



GRID MODERNIZATION PROVISIONS IN THE BIPARTISAN INFRASTRUCTURE PACKAGE

Over the last year, the GridWise Alliance worked with our members and industry stakeholders to develop [recommendations for at least \\$50 billion](#) of federal funding in any infrastructure package to leverage private investments in grid modernization to enhance the security, resilience, reliability, and affordability of the electric grid and support the decarbonization of the economy. The bipartisan *Infrastructure Investment and Jobs Act* passed by the Senate today is an historic commitment to accelerate the transformation of the nation's transmission and distribution grid to serve as the platform for transportation and building electrification, growing renewable energy generation, greater resilience in the face of extreme weather and increasing cyber threats, and the need to ensure equity and environmental justice throughout the transition to a clean energy economy.

The GridWise Alliance has identified at least [\\$70 billion](#) of funding in the *Infrastructure Investment and Jobs Act* that falls within the broad categories of funding needs that we identified during our stakeholder process:

- Resilience
- Deployment of technologies to enhance grid flexibility
- Deployment of technologies to enhance grid integration of buildings and vehicles
- Cybersecurity technology and workforce
- Utility communications
- Workforce development

The infrastructure package includes billions of dollars of funding for other programs that GridWise Alliance strongly supports, including for transportation electrification, clean energy supply chain technologies, transmission planning, energy efficiency, and non-DOE cyber programs. The following list of provisions in the bipartisan Senate infrastructure package are only those that directly relate to the GridWise Alliance recommendations in our policy framework for [Grid Investments for Economic Recovery](#). GridWise also supports increasing funding in future infrastructure bills for tax credits for advanced grid technology manufacturing, DOE cybersecurity and workforce development programs, federal and state programs for beneficial electrification and energy conservation incorporating advanced energy management systems for grid integration, and grid modernization programs included in the Energy Policy Act of 2020.

ELECTRIC GRID FUNDING IN THE SENATE BIPARTISAN INFRASTRUCTURE PACKAGE

SEC. 40101. PREVENTING OUTAGES AND ENHANCING THE RESILIENCE OF THE ELECTRIC GRID.

Section 40101 would create a new funding program for utility resilience investments. The **\$5 billion** over five years would be evenly split between direct grants to utilities and other entities and a new state and tribal program that would re-grant money for similar purposes.

SEC. 40103. ELECTRIC GRID RELIABILITY AND RESILIENCE RESEARCH, DEVELOPMENT, AND DEMONSTRATION

Section 40103 creates a new program “Upgrading Our Electric Grid and Ensuring Reliability and Resiliency,” to provide, on a competitive basis, funding to states to coordinate and collaborate with electric sector owners and operators to demonstrate innovative approaches to harden and enhance resilience and reliability of grid infrastructure. The program, funded at **\$5 billion** over 5 years, would focus on demonstrating new approaches to enhancing regional grid resilience, implemented through States by public and rural electric cooperatives. Section 1003 also includes **\$1 billion** in funding for grid resilience investments in rural and remote areas, as well as an assessment of the risks and mitigation strategies for high-voltage transformers.

SEC. 40106. TRANSMISSION FACILITATION FUND

Section 40106 establishes a **\$2.5 billion** loan program, the Transmission Facilitation Fund, to construct a new or replace an existing eligible electric power transmission line; to increase the transmission capacity of an existing eligible electric power transmission line; or to connect an isolated microgrid to an existing transmission, transportation, or telecommunications infrastructure corridor located in Alaska, Hawaii, or a U.S. territory. Priority funding would go to projects that:

- use technology that enhances the capacity, efficiency, resiliency, or reliability of an electric power transmission system, including reconductoring of an existing electric power transmission line with advanced conductors; and (ii) hardware or software that enables dynamic line ratings, advanced power flow control, or grid topology optimization;
- will improve the resiliency and reliability of an electric power transmission system;
- facilitate interregional transfer capacity that supports strong and equitable economic growth; and
- contribute to national or subnational goals to lower electricity sector greenhouse gas emissions.

SEC. 40107. DEPLOYMENT OF TECHNOLOGIES TO ENHANCE GRID FLEXIBILITY

This section provides **\$3 billion** in funding to the Smart Grid Investment Grant Program for the deployment of technologies, including data analytics and software, to enhance grid flexibility.

SEC. 1011. POWER MARKETING ADMINISTRATION TRANSMISSION BORROWING AUTHORITY.

Section 1011 increases the borrowing authority of the Bonneville Power Authority by **\$10 billion**.

CYBERSECURITY

SEC. 40124. RURAL AND MUNICIPAL UTILITY ADVANCED CYBERSECURITY GRANT AND TECHNOLOGICAL ASSISTANCE PROGRAM.

This section creates a new DOE program with **\$250 million** in funding to provide grants and technical assistance for rural co-ops and municipal utilities to detect, respond to, and recover from cybersecurity threats.

SEC. 40125. ENHANCED GRID SECURITY.

Section 40125 creates programs to develop advanced cybersecurity applications and technologies for the energy sector, to enhance and test DOE's emergency response capabilities, and a program to increase protection of grid, natural gas, and oil operations in the face of threats. Total funding for these programs is **\$350 million** over five years.

SEC. 60102. BROADBAND GRANTS FOR STATES, DISTRICT OF COLUMBIA, PUERTO RICO, AND TERRITORIES

Title I of the Broadband provisions in the infrastructure package authorizes **\$42.5 billion** in formula funding to states for broadband deployment. Section 60102 explicitly notes that rural cooperatives, public or private utilities, and public utility districts must be eligible to apply for these state grant programs.

SEC. 60401. ENABLING MIDDLE MILE BROADBAND INFRASTRUCTURE.

This section establishes a grant program funded at **\$1 billion** over 5 years to promote the expansion of middle-mile infrastructure to connect underserved areas. Utilities could apply for funding for this program to supplement capital investments in order to facilitate increased broadband connectivity to underserved areas within utility service areas and nearby communities.