



National Association of
State Energy Officials

Electric System Resilience, Transmission, and Distribution Provisions in the Infrastructure Investment and Jobs Act

Updated January 10, 2022

Summary of Key Electric System Resilience, Transmission, and Distribution Provisions

The following summary is organized in the order the provisions appear in the bill. Each provision below includes Section numbers from the bill so that you are able to consult the bill directly for more details. NASEO will continue to update this summary as more guidance is released.

Sec. 40101 Preventing Outages and Enhancing the Resilience of the Electric Grid

- \$5 billion for FY22-FY26
- Up to 50% of the total funding (\$2.5 billion) going via formula determined by the Secretary (not via SEP) to states (not defined)
- States and tribes need to provide a 15 percent match and the eligible entity (see below) will need to provide a 100 percent match. The only exemption is if the eligible entity sells not more than 4 million MW/h of electricity in a year; for those entities the match is 1/3rd of the amount of the grant.
- Establishment of Program:
 - **180 days after the date of enactment of this Act, the Secretary will establish program under which the Secretary shall make grants to eligible entities, States, and Indian Tribes in accordance with this section.**
 - Eligible entities:
 - An electric grid operator
 - An electricity storage operator
 - An electricity generator
 - A transmission owner or operator
 - A distribution provider
 - A fuel supplier; and
 - Any other relevant entity as determined by the Secretary.
- A plan prepared by a State or Indian Tribe for purposes of an application described in subparagraph (A) shall—
 - describe the criteria and methods that will be used by the State or Indian Tribe to award grants to eligible entities;
 - be adopted after notice and a public hearing; and
 - describe the proposed funding distributions and recipients of the grants to be provided by the State or Indian Tribe
- The Secretary shall ensure that each grant provided to a State or Indian Tribe under the program is allocated, pursuant to the applicable plan of the State or Indian Tribe, to eligible entities for projects within the State or on the land of the Indian Tribe.
- The State or Indian Tribe may use not more than 5 percent for—
 - providing technical assistance under subsection (g)(1)(A); and

- administrative expenses associated with the program
- Eligible Activities:
 - Activities, technologies, equipment, and hardening measures to reduce the likelihood and consequences of disruptive events, including
 - weatherization technologies and equipment;
 - fire-resistant technologies and fire prevention systems; monitoring and control technologies;
 - the undergrounding of electrical equipment;
 - utility pole management;
 - the relocation of power lines or the reconductoring of power lines with low-sag, advanced conductors;
 - vegetation and fuel-load management;
 - the use or construction of distributed energy resources for enhancing system adaptive capacity during disruptive events, including—
 - (i) microgrids; and
 - (ii) battery-storage subcomponents;
 - adaptive protection technologies;
 - advanced modeling technologies;
 - hardening of power lines, facilities, substations, of other systems; and
 - the replacement of old overhead conductors and underground cables.
- Grants are determined by formula determined by Secretary based on total population, total area, areas with low ratio of electricity customers to power lines, and probability of events, among other factors. Priority to projects which will have the greatest community benefits (rural and urban).

Sec. 40103 Electric Grid Reliability and Resilience Research, Development, and Demonstration

- **Energy Infrastructure Federal Financial Assistance Program**
 - \$5 billion for FY22-FY26
 - Requires match
 - Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a program, to be known as the “Program Upgrading Our Electric Grid and Ensuring Reliability and Resiliency”, to provide, on a competitive basis, Federal financial assistance to eligible entities to carry out the following:
 - The purpose of the program is to coordinate and collaborate with electric sector owners and operators—
 - to demonstrate innovative approaches to transmission, storage, and distribution infrastructure to harden and enhance resilience and reliability; and
 - to demonstrate new approaches to enhance regional grid resilience, implemented through States by public and rural electric co-operative entities on a cost-shared basis.
 - Eligible entities:
 - a State;
 - a combination of 2 or more States;

