Initiative aims to reinvent utility industry the Minnesota way Jeffrey Tomich, E&E reporter

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The pressures facing Xcel Energy Inc. are not uncommon among investor-owned electric utilities.

More efficient use of energy is eroding demand. Customers want more options to manage their energy use and even generate a share of their own energy with solar arrays. Massive investments are required to maintain and improve the grid, and new environmental regulations require a continued shift to cleaner energy sources.

But how the utility is facing that future, one that requires billions of dollars in capital investments at a time when sales are flat or declining, is relatively unique.

In Minnesota, Xcel is part of a diverse group of parties taking part in an initiative dubbed e21 that launched almost two years ago to reinvent the utility business model and the regulations and policy that guide it.

The effort is akin to the work that's underway in a few other states, such as New York. But e21 stands out in a few ways.

Unlike similar efforts in other states, e21 isn't driven by regulators or legislative mandate. In contrast to California or New York, both deregulated states, retail electricity prices in Minnesota are set by the Public Utilities Commission and remain relatively modest. And while the state has seen a boom in demand for community solar projects, there's not the explosion in rooftop solar penetration like Hawaii or Arizona.

At a time when other states and utilities seem to want to maintain the status quo, why is Minnesota's electricity industry so willing and prepared to embrace change?

Rolf Nordstrom, CEO of the nonprofit Great Plains Institute and a co-director of e21, believes now -- before there's a crisis -- is the ideal time to begin tackling the complex and daunting task of reinventing an industry that has largely done things the same way for a century.

"The forces that are at work -- changes in technology, changes in consumer expectations, changes in policy, new regulations. It feels to us that those forces are inexorable, and the tectonic plates in the energy space are shifting permanently," he said. "Whether they know it or not, it feels to us like every state in the union and every utility is going to need to grapple with these same forces at one time or another. We've just drawn the conclusion that it's better to do it now than when there's not a real urgency to it."

Minneapolis-based Xcel, which sells electricity to 1.2 million customers, agrees.

For decades, utilities aspired to provide reliable, safe and affordable electricity. Those basic tenets still apply. But consumers today want more -- they want new ways to manage their energy use, and they want lower emissions. Technology is enabling those choices, and state energy policy and regulations must keep up, said Bria Shea, regulatory manager for Xcel in Minnesota.

"All of those customer choices require innovation, grid modernization and a cleaner energy system," Shea said. "And currently we don't think the regulatory framework is set up to adopt those technologies and customer interests. We see a need to change that framework, and we want to be part of the conversation that's actually doing that."

The challenge that e21 was developed to solve was summarized by consultant Peter Kind in a report prepared a few years ago for the Edison Electric Institute. It was that often-cited report, "Disruptive Challenges," that grabbed the attention of Mike Bull, then the manager of policy and strategy at Xcel, and led to the formation of the e21 initiative to reinvent the utility business and regulatory framework in Minnesota.

"I realized that Xcel needed to get out ahead of that and do some concentrated planning around those dynamics," said Bull, who helped organize e21 after leaving the utility for the nonprofit Minnesota Center for Energy and Environment. The initiative began in February 2014. Participants include Xcel and Minnesota Power, environmental and renewable advocacy groups, state and local government representatives, George Washington University Law School, and business and consumer advocates.

Parties have been meeting monthly in search of consensus on often thorny, complex issues that could eventually lead to a gradual overhaul of a century-old electric grid and state energy policy.

The group finished their first year of work last year by producing broad recommendations that would guide the next phase. A key takeaway of that initial work: The electric industry was ripe for change.

"So many other things in our life are made simple and digital and full of choices, and yet the electricity system, you just pretty much get vanilla, or maybe French vanilla," Nordstrom said. "We've arrived at a time when people want different things out of the electric sector now."

Among the recommendations in the Phase 1 <u>report</u> were to enable an opt-in system of performance-based ratemaking, where a portion of a utility's revenue would be tied to achieving an agreed-upon set of performance metrics.

Other recommendations being explored further this year include grid modernization and expanding traditional utility long-range plans to focus more on distribution.

Nordstrom described Phase 1 of e21 as developing the blueprint for change. Phase 2 is building the house, he said. The effort involved creating smaller groups to work with industry experts from across the country and digging deeper into specific recommendations and challenges. Phase 2 will wrap up early next year and lead to implementation, perhaps through a series of pilot projects.

In fact, concepts that evolved from e21 discussions are already being proposed to state regulators.

They include a request by Xcel to implement a multiyear rate plan under legislation the utility supported that was approved earlier this year. The utility filed for a rate increase on Nov. 1. that would be phased in over three years with an option to extend the plan to five years.

With the filing, Xcel became the first utility to ask Minnesota regulators for approval of a multiyear rate plan under legislation passed earlier this year.

The proposal would put in place certain performance metrics for the utility. While there would be no penalties or incentives assessed as part of the initial multiyear plan, Shea said, data gathered during the pilot would establish a baseline for measuring performance.

The idea behind performance-based ratemaking, according to e21 participants, is to base utilities' earnings on delivering what customers really want instead of a system that rewards them for erecting expensive power plants, poles and wires and selling more energy -- a system that e21 participants dubbed "build more, sell more."

"The consensus that was arrived at in e21 in its first year, its first phase, was that that might have served society very well for the last 150 years, but we've arrived at a time when people want different things out of the electric sector," Nordstrom said. "Instead of tying utilities financial future to only investing in big capital assets and selling kilowatt-hours, that maybe a portion of their earnings ought to be tied to achieving an agreed-upon set of performance outcomes."

At the same time, multiyear rate plans provide a certainty to the utility and consumers and enable time and money that's traditionally been spent litigating rate cases to be redirected to broader policy questions.

When it comes to overhauling how rates are set and transforming the grid, e21 participants say the goal is not to attempt a massive, one-time rewrite of utility law, but to implement changes gradually, realizing that technology, consumer expectations and energy policy will continue to evolve.

"Any sort of process takes time. Especially when it involves utilities. It's a culture we wanted for our utilities because they make 50-year investments, and bad decisions stay around for 50 years," Bull said. "We don't want them to make bad decisions quickly, which means they don't make good decisions quickly either."

In fact, e21 participants say it's not entirely clear yet what the utility business model will ultimately look like. Said Shea: "It's definitely a work in progress. I don't think the endgame has been identified yet. But I do think the expectation is that parties will continue to collaborate."