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.

Consumers Energy (CE) will build out much-needed infrastructure investments in some of Michigan’s most historically underinvested communities. The project will work to upgrade the backbone of CE’s circuit systems and increase capacity at local substations to better support redundancy in disadvantaged communities (DACs). Additionally, reconductoring the three-phase lines hardens them against the impacts of extreme weather and prepares them for the future adoption of technologies needed for the automatic transfer of customers to separate lines when an outage does occur.

The specific project goals and objectives are to complete lateral fusing of Consumers Energy’ Low Voltage Distribution (LVD) system, construct new ties between circuits while adding automated loops in targeted DACs, harden poles, and pilot new state-of-the-art sensors to drive system resiliency.

Anticipated Outcomes and Benefits

› Ensure targeted portions of the CE system are sectionalized to current standards and will achieve an estimated 6-to-7-minute System Average Interruption Duration Index (SAIDI) improvement by limiting the number of customers affected by any single outage, especially for DACs in a storm event.
› Lower the frequency of outages by limiting customers affected and transferring other customers to another source during a fault, made possible through the sectionalization and automation loops being installed in the areas.
› Enable the CE team to more closely monitor and respond to a range of incidents such as downed wires, pole accidents, and deteriorating pole conditions.
› Commit to seek input from impacted stakeholders on priorities and concerns and formulate plans to address major concerns or priorities.
› Create a platform to train company apprentices with lineworker crews that will be comprised of at least 33% apprentice-level employees to provide training on a variety of grid technologies. This investment will also sustain at least 66 union-represented quality jobs partially sourced from local communities.
› Continue partnership with Utility Workers Union of America to incorporate worker feedback, offer competitive benefits, promote training and advancement, and engage in equitable job recruitment practices through existing school-to-work pre-apprenticeship programs.
› Lower energy bills for residents by reducing yearly operation and maintenance expenses for maintenance tree trimming expenses.

PROJECT DETAILS

› Project: Sectionalization and Circuit Improvements to Mitigate Outage Impacts for Disadvantaged Communities
› Applicant/Selectee: Consumers Energy
› GRIP Program: Grid Resilience Utility and Innovation Grants (Bipartisan Infrastructure Law, Section 40101(c))
› Federal cost share: $100,000,000
› Recipient cost share: $100,310,996
› Project Location: Michigan
› Project type: System Hardening

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.