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# NRG Energy, Green Mountain Power roll out microgrid plan for Vermont

By [Michael Copley](#)

[Green Mountain Power Corp.](#) and [NRG Energy Inc.](#) on Sept. 2 rolled out a series of utility programs and infrastructure projects in Vermont that the companies described as the foundations for a modernized electric grid.

Using NRG Energy's technical capabilities and funding from Green Mountain Power, the companies said they are facilitating an evolution of the grid, starting with a network of electric vehicle charging stations, community solar plants, energy-management programs and micro power generators that can provide battery storage for onsite solar systems.

The ultimate goal is to create clusters of self-sustaining microgrids in the state that are more flexible and resilient than an existing power system that depends on "130 million wooden poles," NRG Energy President and CEO David Crane said at a news conference.

"What it really means is that you're moving toward a local system versus this very vast regional system that operates now," Green Mountain Power President and CEO Mary Powell said. "As I stand here today, all I know is that I don't know how long it'll take, but I will say that we're certainly going to see a lot of change in the next five to 10 years."

Both executives emphasized that the goal is to build off of the existing grid rather than scrap it for something entirely new. "It's just making the existing wires smarter," Crane said. "You don't want to just throw [existing infrastructure] to the curbside if you can make use of it."

Starting in 2015, Green Mountain Power customers will be able to remotely manage their homes' energy consumption, and the utility said it may offer a demand-response program as well as an NRG web-based tool that gives customers "clear insight" into their electricity use. Those initiatives, as well as infrastructure projects such as electric vehicle charging stations and community solar installations, will contribute to the companies' "ambitious vision" for microgrids — "a market-based platform designed to create efficiencies and distributed energy solutions."

"Our customers consistently tell us they want tools to save money and move to renewable energy sources, and we can show the rest of the country how to get there. This is what our energy future looks like," Powell said in a news release.

The effort in Vermont coincides with more widespread adoption of distributed power systems such as rooftop solar panels, as well as heightened concerns about extreme weather. To prepare for harsher storms, Green Mountain Power recently [broke ground](#) on the 2-MW [Stafford Hill](#) solar farm in Rutland County, Vt. The project, which includes 4 MW of battery storage, will provide backup power to a local emergency shelter. The company said the project is the first example in the country of a microgrid powered solely by solar with a battery backup and no other fuel source.

Crane applauded Powell and other Green Mountain Power officials for their efforts, noting that he, "for the most part," has a "fairly low opinion of people who run utilities around the country." Crane said too few are able to work around the "fundamental conflict" baked into the electric utility model: a corporate obligation to shareholders and a regulated mandate to serve ratepayers.

Others think utilities are the ones best positioned to lead in the microgrid space. "Certainly [other] companies can do it, but we are in the business of planning, building, operating and maintaining electric generation and distribution assets," [Arizona Public Service Co.](#) Director of Technology Innovation and Integration Scott Bordenkircher [said](#) in June.

NRG Energy, an independent power producer, recently [unveiled](#) a company reorganization creating NRG Home, a unit focused on the intersection of retail customers and the residential solar market, and NRG Renew, which will include the company's wind, large-scale solar and renewables-driven microgrid business.

"The national grid that we all benefit from is a great thing," Crane said Sept. 2. But, he added, "I would have to say that a system that's based on 130 million wooden poles is just not up to the weather challenges of the 21st century."

Vermont Gov. Peter Shumlin said the partnership between NRG Energy and Green Mountain Power presents a "huge opportunity ... to ensure that we move from the old [electric grid] model that, for lots of reasons, we've got to leave in the past."

Green Mountain Power, which was recently [approved](#) for a 1.46% electric rate decrease, is a subsidiary of [Gaz Métro LP](#) and, ultimately, the [Caisse de depot et placement du Quebec](#).

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