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.

LEVERAGING AN INNOVATIVE PARTNERSHIP AND COLLABORATION AMONG STATES, THE PROJECT WILL COORDINATE THE PLANNING, DESIGN, AND CONSTRUCTION OF FIVE TRANSMISSION PROJECTS ACROSS SEVEN MIDWEST STATES, KNOWN AS THE JOINT TARGETED INTERCONNECTION QUEUE (JTIQ) PORTFOLIO. THE JTIQ PROCESS REPLACES THE TRADITIONAL INTERCONNECTION STUDY APPROACH WITH A COORDINATED, LONG-RANGE, INTERREGIONAL ASSESSMENT THAT STUDIES MULTIPLE PROJECTS AT ONCE, RESULTING IN MORE REGIONALLY OPTIMIZED TRANSMISSION SOLUTIONS AND AN INNOVATIVE COST-SHARE ALLOCATION APPROACH.

The central United States has experienced unprecedented growth in the development of new electric generation, primarily driven by utility-scale wind, solar, and battery projects. The volume of new generation projects has triggered large, costly transmission upgrades in the Southwest Power Pool (SPP) and Midcontinent Independent System Operator (MISO) regions. Transmission system upgrades are often necessary in the neighboring region, but the costs and uncertainty of the system upgrades have become one of the biggest bottlenecks for developing new renewable energy projects in the upper Midwest. The JTIQ Portfolio project overcomes many of these challenges and provides numerous interregional benefits, including scalable transmission solutions, new renewable generation, lower energy costs, enhanced community engagement, and workforce development.

Anticipated Outcomes and Benefits

› Demonstrate a replicable and scalable solution to interregional interconnection and transmission planning studies.
› Leverage holistic, long-range studies of generation projects to deliver large-scale, regionally optimized transmission solutions.
› Allocate costs among projects over time with an innovative fixed per-MW charge.
› Unlock approximately 30 GWs of new generation, primarily wind and solar energy.
› Community engagement via a robust and evolving community engagement plan that incorporates feedback from impacted communities.
› Targeted training and workforce development for disadvantaged communities (DACs).

PROJECT DETAILS

› Project: Joint Targeted Interconnection Queue Transmission Study Process and Portfolio
› Applicant/Selectee: Minnesota Department of Commerce
› GRIP Program: Grid Innovation Program (Bipartisan Infrastructure Law, Section 40103(b))
› Federal cost share: $464 million
› Recipient cost share: $1.3 Billion
› Project Location: Iowa, Kansas, North Dakota, Nebraska, Minnesota, Missouri, South Dakota
› Project type: Interregional Interconnection

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.