Big WIRES Act features Grid Enhancing Technologies for Resilience and Lower Energy Costs

Seven Bills from 118th Congress Would Leverage GETs to Increase Transmission Capacity

September 19, 2023, WASHINGTON D.C. – With the introduction of the Big WIRES Act, Senator John Hickenlooper and Representative Scott Peters join the many members of Congress who have included Grid-Enhancing Technologies (GETs) in their strategies to accelerate transmission expansion. The Big WIRES Act would set a minimum requirement for interregional transfer capacity and include GETs among the technical options for meeting the requirement. Research by Grid Strategies on “Quantifying a Minimum Interregional Transfer Requirement” found significant net benefits from this policy, which is already in place as a goal for 2030 in the European Union.

Julia Selker, Executive Director of the WATT Coalition, said: “Grid Enhancing Technologies increase transmission capacity quickly and at very low cost, and also give grid operators more visibility and flexibility to respond to outages and other challenges. These values make GETs indispensable to a cleaner, more resilient, and lower-cost energy system. I am pleased to see GETs included in the Big WIRES Act’s approach to achieving these goals.”

GETs include Dynamic Line Ratings, which measure ambient conditions to determine true line capacity; Advanced Power Flow Control, which actively shifts power flow between available circuits; and Topology Optimization, software that finds options for grid operators to open or close circuits in a way that reduces congestion. The Brattle Group found that GETs can double capacity for new resources to interconnect on the existing grid, and can be operational within weeks or months.

Legislators have recognized that GETs could be a key tool for addressing pressing issues for the grid: growing transmission congestion costs, intensifying extreme weather events that cause both generation and transmission outages, interconnection queue delays, and electricity demand growth.

Listed below are short descriptions of GETs policy in seven bills from the 118th Congress:

**Senator John Hickenlooper & Representative Scott Peters’ BIG WIRES Act** directs FERC to require a minimum interregional transfer capacity. Regions can use GETs to meet the requirement.

**Senator Tom Carper’s Promoting Efficient and Engaged Reviews Act of 2023 (PEER Act)** directs FERC to develop a final rule that will establish cost-allocation and transmission planning processes that include
grid enhancing technologies, including dynamic line ratings, topology optimization, and power flow control.

**Senator Martin Heinrich’s Grid Resiliency Tax Credit Act** aims to provide a 30% investment tax credit (ITC) for investments in large-scale transmission projects and grid enhancing technologies.

**Senator Joe Manchin’s Building American Energy Security Act of 2023**, in part, intends to designate energy projects of “strategic national importance” to receive priority federal review. This includes at least three electric transmission projects or projects using grid-enhancing technology.

Two bills, **Representative Kathy Castor’s Efficient Grid Interconnection Act** and **Representative Sean Casten and Representative Mike Levin’s Clean Electricity and Transmission Acceleration Act of 2023** requires GETs to be included in interconnection studies - both bills go further than the Federal Energy Regulatory Commission did in Order 2023 in terms of comprehensive and accountable integration of GETs.

**Senator Edward Markey, Representative Ocasio-Cortez (NY), and Representative Casar’s (TX) Connecting hard-to-reach Areas with Renewably Generated Energy (CHARGE) Act** includes a series of reforms through FERC regulations or amendments to the Federal Power Act to allow more for proactive and equitable development of the U.S. grid. This bill includes:

- A requirement that transmission planning and cost-allocation processes include the use of GETs
- A requirement to establish an Office of Transmission within the Commission responsible for reviewing opportunities for the deployment of GETs

**About the WATT Coalition:**
The Working for Advanced Transmission Technologies (WATT) Coalition advocates for policy that supports wide deployment of Grid-Enhancing Technologies (GETs), to accelerate the clean energy transition and lower energy costs. Dynamic Line Ratings determine the true, real-time capacity of power lines. Advanced Power Flow Control allows operators to reroute power to lines with available capacity. Topology Optimization identifies the best grid reconfigurations to reroute flow around bottlenecks. In operations, these technologies reduce congestion costs and improve economic dispatch, situational awareness and reliability. In planning, they reduce the time, cost and complexity of integrating new generation and load. WATT members include AES Corporation, Ampacimon, EDF Renewables North America, Heimdall Power, Invenergy, LineVision, Lindsey Systems, NewGrid, Pine Gate Renewables, Prisma Photonics, Smart Wires, Sol Systems, VELCO. Learn about unlocking more value from the grid at watt-transmission.org.