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.

SMART GRID MANHOLE AND VAULT MONITORING

The proposed Smart Grid Manhole and Vault Monitoring Project (MVMP) will significantly lower the frequency and duration of outages through the integration of fault locators and manhole monitors in more than 600 vaults and 800 manholes. These smart grid monitoring enhancements will also extend the life of underground transformers, enable timely conditional-based maintenance for underground infrastructure, and enable rapid prioritization of outage recovery efforts through real-time monitoring of assets.

Anticipated Outcomes and Benefits

The MVMP project will accelerate and enhance ongoing resiliency programs to minimize grid impacts from major storms and other environmental events as well as significantly improve infrastructure situational awareness through advanced equipment health telemetry and predictive failure analysis. Benefits include:

› Improved situational awareness to help prevent the likelihood of catastrophic failures due to compromised underground infrastructure.
› Reduced impact on home, businesses, and communities with better use and fault detection of underground electrical infrastructure, leading to fewer power outages and disruptions.
› Replicable model for underground infrastructure enhancements as undergrounding of overhead electric systems increases across the utility industry and quick and reliable underground fault detection becomes critical to system resilience.
› Enhanced system resiliency in disadvantaged communities (DACs).
› Increased energy resilience, including the reduction of outage frequency and/or duration.
› Offers competitive negotiated wages and benefits and works closely with the International Brotherhood of Electrical Workers (IBEW) and the building trades to ensure a strategic and collaborative alignment to attract, develop, and retain a skilled and qualified workforce.
› Reskilling will be accomplished through on-the-job training, investment in new apprenticeship programs, and partnerships with the local community college system.

PROJECT DETAILS

› Project:
  Smart Grid Manhole and Vault Monitoring Project
› Applicant/Selectee:
  Florida Power & Light (FPL)
› GRIP Program:
  Smart Grid Grants (Bipartisan Infrastructure Law, Section 40107)
› Federal cost share:
  $30,363,088
› Recipient cost share:
  $36,738,088
› Project Location:
  Florida
› Project type:
  Resilience and Sectionalization

HELPFUL LINKS

› Grid Resilience and Innovation Partnerships Program
› About the Grid Deployment Office

Published October 2023. Fact sheet information is based on project applications at the time of publication and should not be considered final.