

MPR News | Minnesota Now Minnesota Now - What is the precedent set between private solar panel owners and utility companies? 01KV8TQYZH3ZQ2Z3F9WC14M8BS

NINA MOINI: A tribal nation is one step closer to switching on a larger solar project in southwestern Minnesota. The Upper Sioux Community installed rows and rows of solar panels to power its casino, which means the tribe plans to buy less electricity from the local utility. The utility, the Minnesota Valley Cooperative Light and Power Association, then threatened to cut off power to the casino.

A judge ruled last week in favor of the tribe. Now the dispute is up to state regulators to decide. We wanted to understand if this case could influence how cooperatives treat other users that want to generate their own power. Joining me to help explain this is Gabriel Chan. He's a Professor at the University of Minnesota focused on energy policy. Thanks for joining me in the studio.

GABRIEL CHAN: Thanks for having me, Nina.

NINA MOINI: So let's get some background on the situation, if you don't mind, for folks. What does it mean for a community to get electricity from a cooperative rather than a company like, say, Xcel Energy or Minnesota Power? And how common is this around the state?

GABRIEL CHAN: Sure. We have over 40 cooperatives in Minnesota that provide electricity service to end-use consumers throughout the state, primarily in rural areas. And one thing that's very distinctive about these utilities is that they're not for profit.

And in fact, the consumers who take electricity from these utilities actually own the utilities and have governance rights to elect the board of directors that make the decisions for those utilities. So it's a very interesting, not-for-profit model that really centers what we call energy democracy in our system.

NINA MOINI: Tell me more about that. So what could this look like? What could people vote or have more control over in that setting?

GABRIEL CHAN: Sure. So back in the day, in the 1920s, most of rural America did not have electricity. And the for-profit companies serving the major cities were not able to profitably build the infrastructure to serve those communities. So the communities decided to get together and form their own utilities.

And from the very beginning, there's been this sense of local control. And in particular, the way that looks is they elect their board of directors that hold the fiduciary responsibilities to run the utility in the best interest of the entire membership that takes electricity from those places.

NINA MOINI: So Upper Sioux's project, I understand, is 2 and 1/2 megawatts and would cover about 30% of the casino's electricity needs. Can you give listeners a sense of how big that is?

GABRIEL CHAN: Sure. So I'd say a typical household might need anywhere from 5 to 10 kilowatts.

NINA MOINI: Hmm.

GABRIEL CHAN: And so this is 2,500 kilowatts-- so, much bigger. The casino is, I think, over 150 rooms, plus the gaming floor and a conference center. And so this project covers about 30% of that load.

NINA MOINI: And the cooperative said the project was just too big. Essentially, it limits its members to solar projects of 40 kilowatts or less. But the judge then ruled that limit does not apply here because this project is what's called behind the meter. Can you explain part of that dispute and what this behind the meter term means?

GABRIEL CHAN: Yeah. It's a very important term in the energy space. And in particular, this project is not only behind the meter, meaning that it's on the customer side or it's on the consumer side of the electric meter. But actually, it also has a very large battery system.

And so that battery is designed to absorb the solar energy that's produced and actually keep it from going back onto the grid. And this actually was the key distinction about this project from other large solar projects and was really important from a legal perspective. Because this project, in its location behind the meter with storage, doesn't actually push any energy back onto the grid. It keeps it all behind the meter for use at the casino.

NINA MOINI: Thank you for explaining that. So what role do these types of projects play in efforts to meet the state's larger renewable energy goals from your perspective? Because it's kind of tough, right? People want to invest in this type of energy. But then depending on where you are, it's considered to be too much. And you have to slow roll it, it feels like.

GABRIEL CHAN: Yeah. So, famously, the sun does not shine all day when we need electricity. And so while solar energy has become extremely cheap, it has this fundamental issue that it can't provide all of our energy needs by itself.

But when paired with storage, this becomes a real opportunity to integrate more renewables onto the grid and help meet our climate goals. And in fact, you see this reflected. The majority of new projects proposed in our state and around the area are renewable energy, like wind and solar, paired with storage.

So this is exactly the kind of technology that we need to be deploying to meet our carbon goals. And a lot of the difficulties with this became, really, about the contractual arrangements, the local policies, and even the state policies and how they can treat these kinds of projects.

NINA MOINI: From the perspective of the cooperative's finances, how much of a hit could this project be?

