



FACT SHEET

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.

ENHANCING THE CLEAN ENERGY TRANSITION BY ENHANCING GRID STABILITY

Algonquin Power Fund America, Inc. plans to deploy SmartValve, an advanced power flow control technology that quickly solves grid issues by unlocking additional transfer capacity on existing transmission lines. The project aims to increase transmission transfer capacity of the existing grid, resolve stability issues, mitigate the risk of climate impacts, and be replicable at other locations with similar stability limitations in the U.S.

Anticipated Outcomes and Benefits

- › Increase transmission capacity by approximately 300 MW by rerouting power flows, maximizing renewable output, and interconnection ability.
- › Enhance system visibility to enable grid operators to quickly rebalance the electrical system.
- › Reduce the financial and pollution energy burden for marginalized customers by improving access to clean energy.
- › Make better use of existing infrastructure, unlocking increased transmission capacity while maintaining stability in the region, reducing clean energy curtailments, supporting additional clean energy generation development, and increasing the system's ability to respond to adverse contingency events. DOE funding will create labor requirements within **disadvantaged communities** (DACs), leading to job creation.
- › Provide scholarships and specialized support to 20 low-income, diverse, academically talented, undergraduate electrical engineering and computer engineering students.
- › Commit to support future training programs for the union workforce on SmartValve installation and ongoing operations and maintenance activities.
- › Create opportunities for contracting minority/disadvantaged business enterprises, either directly through the project team or with the host utility's preferred subcontractors.
- › All laborers and mechanics performing work will be paid wages at rates no less than the prevailing wage.

PROJECT DETAILS

- › **Project:**
Enabling the Clean Energy Transition by Enhancing Grid Stability Using SmartValve Technology
- › **Applicant/Selectee:**
Algonquin Power Fund America Inc.
- › **GRIP Program:**
Smart Grid Grants (Bipartisan Infrastructure Law, Section 40107)
- › **Federal cost share:**
\$42,905,918
- › **Recipient cost share:**
\$42,905,918
- › **Project Location:**
Illinois and Texas
- › **Project type:**
Grid Capacity and Renewables Integration

HELPFUL LINKS

- › [Grid Resilience and Innovation Partnerships Program](#)
- › [About the Grid Deployment Office](#)