Sponsor/Title: Department of Energy (DOE) - National Energy Technology Laboratory - Infrastructure Investment and Jobs Act (IIJA) — Speed to Power through Accelerated Reconductoring and other Key Advanced Transmission Technology Upgrades (SPARK)

External Link: https://www.grants.gov/search-results-detail/361477

Funding Opportunity Number: DE-FOA-0003580

Submission Limitation per Institution: One (1) concept paper and one (1) associated application for Topic Area 2: Smart Grid (IIJA Section 40107)

Notre Dame Limited Submissions Listing:
https://research.nd.edu/our-services/funding-opportunities/faculty/limited-submissions-program/

Internal Expression of Interest Deadline: 2026-04-01

Sponsor Application Deadline: 2026-05-20

Purpose: The Office of Electricity leads the U.S. Department of Energy's Research, Development, Demonstration and Deployment (RDD&D) efforts to strengthen and modernize our nation's power grid and maintain reliable, affordable, and secure electricity delivery infrastructure is dedicated to pioneering innovations to advance a 21st-century grid and the tenets of Gold Standard Science, where applicable.

The Grid Resilience and Innovation Partnerships (GRIP) Program provides up to $10.5 billion in competitive funding over five years to states, Indian tribes, electric utilities, and other eligible recipients to strengthen grid resilience and innovation (sections 40101[c], 40103[b], and 40107 of the IIJA). OE administers this program with NETL.

The GRIP Program had two prior funding opportunities, covering fiscal years (FY)2022–2023 and FY2023–FY2024. To clarify the program's new emphasis, this funding opportunity has been renamed Speed to Power through Accelerated Reconductoring and other Key Advanced Transmission Technology Upgrades (SPARK). Training elements are not allowable costs for this NOFO, either as DOE Share or Cost Share, unless specific to the operation and management of the technology (EO 14236 [March 14, 2025]).

SPARK is an opportunity to meet load demand growth and resource adequacy and to address critical national, interregional, and regional needs. OE achieves these goals by stimulating investment in power system infrastructure and building partnerships between states, local governments, tribes, and power system operators to enhance reliability and affordability of the electric grid. A comprehensive approach that considers all opportunities within the IIJA should include coordinated effort between stakeholders to guide investment strategies for improving resilience beyond what the IIJA can directly support.

Topic Area 2: Smart Grid Objectives: The Smart Grid Topic Area aims to support projects focused on deploying advanced grid technologies. This initiative is looking for innovative application of cutting-edge, market-ready technologies, which may include new devices, materials, engineering designs, or software tools. These projects are intended to strengthen grid reliability and resilience through reconductoring and deploying other Advanced Transmission Technologies. Projects will expand the transfer capability of existing transmission and sub-transmission lines, improve system flexibility, and reduce the likelihood and consequences of disruptive events. This topic supports projects that enhance the efficiency, reliability, and operational flexibility of the electric grid through smart grid technologies that enable real-time monitoring, control, and optimization of grid assets. DOE will focus primarily on projects that

combine Advanced Transmission Technologies and reconductoring to achieve measurable increases in transfer capability and operational intelligence.

Projects must demonstrate how digitalization, automation, and data-driven technologies improve existing transmission and sub-transmission systems while delivering measurable affordability benefits to ratepayers through reduced congestion costs, deferred capital investment, and improved efficiency of existing assets. Projects should provide quantifiable improvements in grid performance, situational awareness, and resilience through modernization and smart control.

DOE seeks applications for smart grids, specifically those designed to support new load integration, that:

- Integrate ATTs or reconductoring in ways that enable dynamic operations and increase transfer capability on existing rights-of-way
- Deploy advanced conductors and smart grid technologies that improve operational flexibility, reliability, and affordability
- Enhance data visibility and control through communications, automation, and analytics that directly support improved reliability
- Provide replicable approaches for regional scale-up and commercialization of combined ATTs and reconductoring deployments
- Support integration of backup generation enabling solutions (e.g., controls, telemetry, coordination) tailored for large load integration with mechanisms for grid-support services

Technical Approaches of Interest:

- Advanced Transmission Technologies
- Reconductoring as a Smart Grid Enabler
- Communications and Cybersecurity Integration

Internal Application Requirements: Upload the following information to the Google Form at https://forms.gle/b9shr8xi5FrGU5dz8 by the internal deadline:

- Name of the Principal Investigator (PI)
- Project Title
- All ND Collaborators:
    - For each ND Collaborator listed, include name, department or unit, and specific role for this project in three sentences (maximum).
- Project Summary: Three (3) pages (maximum) addressing the following Technical Review Criteria as outlined on pages 47-51, in the NOFO.
    - Criterion 1: Technical Approach and Impact
    - Criterion 2: Financial and Market Viability
    - Criterion 3: Management and Organization
    - Criterion 4: Workplan

Questions: Contact Notre Dame Research Limited Submissions at limited@nd.edu.

Unless otherwise noted, all internal applications are due by 11:59 PM Eastern Time on the internal expression of interest deadline.

Applications submitted after the deadline will not be accepted.