes, maximizing energy efficiency and reducing peak demand.
- AMI technology will enable customers to access variable plans that offer different electricity rate prices throughout the day. This flexibility, which allows customers to choose to use energy when prices are lower, also provides utilities with data on customers' energy reductions, enabling them to create programs that reward customers for energy savings.
- Energy audits for building owners will identify opportunities to reduce energy use and save money, particularly in older buildings which tend to have higher emissions and consume more energy.
- The DERMS platform will provide real-time grid data, giving utility operators greater control over managing the electrical system, its DERs, and the system's load.
- A robust fiber network will lay the foundation for technology needed to transmit vast amounts of grid data.
- The DERMS platform will enable load management with virtual power plants (VPPs), harnessing the potential of new renewable energy and electric vehicles. This platform will also provide REC with real-time monitoring and management of the electric grid to enhance resilience, improve planning, and restore service after outages.
- The project will support the expansion of clean energy within the Rappahannock Tribal Designated Area as well as four counties containing DACs.

#### PROJECT DETAILS

- Project:

   Enabling EV and DER Adoption through
   DERMS, AMI, and Fiber Integration
- Applicant/Selectee:
   Rappahannock Electric Cooperative
- GRIP Program:
   Smart Grid Grants (Bipartisan Infrastructure Law, Section 40107)
- Federal cost share: \$38,162,015
- > Recipient cost share: \$38,162,015
- Project Location: Virginia
- Project type:RE Enablement

### **HELPFUL LINKS**

- > Grid Resilience and Innovation Partnerships Program
- > About the Grid Deployment Office