Next Generation Grid Resources and Infrastructure Development (GRID) Act *U.S. Senator Angus King (I-Maine)*

America's electricity grid has remained relatively unchanged over the past 100 years – but today, new technologies, environmental pressures, and the need for more resilient infrastructure are beginning to transform the way electricity is generated and delivered. Distributed energy resources (DER), which can include generation, storage, efficiency, and demand response, among others – are being deployed at the edge of the grid, helping to create a more secure, resilient, and cost-effective electricity system.

The Next Generation GRID Act would help move America's energy infrastructure into the future, by removing barriers to the deployment of DER and leveraging federal resources to ensure new investments in the grid lay the groundwork for a more modern energy system.

Removing Barriers

Removing barriers to DER starts at protecting the rights of consumers—from homeowners to businesses large and small—to manage their energy use and to be protected from discriminatory rates and interconnection procedures. The Next Generation GRID Act would establish a right of interconnection for DER under the Public Utilities Regulatory Policy Act of 1978, preventing undue delays, punitive rates or charges, and fair credit for exported energy.

A New Approach

Recent events have shown the vulnerability of the electric grid to physical disruption. While we cannot build an entirely secure grid, new approaches, including through DER, have shown we can build a more distributed and resilient grid. The Next Generation GRID Act would target federal dollars for a new infrastructure effort, asking states and electric utilities to conduct assessments of their grid systems and infrastructure and develop plans for incorporating DER, to assess areas of the system where different types of DER can provide the most value, or where their integration may pose challenges for the grid.

The bill would also ask state and federal regulators to proactively consider new alternatives to costly infrastructure upgrades, like new substations and transmission lines, in the planning of the electric grid. While the cost of producing electricity has declined dramatically over the last few years, the cost of delivering that power has steadily increased, keeping consumer bills high. Known as non-wires alternatives, these new solutions are often a combination of DER such as energy storage, solar and demand response, which can more cost effectively meet grid needs while limiting the construction of new physical infrastructure.

New models

With the grid changing rapidly it is also time to consider new models for utility regulation. While utilities are already accustomed to implementing policy goals, economic incentives under the current regulatory model have relied too heavily on the need for utilities to expend capital to make money. With more demands increasingly being placed on utilities, from environmental goals to energy efficiency and to incorporating a range of customer-driven technologies, the Next Generation GRID Act would encourage state regulators to consider the use of performance-based incentives to better align economic incentives for utilities with policy goals.