

(k) National Laboratories

In supporting technology transfer activities at the National Laboratories, the Secretary shall encourage partnerships with entities that are located in the same region or State as the National Laboratory.

(l) Security

In carrying out the activities under this section, the Secretary shall ensure proper security controls are in place to protect sensitive information, as appropriate.

(m) No funds for construction

No funds provided to the Department of Energy under this section shall be used for construction.

(n) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out this section \$50,000,000 for each of fiscal years 2023 through 2027.

(Pub. L. 110-140, title IX, §936, as added Pub. L. 117-167, div. B, title VI, §10622, Aug. 9, 2022, 136 Stat. 1660.)

SUBCHAPTER IX—SMART GRID

§ 17381. Statement of policy on modernization of electricity grid

It is the policy of the United States to support the modernization of the Nation's electricity transmission and distribution system to maintain a reliable and secure electricity infrastructure that can meet future demand growth and to achieve each of the following, which together characterize a Smart Grid:

(1) Increased use of digital information and controls technology to improve reliability, security, and efficiency of the electric grid.

(2) Dynamic optimization of grid operations and resources, with full cyber-security.

(3) Deployment and integration of distributed resources and generation, including renewable resources.

(4) Development and incorporation of demand response, demand-side resources, and energy-efficiency resources.

(5) Deployment of “smart” technologies (real-time, automated, interactive technologies that optimize the physical operation of appliances and consumer devices) for metering, communications concerning grid operations and status, and distribution automation.

(6) Integration of “smart” appliances and consumer devices.

(7) Deployment and integration of advanced electricity storage and peak-shaving technologies, including plug-in electric and hybrid electric vehicles, and thermal-storage air conditioning.

(8) Provision to consumers of timely information and control options.

(9) Development of standards for communication and interoperability of appliances and equipment connected to the electric grid, including the infrastructure serving the grid.

(10) Identification and lowering of unreasonable or unnecessary barriers to adoption of smart grid technologies, practices, and services.

(Pub. L. 110-140, title XIII, §1301, Dec. 19, 2007, 121 Stat. 1783.)

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE

Section effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110-140, set out as a note under section 1824 of Title 2, The Congress.

§ 17382. Smart grid system report

The Secretary, acting through the Assistant Secretary of the Office of Electricity Delivery and Energy Reliability (referred to in this section as the “OEDER”) and through the Smart Grid Task Force established in section 17383 of this title, shall, after consulting with any interested individual or entity as appropriate, no later than 1 year after December 19, 2007, and every 2 years thereafter, report to Congress concerning the status of smart grid deployments nationwide and any regulatory or government barriers to continued deployment. The report shall provide the current status and prospects of smart grid development, including information on technology penetration, communications network capabilities, costs, and obstacles. It may include recommendations for State and Federal policies or actions helpful to facilitate the transition to a smart grid. To the extent appropriate, it should take a regional perspective. In preparing this report, the Secretary shall solicit advice and contributions from the Smart Grid Advisory Committee created in section 17383 of this title; from other involved Federal agencies including but not limited to the Federal Energy Regulatory Commission (“Commission”), the National Institute of Standards and Technology (“Institute”), and the Department of Homeland Security; and from other stakeholder groups not already represented on the Smart Grid Advisory Committee.

(Pub. L. 110-140, title XIII, §1302, Dec. 19, 2007, 121 Stat. 1784.)

Editorial Notes

CODIFICATION

December 19, 2007, referred to in text, was in the original “enactment” and was translated as meaning the date of enactment of Pub. L. 110-140 to reflect the probable intent of Congress.

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE

Section effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110-140, set out as a note under section 1824 of Title 2, The Congress.

§ 17383. Smart Grid Advisory Committee and Smart Grid Task Force**(a) Smart Grid Advisory Committee****(1) Establishment**

The Secretary shall establish, within 90 days of December 19, 2007, a Smart Grid Advisory Committee (either as an independent entity or as a designated sub-part of a larger advisory committee on electricity matters). The Smart Grid Advisory Committee shall include eight

or more members appointed by the Secretary who have sufficient experience and expertise to represent the full range of smart grid technologies and services, to represent both private and non-Federal public sector stakeholders. One member shall be appointed by the Secretary to Chair the Smart Grid Advisory Committee.

