

Grid Resilience Innovation Partnership (GRIP) Program Overview

The Department of Energy (DOE) Grid Resilience Innovation Partnership (GRIP) is a new program that is managed by the DOE's new Grid Deployment Office (GDO). The GRIP program, created by the Bipartisan Infrastructure Law (BIL), consists of three programs: Grid Resilience Utility and Industry Grants, Smart Grid Grants, and the Grid Innovation Program. **Summary charts containing important deadlines, anticipated funding amounts, and concept paper requirements for the GRIP program are attached to the end of this document.**

The DOE issued a Funding Opportunity Announcement (FOA) in mid-November for the GRIP that included all three parts, also known as topic areas, of the GRIP program. Applying will be a two-step process. First, potential applicants must submit concept papers. Concept papers must only cover one topic area. Potential applicants can submit more than one concept paper. Each concept paper would be associated with a separate application. The DOE will then decide which applicants it will invite to the second step, which is completing an application.

Grid Resilience Utility and Industry Grants, competitive grants funded in the BIL with \$2.5 billion over five years, will support projects that strengthen and modernize America's power system. Applicants must address at least three of the following eligible activities:

- Utility pole management, hardening of power lines, facilities, substations of other systems;
- Undergrounding of electrical equipment;
- Replacement of old overhead conductors and underground cables;
- Relocation of power lines or reconducting of power with low-sag, advanced conductors;
- Vegetation and fuel-load management;
- Weatherization technologies and equipment;
- Fire-resistant technologies and fire prevention systems;
- Monitoring and control technologies;
- Use or construction of distributed energy resources for enhancing system adaptive capacity during disruptive events including microgrids and battery storage subcomponents;
- Adaptive protection technologies; and
- Advanced modeling technologies.

Specific activities not allowed include construction of a new electric generating facility, large-scale battery storage not used for enhancing system adaptive capacity during disruptive events, and cybersecurity.

Note: Grid Resilience Formula Grants are not considered part of the GRIP Program. States and Indian Tribes are eligible to apply and may then award sub-grants. As part of the application for formula grants, applicants must explain their process and plans for awarding sub-grants, including the recipients of sub-grants. Applications are due by March 31, 2023. Monitor your State Energy Office for information and updates on the sub-grant process. Eligible entities cannot submit an application for the same project under Grid Resilience Formula Grants and Grid Resilience Utility and Industry Grants in the same funding cycle.

Smart Grid Grants, funded in the BIL with \$3 billion over five years, will provide grants to deploy advanced grid technologies to enhance grid flexibility. This program focuses on advanced transmission technologies such as dynamic line rating, flow control devices, advanced conductors, and network topology optimization to increase the operational transfer capacity of transmission networks.

Smart Grid Grants will have a 50% cost share and focus on:

- Increasing transmission capacity and operational transfer capacity, specifically grid enhancing technologies such as dynamic line rating, flow control devices, advanced conductors, and network topology optimization, to improve system efficiency and reliability;
- Improving the visibility of the electrical system to grid operators, specifically to quickly rebalance the electrical system with autonomous controls through data analytics, software, and sensors;
- Enhancing secure communication and data flow between distribution components, specifically, investing in optical ground wire, dark fiber, operational fiber and wireless broadband communication networks;
- Aggregating and integrating distributed energy resources and “grid-edge” devices, specifically to provide system benefits, such as renewable energy resources, electric vehicle charging infrastructure, vehicle-to-grid technologies and capabilities, and smart building technologies;
- Enhancing interoperability and data architecture of systems that support two-way flow of both electric power and local analytics to provide information between electricity system operators and consumers; and
- Anticipating and mitigating the impacts of extreme weather or natural disaster on grid resiliency, specifically, investing in the ability to redirect or shut off power to minimize blackouts, prevent wildfires, and avoid further damage.

The **Grid Innovation Program**, funded in the BIL with \$5 billion over five years, will support large-scale demonstration projects that use innovative approaches to energy transmission, distribution, and storage to harden and enhance grid resilience and reliability. Projects that demonstrate new approaches to enhance regional grid resilience and reliability will be implemented through States by public and rural electric cooperatives entities. Innovative approaches can range from the use of advanced technologies to innovative partnerships to the deployment of projects identified by innovative planning processes to many others. These projects will require a 50% cost share.

In addition to rolling out these programs, the DOE is also working to provide technical assistance to those applying for these programs. Updates on the GRIP Program are available [here](#). For more information on GRIP Program requirements, please refer to the FOA [here](#).

For more information on these and other federal funding opportunities, contact Leslie Mazingo, leslie@strategics.consulting, (202) 255-5760; or Shirley Speidell, shirley@strategics.consulting, (202) 527-3114.

