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FORTIFYING THE GRID IN THE SOUTHEASTERN U.S. THROUGH MICROGRIDS: NAVIGATING AN UNCERTAIN REGULATORY ENVIRONMENT
Between 2002 and 2021, the U.S. experienced 229 weather events that each caused more than $1 billion in damage, compared with just 94 such events from 1980 to 2001.
Of the 1,542 weather-related power outages that occurred in the U.S. between 2000-2021, 474 occurred in the Southeast, more than in any other region of the U.S.
Over 70% of grid infrastructure in the U.S. is more than 25 years old, making it more vulnerable to weather-related outages.
Microgrids enhance grid resiliency in inclement weather and can aid in preventing cascading outages, guarding the grid against physical and cyber security attacks, and integrating more sustainable energy technologies.
Microgrids are a group of customers within defined electrical boundaries with the ability to disconnect and reconnect to the grid.
There are several issues impeding more widespread microgrid deployment, largely due to investment costs and regulatory uncertainty.
While many Southeastern states could benefit from more widespread implementation of microgrids, few to none have clear regulatory guidelines for their interconnection and operating procedures, creating a risk for investors.
Microgrids are difficult for states to regulate due to their ability to integrate multiple energy technologies and their complex ownership structures.
State legislatures should pass legislation that formalizes the legal rights and definition of microgrids, directs utilities to create tariff arrangements to be approved by PUCs and PSCs, and requires PUCs and PSCs to create interconnection and technical requirements for microgrids.
States should consider mandating performance-based ratemaking (PBR) rather than cost of service (COS) ratemaking.
States should consider creating legislation that authorizes community choice aggregation.
State legislatures can look to microgrid laws in California, Hawaii, Connecticut, Massachusetts, Maine, and Puerto Rico as examples.
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