



Electric Utility Investment in Distributed Energy Resources

New Hampshire

Policy Description

The State of New Hampshire promotes the investment and deployment of distributed energy resources (DERs) by New Hampshire Revised Statutes Annotated (RSA) 374-G.¹ DERs refer to the production of electricity and/or thermal energy through smaller-scale generation facilities located at, or close to, the point of use, rather than through large centralized power plants. There are a variety of DERs, including combined heat and power (CHP), residential rooftop solar photovoltaics (PV), and battery storage.

The statute encourages public electric utilities to make investments in DERs (on their own, or in partnership with customers) in a deregulated environment in which utilities are generally not permitted to own generation assets. RSA 374-G provides a unique vehicle for expanding CHP projects. The policy encourages utility–customer partnerships that achieve its goals of clean and cost-effective systems that “benefit the transmission and distribution system under state regulatory oversight.”

Eligibility extends not only to renewable fuel sources and storage technologies but also to fossil-fueled power generation through CHP systems that achieve a minimum combined efficiency of 60% of usable thermal and electric output, provided certain emission limits are also met. This policy permits utilities to own or invest in generation sources, with a limit on such deployments at 6% of the utility’s peak load in megawatts. Utilities are eligible for rate recovery for their portion of the investment upon filing with the New Hampshire Public Utilities Commission (PUC), provided the investment meets the public interest as defined in RSA 374-G. A utility can use rate recovery to reclaim a portion of its investment in DERs by adjusting the base distribution rates charged to customers. The amount is reviewed by the New Hampshire PUC and is approved or declined within 90 days. If the utility seeks to reclaim \$1,000,000 or more, then the approval period is extended to six months. As deemed necessary to encourage investment, the PUC may also award the utility with an incentive to return on equity.

Policy Development and Outcomes

The General Court enacted RSA Chapter 374-G in 2008, more than ten years after passing RSA Chapter 374-F (“Restructuring Act”), which served to unbundle and separate electric generation from electric distribution and establish a competitive electric supply market. The purpose of RSA Chapter 374-G was to address and encourage public utility investment in DERs.

Although the statute’s use has been limited, a few successful projects led the New Hampshire legislature to improve and expand the use of the statute, most recently in 2013. With the inclusion and focus on storage and microgrid expansion in the state, the legislature has provided a vehicle for greater investment in these and other technologies, such as CHP, in support of the state’s policy goals.

Following each process before the PUC, the statute has been amended to improve the processing of filings with the PUC and address administrative complexity and expenses. The sponsors of the 2013 changes intended to facilitate utilities’ and private companies’ collaboration to provide benefits to all ratepayers for clean and cost-effective investments in New Hampshire’s grid, as well as to pursue innovative and emerging technologies.

¹ Electric Utility Investment in distributed Energy Resources,” accessed 8/10/20, www.gencourt.state.nh.us/rsa/html/xxxiv/374-G/374-G-mrg.htm

The first project that employed RSA 374-G, undertaken in 2009, involved a joint investment between Unitil and Revolution Energy, a small private company in New Hampshire. The project was a two-technology hybrid system that included a 65 kW Capstone microturbine fueled by natural gas and a 100 kW solar PV array. Unitil supported the project by providing \$200,000 in funding and recovered this expense as a part of rate recovery under the statute. These technologies are located at separate buildings serving Exeter SAU 16: Regional Cooperative School District. The 100 kW solar PV is located at Exeter High School and meets a portion of the high school's electrical load. The 65 kW microturbine is located at the district's Seacoast School of Technology. The system meets a portion of the administrative office's electrical and thermal requirements during the winter months and serves as a peaking unit during the summer months.²



The Exeter School District is supplied by a 65 kW microturbine and 100 kW ground-mounted solar PV.

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The statute promotes collaboration between utilities and their customers. The process required for these projects ensures that economic and environmental benefits outweigh the costs for the participants, as well as all ratepayers. The utility's role as a partner reduces concerns some utilities may have with CHP projects. Projects completed with public entities can leverage a credit-worthy customer (such as a school) with investment opportunity from the private sector—as well as utility ownership—helping the government finance large energy projects that are capital-intensive and avoid complicated bonding processes. Other public institutions and private utility customers with high energy costs, concerns for critical infrastructure, and emission reduction goals may be good candidates for similar projects. The New England CHP Technical Assistance Partnership (New England CHP TAP) is working with two utilities in New Hampshire to help bring expertise and objective advice for customers who may be candidates for CHP, with a focus on the opportunities presented with the RSA 374-G process.

Lessons To Share

- New Hampshire has developed an innovative mechanism to encourage investment partnerships between utilities, private companies, and customers for CHP deployment.
- The New Hampshire approach covers a wide range of power output ranges for systems, downplaying prescriptive requirements to focus on more qualitative goals, such as local economic development and environmental benefits.
- This model could offer expanded opportunities for CHP deployment, especially in deregulated states and competitive markets.
- Streamlining and simplifying the administrative approval process can ensure participation does not become burdensome or resource-intensive, especially for smaller-scale projects.
- Working directly with utilities collaboratively can provide end users with access to capital for CHP projects.

For More Information

U.S. DOE NEW ENGLAND CHP TAP

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² Petition For Approval Of Investment in and Rate Recovery Of Distributed energy Resources," accessed 8/10/20, <https://www.puc.nh.gov/Regulatory/Orders/2010orders/25111e.pdf>