



N A R U C
National Association of Regulatory Utility Commissioners

For Immediate Release

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NARUC Releases Report Analyzing the Value of Resilience

WASHINGTON (April 24, 2019) —The National Association of Regulatory Utility Commissioners, along with Converge Strategies LLC, has released new research that reviews methodologies to quantify the value of energy resilience, particularly as it relates to investments in distributed energy resources. *The Value of Resilience for Distributed Energy Resources: An Overview of Current Analytical Practices* examines both regulatory decision-making and non-regulatory cost-benefit analyses to determine if, and how, a value of resilience was calculated and applied.

Events such as extreme weather, natural disasters and cyberattacks have heightened awareness of the vulnerability of the nation's electric system. Planning for long-duration power interruptions caused by high-impact, low-probability events requires new approaches to power system resilience above and beyond previous hardening efforts. DERs, such as microgrids, solar photovoltaics and batteries, offer new avenues for achieving sustained resilience.

"The declining costs and new capabilities of DERs have greatly contributed to their growth. State policymakers are increasingly interested in understanding how they could ensure that the resilience benefits of DERs are included as part of clean energy programs and grid modernization efforts," said NARUC Center for Partnerships & Innovation Director Danielle Sass Byrnett. "A key sticking point has been how to value resilience."

"Distributed energy resources can contribute to a more resilient and secure electric grid," said Wilson Rickerson, Principal at Converge Strategies, LLC, and the primary author of the report. "To achieve this vision, resilience must be embedded in assets and systems by design. This report, for the first time, examines the strengths and weaknesses of different approaches to justify and value these investments, and provides a foundation for future energy infrastructure and resource planning efforts."

Four specific criteria were used to evaluate the methodologies, which include the method's ease of use, scope of outputs, geographic scalability and power interruption duration analysis capability. Some of the valuation methodologies examined in the report may be useful in regulatory decision-making; however, none of the methods reviewed met all four criteria for regulator usefulness and usability and no single method is capable of capturing all regulatory concerns regarding the resilience value of DERs.

Recent cases were examined where requests to recover the costs of microgrid investments from ratepayers were considered by state public utility commissions—two in Maryland and one in Illinois. *The Value of Resilience* also presents several trends in regulatory approaches to resilience, centering on the lack of a standardized approach to determining value. Also, the value of resilience has been used to analyze cost-benefit tradeoffs, but has not been used to justify investments in project construction.

The report, available on NARUC's website at <http://bit.ly/ValueofResilience>, was supported by the U.S. Department of Energy Solar Energy Technologies Office, administered through the National Renewable Energy Laboratory as part of the Solar Energy Innovation Network and was prepared by Converge Strategies, LLC, a consulting firm working at the intersection of resilience, advanced energy and national security. The Solar Energy Innovation Network assembles diverse teams of stakeholders to research solutions to real-world challenges associated with solar energy adoption.

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About NARUC

NARUC is a non-profit organization founded in 1889 whose members include the governmental agencies that are engaged in the regulation of utilities and carriers in the fifty states, the District of Columbia, Puerto Rico and the Virgin Islands. NARUC's member agencies regulate telecommunications, energy, and water utilities. NARUC represents the interests of state public utility commissions before the three branches of the federal government.