GABRIEL CHAN: Sure. This is one of our smaller utilities. Minnesota is somewhat unique in that we have over 120 small municipal utilities and over 40 cooperative utilities, like Minnesota Valley Co-op Light and Power. So these are small utilities.

They have roughly 5,000 or so member-owner consumers. And this is one of their largest loads, as a large resort in their service area. And so one of the main concerns from the co-op is that they have to maintain hundreds of miles of electrical lines and substations and infrastructure.

And when someone generates their own energy, they lose the ability to sell that energy and gain revenue from it. And that really became the main issue, was, how is the co-op going to maintain its infrastructure when it's not able to sell as much energy because people are generating their own?

NINA MOINI: Could this case, do you think, affect how cooperatives treat other users who want to build some of these larger solar projects? Do they have impact on other cases? Are people looking around at each other to see what the standard is?

GABRIEL CHAN: Sure. I mean, there's a famous saying in the co-op world. You've met one co-op, you've met one co-op. But it doesn't mean that there aren't lessons to be learned. And I think, in particular, what this case speaks to is the opportunity for projects that have solar and storage that don't export back onto the grid.

And I think what this case will show, if the public utility commission agrees with the judge, is that individual consumers, particularly large consumers, like tribes or large corporations, can build these kinds of projects. But what it doesn't speak to is the rate treatment. What other kinds of ways could cooperatives try to recover some of their so-called fixed costs of maintaining the grid from consumers that install these big, self-generation plants?

NINA MOINI: And tribal sovereignty was also part of this case. Upper Sioux also argued, because it's a sovereign government, it has the right to buy power from any utility it chooses. And the judge agreed. What could this mean for other tribal nations?

GABRIEL CHAN: Absolutely. Minnesota's 11 federally recognized tribes are all considering different pathways to tribal energy sovereignty. This has become a really important movement here in Minnesota and nationally, where tribes are exerting their sovereignty to think about how can they use energy infrastructure development to advance things like economic development, workforce development, and really just their own self-determination.

And energy has become a critical way to do this. And I think a lot of tribes are going to be thinking about, well, what could they do in their local context with their utilities or maybe on their own to advance these kinds of projects that meet their goals?

NINA MOINI: You kind of alluded to the way that communities and cooperatives might have to think creatively moving forward and try to make some changes. Are there compromises you believe work well when there are communities interested in producing more of their own power and cooperatives are concerned about losing business?

GABRIEL CHAN: Absolutely. I think, right now, we're in a moment where the grid needs more infrastructure. We're hearing every day about data center proposals or electric vehicles coming. We need a lot more supply. And in particular, we need things like the batteries that Upper Sioux is proposing to build because those batteries introduce all of this flexibility and allow us to use renewables to their full potential.

So this is exactly what we need. But in the contractual relationships and, I think, without the kind of, maybe, technical capacity to get there and the relationships to get there, to collaborate, it's really hard to leverage the batteries for their full potential. But I would say that, technically, everything is there to have a very valuable project for both the tribe, the utility, and society. But we need new ways to work together and leverage these kinds of technical opportunities into real economic opportunities for everyone.

NINA MOINI: So moving forward, regulators with the state Public Utilities Commission will have the final say in this case. And a spokesperson says the public comment period is open through July 22, and they expect to take up the issue this fall. Do you have a sense of whether the PUC is likely to agree with the judge's recommendation? What would you guess?

GABRIEL CHAN: Well, the PUC gets to make its own decisions. And I would say, based on the hearing that they held before it moved to the judge, it does seem like they are sympathetic to the tribe's concerns. I would say, the PUC-- the Public Utilities Commission-- also just approved a large-scale battery deployment for Xcel Energy, our largest utility in the state, to actually do something of comparable size to what's being proposed or what's being developed by Upper Sioux.

And what the Public Utilities Commission found in this Xcel Energy case was that batteries at this kind of scale-- around 1 megawatt-- actually are super beneficial to the grid and especially when they're made interactive with our big, wholesale grid that crosses many states. When you can make the batteries respond to the full set of value possibilities that are out there in the region, then you really unlock the costs and benefits to be really favorable to all consumers.

NINA MOINI: Thank you so much for stopping by and breaking all this down for us. I learned a lot, and I really appreciate your time.

GABRIEL CHAN: Absolutely. My pleasure.

NINA MOINI: Gabriel Chan is a Law Professor at the U of M's Humphrey School of Public Affairs. By the way, attorneys for Upper Sioux and Minnesota Valley did not respond to a request for comment.