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.

CREATING AN INTELLIGENT ECOSYSTEM FOR GREATER PRECISION IN GRID MANAGEMENT

The Connected Clean PowerCity project will create an intelligent ecosystem for managing the grid with greater precision. The project will deploy distributed grid-edge intelligence at scale, an advanced distributed energy resource management system (DERMS), and other enabling technologies, and will modernize the utility’s outage management system (OMS). A key component of the project will be a case study with the Wilton Rancheria Tribe of Miwok Indians, which will demonstrate how advanced smart grid system components can integrate with site-specific distributed energy resources (DERs). This next-generation smart grid project will address the regional need for resilient, reliable grid service that is hardened for and supports the clean energy transition.

Anticipated Outcomes and Benefits
The proposed work will adapt infrastructure to interact with technology and customers at the grid edge, establishing visibility, management, and control while ensuring a variety of community-level benefits, including:

› Improving service reliability, supporting core community benefits, mitigating congestion, and providing equitable energy access to all at a best-in-class cost.
› Enabling real-time grid management of rapidly proliferating DERs while accelerating the adoption of electric vehicles and other smart grid assets.
› Setting the foundation for next-generation technologies with enabling devices while future-proofing the region’s resilience against projected climate impacts.
› Commitment to ensure over 40% of benefits flow to disadvantaged communities.
› Engaging in a substantive partnership with the Wilton Rancheria Tribe of Miwok Indians to support resilience.
› Reducing emissions by replacing centralized, fossil-based power generation with networks of DERs.
› Training next-generation utility personnel with cross-functional DER management technical skills.
› Supporting good-paying jobs with benefits through labor contracts with local unions and providing training opportunities via apprenticeships and partnerships with local organizations, with a focus on DACs, populations facing barriers to employment, and the Wilton Rancheria Tribe.

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