(2) Mission

The mission of the Smart Grid Advisory Committee shall be to advise the Secretary, the Assistant Secretary, and other relevant Federal officials concerning the development of smart grid technologies, the progress of a national transition to the use of smart-grid technologies and services, the evolution of widely-accepted technical and practical standards and protocols to allow interoperability and inter-communication among smart-grid capable devices, and the optimum means of using Federal incentive authority to encourage such progress.

(3) Applicability of chapter 10 of title 5

Chapter 10 of title 5 shall apply to the Smart Grid Advisory Committee.

(b) Smart Grid Task Force

(1) Establishment

The Assistant Secretary of the Office of Electricity Delivery and Energy Reliability shall establish, within 90 days of December 19, 2007, a Smart Grid Task Force composed of designated employees from the various divisions of that office who have responsibilities related to the transition to smart-grid technologies and practices. The Assistant Secretary or his designee shall be identified as the Director of the Smart Grid Task Force. The Chairman of the Federal Energy Regulatory Commission and the Director of the National Institute of Standards and Technology shall each designate at least one employee to participate on the Smart Grid Task Force. Other members may come from other agencies at the invitation of the Assistant Secretary or the nomination of the head of such other agency. The Smart Grid Task Force shall, without disrupting the work of the Divisions or Offices from which its members are drawn, provide an identifiable Federal entity to embody the Federal role in the national transition toward development and use of smart grid technologies.

(2) Mission

The mission of the Smart Grid Task Force shall be to insure awareness, coordination and integration of the diverse activities of the Office and elsewhere in the Federal Government related to smart-grid technologies and practices, including but not limited to: smart grid research and development; development of widely accepted smart-grid standards and protocols; the relationship of smart-grid technologies and practices to electric utility regulation; the relationship of smart-grid technologies and practices to infrastructure development, system reliability and security; and the relationship of smart-grid technologies and practices to other facets of electricity supply, demand, transmission, distribution,

and policy. The Smart Grid Task Force shall collaborate with the Smart Grid Advisory Committee and other Federal agencies and offices. The Smart Grid Task Force shall meet at the call of its Director as necessary to accomplish its mission.

(c) Authorization

There are authorized to be appropriated for the purposes of this section such sums as are necessary to the Secretary to support the operations of the Smart Grid Advisory Committee and Smart Grid Task Force for each of fiscal years 2008 through 2020.

(Pub. L. 110-140, title XIII, §1303, Dec. 19, 2007, 121 Stat. 1784; Pub. L. 117-286, §4(a)(281), Dec. 27, 2022, 136 Stat. 4336.)

Editorial Notes

AMENDMENTS

2022—Subsec. (a)(3). Pub. L. 117-286 substituted “chapter 10 of title 5” for “Federal Advisory Committee Act” in heading and “Chapter 10 of title 5” for “The Federal Advisory Committee Act (5 U.S.C. App.)” in text.

Statutory Notes and Related Subsidiaries

EFFECTIVE DATE

Section effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110-140, set out as a note under section 1824 of Title 2, The Congress.

§ 17384. Smart grid technology research, development, and demonstration

(a) Power grid digital information technology

The Secretary, in consultation with the Federal Energy Regulatory Commission and other appropriate agencies, electric utilities, the States, and other stakeholders, shall carry out a research, development, and demonstration program—

(1) to develop advanced techniques for measuring peak load reductions and energy-efficiency savings from smart metering, demand response, distributed generation, and electricity storage systems;

(2) to investigate means for demand response, distributed generation, and storage to provide ancillary services;

(3) to conduct research to advance the use of wide-area measurement and control networks, including data mining, visualization, advanced computing, and secure and dependable communications in a highly-distributed environment;

(4) to test new reliability technologies, including those concerning communications network capabilities, in a grid control room environment against a representative set of local outage and wide area blackout scenarios;

(5) to identify communications network capacity needed to implement advanced technologies.¹

(6) to investigate the feasibility of a transition to time-of-use and real-time electricity pricing;

(7) to develop algorithms for use in electric transmission system software applications;

(8) to promote the use of underutilized electricity generation capacity in any substi-

¹ So in original. The period probably should be a semicolon.