- an Indian Tribe;
 - a unit of local government; and
 - a public utility commission.
 - Applications to outline how the federal assistance is used, expected beneficiaries, and how the proposal would improve regional energy infrastructure if 2 or more states apply together
- **Energy Improvement in Rural or Remote Areas**
 - Assistance for rural or remote areas with less than 10,000 inhabitants
 - \$1 billion for FY22-FY26
- **Energy Infrastructure Resilience Framework**
 - The Secretary, in collaboration with the Secretary of Homeland Security, the Federal Energy Regulatory Commission, the North American Electric Reliability Corporation, and interested energy infrastructure stakeholders, shall develop common analytical frameworks, tools, metrics, and data to assess the resilience, reliability, safety, and security of energy infrastructure in the United States, including by developing and storing an inventory of easily transported high-voltage recovery transformers and other required equipment.
 - The Secretary shall carry out an assessment of—
 - with respect to the inventory of high-voltage recovery transformers, new transformers, and other equipment proposed to be developed and stored
 - any efforts carried out by industry as of the date of the assessment.

Sec. 40105 Siting of Interstate Electric Transmission Facilities

- Affected States and Indian Tribes, shall issue a report, relating to electric transmission capacity constraints and congestion, which may designate as a national interest electric transmission corridor any geographic area that—
 - is experiencing electric energy transmission capacity constraints or congestion that adversely affects consumers; or
 - is expected to experience such energy transmission capacity constraints or congestion.
- FERC can issue permit in certain circumstances even if state commission had denied siting application

Sec. 40106 Transmission Facilitation Program

- \$10 million for each fiscal year
- Also creates \$2.5 billion revolving loan fund that allows DOE to serve as an “anchor tenant” for a new transmission line or an upgrade of an existing line

Sec. 40107 Deployment of Technologies to Enhance Grid Flexibility

- Amends Energy Independence and Security Act of 2007 to include Smart Grid investments
- Authorizes \$3 billion for the Smart Grid Investment Matching Grant Program

Sec. 40109 State Energy Program

- As part of the \$500 million SEP funding for FY22-26, requires State Energy Offices to mandatorily conduct activities to support transmission and distribution planning, including

- support for local governments and Indian Tribes;
- feasibility studies for transmission line routes and alternatives;
- preparation of necessary project design and permits; and
- outreach to affected stakeholders.

Sec. 40111 Study of Codes and Standards for Use of Energy Storage Systems Across Sectors

- Secretary to issue study no later than 18 months after enactment on barriers, foster collaboration and increase conformity across sectors; identify existing codes and standards; identify needed revisions or enhancements of codes and receive formal input from stakeholders on existing and new/revised codes

Sec. 40112 Demonstration of Electric Vehicle Battery Second-Life Applications for Grid Services

- Directs Secretary to establish a demonstration project for second-life applications of EV batteries as aggregated energy storage installations to provide services to the electric grid

Sec. 40123 Incentives for Advanced Cybersecurity Technology Investment

- Directs FERC to release a study in consultation with DOE, NERC, ESCC, and NARUC to identify incentive-based rate treatments for transmission and sale of electricity subject to FERC's jurisdiction to encourage investment by public utilities in advanced cybersecurity technology and participation of them in cybersecurity threat information sharing programs.
- Based on the study, FERC to establish rate-based incentives after one year.
- Special consideration can be given to defense critical electric infrastructure and other facilities subject to the jurisdiction of the Commission that are critical to public safety, national defense, or homeland security.

Also of Note:

Subtitle B—Energy Information Administration

Sec. 40411. Definitions.

Sec. 40412. Data collection in the electricity sector.

Sec. 40413. Expansion of energy consumption surveys.

Sec. 40414. Data collection on electric vehicle integration with the electricity grids.

Sec. 40415. Plan for the modeling and forecasting of demand for minerals used in the energy sector.

Sec. 40416. Expansion of international energy data.

Sec. 40417. Plan for the National Energy Modeling System.

Sec. 40418. Report on costs of carbon abatement in the electricity sector.

Sec. 40419. Harmonization of efforts and data.