Congressional Research Service
Informing the legislative debate since 1914

INSIGHT

Electricity Transmission Provisions in the Inflation Reduction Act of 2022

Updated August 23, 2022

On August 16, 2022, President Biden signed into law P.L. 117-169, commonly known as the Inflation Reduction Act of 2022 (IRA). The IRA contains several provisions aimed at incentivizing increased development of electricity transmission infrastructure in the United States. Many stakeholders view an enhanced U.S. transmission system as key to enabling increased use of wind and solar energy for electricity generation and improving resilience to extreme weather events such as Winter Storm Uri. This analysis summarizes the three transmission provisions in Part 5 of Subtitle A of Title V of the law. In total, this part would appropriate almost $2.9 billion for transmission provisions. Other provisions in the IRA, such as those related to loan programs administered by the U.S. Department of Agriculture, could potentially incentivize transmission development, but this analysis does not include them.

Section 50151 (Transmission Facility Financing) would appropriate $2 billion to remain available until September 30, 2030, for a direct loan program for certain transmission project development. To be eligible for a direct loan, a transmission project would need to be located in a National Interest Electric Transmission Corridor (NIETC). The U.S. Department of Energy (DOE) may designate an area as an NIETC pursuant to 16 U.S.C. §824p if it meets certain criteria, such as promoting energy security or enabling the use of intermittent energy sources such as wind and solar. No NIETCs currently exist. Absent an NIETC designation, the appropriations this section would provide may not be accessible to industry participants. The Infrastructure Investment and Jobs Act (IIJA; P.L. 117-58) amended the NIETC designation process, but it remains unclear to what extent DOE will use its authority to designate NIETCs.

Section 50152 (Grants to Facilitate the Siting of Interstate Electricity Transmission Lines) would appropriate $760 million to remain available through September 30, 2029, for making grants aimed at facilitating the siting of certain onshore and offshore transmission lines. In general, state and local governments have authority for siting electricity transmission infrastructure in the United States. This section would allow relevant siting authorities to receive grants to be used for purposes including transmission project studies, examination of alternative siting corridors, hosting negotiations with project backers and opponents, participating in federal and state regulatory proceedings, and promoting economic development in affected communities. Grants under this section would be contingent on the siting authority agreeing to make a final decision (approval or denial) on the transmission project within two years. The bill does not specify consequences should the siting authority fail to make a final decision.

Congressional Research Service
https://crsreports.congress.gov
IN11981

Section 50153 (Interregional and Offshore Wind Electricity Transmission Planning, Modeling, and Analysis) would appropriate $100 million to remain available until September 30, 2031, for expenses for convening stakeholders and conducting analysis related to interregional transmission development and development of transmission for offshore wind energy. The continental U.S. transmission system is comprised of three interconnections (i.e., grids) with limited connection among them: the Eastern Interconnection, the Western Interconnection, and the Electric Reliability Council of Texas. The Eastern Interconnection is the largest and is itself comprised of different regions, including five separate power markets overseen by independent system operators or regional transmission organizations. Currently, transmission development involving two or more regions is relatively rare. Some analysis indicates that a greater amount of interregional electricity connection would promote greater use of renewable energy and potentially lower costs for consumers. The Federal Energy Regulatory Commission (FERC), which regulates rates for interstate electricity transmission, began a rulemaking in July 2021 aimed at potentially modifying multiple aspects of transmission development. An April 2022 FERC Notice of Proposed Rulemaking focuses primarily on regional transmission planning and cost allocation. FERC continues to examine interregional transmission planning, for example, as part of the Joint Federal-State Task Force on Electric Transmission.

The IRA is the third significant energy-related law of the past two years (following the Energy Act of 2020, enacted as part of P.L. 116-260, and IIJA). Such successive lawmaking is relatively rare for the electricity sector. Arguably, the last time a similar set of events took place was when Congress enacted the Energy Policy Act of 2005 (P.L. 109-58) followed by the Energy Independence and Security Act of 2007 (P.L. 110-140) and the American Recovery and Reinvestment Act of 2009 (P.L. 111-5). The electricity sector changed significantly in the years following enactment of those laws, with a marked increase in the use of natural gas, wind, and solar for electricity generation accompanied by increased efficiency, which kept electricity demand growth low. The change was in part driven by federal energy laws (especially tax credits), though market forces, state policies, and other factors influenced the electricity sector as well. As in the mid-2000s, recently enacted energy laws may drive significant changes in the electricity sector, though market forces and other factors are likely to be important too.

Evaluating the potential impact of the transmission provisions in the IRA is complicated by three factors. First, the other recently enacted energy laws are still being implemented, and their eventual impact on the electricity sector remains unknown. Second, FERC's rulemakings on transmission are not finalized and may affect future transmission development. Lastly, electricity sector participants and regulators are responding to numerous issues—including reliability challenges, nominal cost increases, and weather-related risks—all of which may influence transmission infrastructure development in the years to come. The IRA's transmission provisions are an additional change to which the electricity sector will respond moving forward.

Author Information

Ashley J. Lawson
Analyst in Energy Policy

Disclaimer