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.

MODERNIZING TRANSMISSION INFRASTRUCTURE FOR A CLEANER, MORE AFFORDABLE ELECTRIC GRID IN ALASKA

The Railbelt Innovative Resiliency Project (RIR) is a unique partnership between the State of Alaska, four Railbelt Regional Electric Cooperatives, a Railbelt municipal utility, the Regulatory Commission of Alaska, and local labor unions. The project will incentivize crucial transmission investment through innovative rate-making techniques, and it will have a direct benefit for tribal and disadvantaged communities (DACs) within the Railbelt and rural Power Cost Equalization communities by building a resilient, clean, smart, and affordable electrical grid in Alaska.

The primary objective of the RIR Project is to address various challenges facing the electrical grid in the three Railbelt regions of Alaska. These challenges include decreasing system frequency regulation, slowing frequency response to disturbances, and increasing natural frequency power oscillations. The project will incorporate Battery Energy Storage (BESS) and a High-Voltage Direct Current (HVDC) submarine cable installed in a challenging marine environment to address the need for increased transfer capacity and advanced system regulation management technologies.

Anticipated Outcomes and Benefits
› Increases transfer capacity between regions that enables higher renewable energy integration into the electricity system.
› Resilience and reliability improvements for the tribal and DACs located in the Railbelt region, and a reduction in reliance on fossil fuel generation and associated emissions.
› Supports the retention of high-quality jobs in the region, including 650 highly paid union jobs with competitive employer-sponsored benefits.
› Creates apprenticeship and internship programs to train a new generation of lineworkers and wireworkers to reinvigorate Alaska’s energy workforce.

PROJECT DETAILS

› Project: Railbelt Innovative Resiliency Project
› Applicant/Selectee: Alaska Energy Authority
› GRIP Program: Grid Innovation Program (Bipartisan Infrastructure Law, Section 40103(b))
› Federal cost share: $206,500,000
› Recipient cost share: $206,500,000
› Project Location: Alaska
› Project type: Interregional Interconnection

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

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