**GRIP PROGRAM
COST SHARE AND DEADLINE CHART**

DOE Program Name	BIL Program Name	Purpose	Cost Share	Important Dates
Grid Resilience Utility and Industry Grants (competitive grants only)	Preventing Outages and Enhancing the Resilience of the Electric Grid – Section 40101 (c)	Projects to strengthen and modernize the electric grid against wildfires, extreme weather, and other natural disasters exacerbated by the climate crisis. This program funds comprehensive transformational transmission and distribution technology solutions that will mitigate multiple hazards across a region or within a community, including wildfires, floods, hurricanes, extreme heat, extreme cold, storms, and any other event that can cause a disruption to the power system. This program provides grants to electric grid operators, electricity storage operators, electricity generators, transmission owners or operators, distribution providers, and fuel suppliers.	Most utilities match 100%. Small Utilities match 1/3.	Concept Papers Due: 12/16/22 DOE Response: 01/27/23 Applications Due: 04/06/23
Smart Grid Grants	Deployment of Technologies to Increase Capacity and Enhance Flexibility of the Existing Grid – Section 40107	Deploy projects that increase the flexibility, efficiency, and reliability of the electric power system, with particular focus on increasing capacity of the transmission system, preventing faults that may lead to wildfires or other system disturbances, integrating renewable energy at the transmission and distribution levels, and facilitating the integration of increasing electrified vehicles, buildings, and other grid-edge devices.	50% Match	Concept Papers Due: 12/16/22 DOE Response: 01/27/23 Applications Due: 03/17/23
Grid Innovation Program	Program Upgrading Our Electric Grid and Ensuring Reliability and Resiliency – Section 40103 (b)	Deploy large-scale projects that use innovative approaches to transmission, storage, and distribution infrastructure to enhance grid resilience and reliability. Broad project applications are of interest including interregional transmission projects, investments that accelerate interconnection of clean energy generation, utilization of distribution grid assets to provide backup power and reduce transmission requirements, and more.	50% Match	Concept Papers Due: 01/13/22 DOE Response: 01/27/23 Applications Due: 05/19/23

GRIP PROGRAM ANTICIPATED FUNDING AMOUNTS

DOE expects to make a total of approximately \$3.9 Billion of federal funding available for new awards under this FOA, subject to the availability of appropriated funds. DOE anticipates making approximately 40-100 awards under this FOA. DOE may issue one, multiple, or no awards. Individual award amounts vary by topic area, see details below.

DOE may issue awards in one, multiple, or none of the following topic areas:

Topic Area Number	Topic Area Title	Anticipated Number of Awards	Anticipated Min. Award	Anticipated Max. Award	Approx. Total Available	Period of Performance
1	Grid Resilience Utility and Industry Grants	10*		Either the total of the applicant's last three years of resilience investments or \$100 million, whichever is lower**	\$918 million	60 months
2	Smart Grid Grants	25-50		\$30 Million	\$1,140 million	60 months
3	Grid Innovation Program	4-40	\$50 million	\$250 million Proposed increased award size of \$1 billion per award for interregional transmission projects only)	\$1,920 million	60-96 months

*Approximately 3 of the anticipated number of awards will be made to small utilities. Thirty percent (30%) of the total funding available will be set aside for small utilities, which are defined as entities that sell no more than 4,000,000 MWh of electricity per year.

**DOE may not award a grant to an eligible entity in an amount that is greater than "the total amount that the eligible entity has spent in the previous 3 years on efforts to reduce the likelihood and consequences of disruptive events".

GRIP PROGRAM CONCEPT PAPER REQUIREMENTS

Each Concept Paper must be limited to a single Topic Area. Do not consolidate multiple Topic Areas into a single Concept Paper.

The Concept Paper must conform to the following content and form requirements and must not exceed the stated page limits. If applicants exceed the maximum page lengths indicated below, DOE will review only the authorized number of pages and disregard any additional pages:

	Page Limit	Description
Cover Page	1 page maximum	The cover page should include the project title, the specific announcement Topic Area being addressed, both the technical and business points of contact, names of all team member organizations, the project location(s), and any statements regarding confidentiality.
Project and/or Technology Description	12 pages maximum	Applicants are required to describe succinctly: • How the project addresses the topic area's eligible uses and technical approaches. • How the project supports State, local, Tribal, community and regional resilience, in reducing the likelihood and consequences of disruptive events, decarbonization, or other energy strategies and plans. • The grid-benefitting outcomes to be delivered by the project. • The impact of the project to reduce innovative technology risk; achieve further deployment at scale; and lead to additional private sector investments. • The impact that DOE funding would have on the proposed project. • The readiness, viability, and expected timing of the project.
Community Benefits Plan	5 pages maximum	Applicants are required to describe succinctly the approach to be taken with the Community Benefits Plan, addressing the four core elements: • community and labor engagement leading to negotiated agreements; • investing in job quality and workforce continuity; • advancing diversity, equity, inclusion, and accessibility; and contributing to the Justice40 Initiative goal that 40% of the overall benefits of certain climate and clean energy investments flow to disadvantaged communities.
Addendum A	5 pages maximum	Applicants are required to describe succinctly the qualifications, experience, and capabilities of the proposed Project Team, including: • Whether the Project Manager and Project Team have the skill and expertise needed to successfully execute the project plan; • Whether the applicant has prior experience that demonstrates an ability to perform tasks of similar risk and complexity; • Whether the applicant has worked together with its teaming partners on prior projects or programs; and • Whether the applicant has adequate access to equipment and facilities necessary to accomplish the effort and/or clearly explain how it intends to obtain access to the necessary equipment and facilities. • Applicants may provide graphs, charts, or other data to supplement their Project and/or Technology Description.

Addendum B Topic Area 1 ONLY, if applicable*	N/A	Applicants who are small utilities applying to Topic Area 1 must submit the EIA Form 861 for the last reporting year showing the total retail electricity sales to ultimate customers to ensure status as a small utility.
*Small utilities ONLY: 30% of the total funding available will be set aside for small utilities, which are defined as entities that sell no more than 4,000,000 MWh of electricity per year		

DOE makes an independent assessment of each Concept Paper based on the criteria in the FOA. DOE will encourage a subset of applicants to submit Full Applications. Other applicants will be discouraged from submitting a Full Application.

An applicant who receives a “discouraged” notification may still submit a Full Application. DOE will review all eligible Full Applications. However, by discouraging the submission of a Full Application, DOE intends to convey its lack of programmatic interest in the proposed project in an effort to save the applicant the time and expense of preparing an application that is unlikely to be selected for award negotiations.

DOE may include general comments provided from reviewers on an applicant’s Concept Paper in the encourage/discourage notification sent via email at the close of that phase.