



Smart Grid Grants

Funded through the Bipartisan Infrastructure Law (BIL), the Smart Grid Grants (40107) are designed to 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. Smart grid technologies funded and deployed at scale through this program must demonstrate a pathway to wider market adoption.

The Smart Grid Grants Program will invest up to **\$3 billion (\$600 million/year for Fiscal Years 2022-2026)** in grid resilience technologies and solutions. The first funding cycle will include both FY22 and FY23, up to \$1.2 billion. Recipients must provide a cost-share of at least 50% of the grant. This program is open to domestic entities including:

- Institutions of higher education
- For-profit entities
- Non-profit entities
- State and local governmental entities
- Tribal nations

The Smart Grid Grants Program was previously funded by the Recovery Act of 2009. The Bipartisan Infrastructure Law expands on the existing program, including additional eligible investment areas.

Concept Papers are due **December 16, 2022**. DOE will provide a response to Concept Papers by February 2023. Full Applications are due **March 17, 2023**. Applicants are allowed to submit more than one Concept Paper, provided that each describes a unique project.

Smart Grid Priority Investment Areas:

- ▶ **Increasing transmission capacity and operational transfer capacity**
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**
Help quickly rebalance the electrical system with autonomous controls through data analytics, software, and sensors.
- ▶ **Enhance secure communication and data flow between distribution components:**
Investments in optical ground wire, dark fiber, operational fiber, and wireless broadband communications networks.
- ▶ **Aggregation and integration of distributed energy resources and other “grid-edge” devices 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**
Support two-way flow of both electric power and localized analytics to provide information between electricity system operators and consumers.
- ▶ **Anticipate and mitigate the impacts of extreme weather or natural disaster on grid resiliency**
Investments to increase the ability to redirect or shut of power to minimize blackouts, prevent wildfires, and avoid further damage.

