

Courtney Doyle (00:27):

Welcome back to another episode of Co-Op Energy Talk. I'm your host, communications and member relations manager, Courtney Doyle. This month, we are tackling a pretty hot topic, uh, which is data centers. I have Cherryland CEO Rachel Johnson and Wolverine Power Supply COO Zach Anderson here to talk today through a lot of the questions and concerns that we hear surrounding data centers, what we're doing to position ourselves in a way to best serve and safeguard our members, and hopefully just demystify some of the general questions we hear and concerns around data centers. So thank you guys for joining us today.

Zach Anderson (01:03):

Happy to be

Rachel Johnson (01:03):

Here. Yeah, and, and thank you for putting this together and excited to have this conversation with Zach. I had the chance to, um, watch Zach on a, a local panel recently talking about data centers and how communities can prepare. So I think we'll have a lot of good things to talk about.

Courtney Doyle (01:16):

So we picked the right guy to talk about this.

Rachel Johnson (01:18):

Well, I don't know. We'll decide at the end. <laugh>

Zach Anderson (01:19):

The guy that was available

Zach Anderson (01:21):

Today. <laugh>

Courtney Doyle (01:23):

Well, first, Zach, can you just talk us through, we hear data center a lot. Do you just hear that term thrown around? A lot of times it's alongside AI specifically, but, um, what exactly is a data center?

Zach Anderson (01:36):

So I'll, I'll pick up there and I'll just differentiate very simply. Data centers have been in our lives since the creation of the internet, computing. Computing power used to be housed in large data facilities, right? When computers took up, uh, people can't see this room, but a h - one computer that we all carry around in our pocket with a decimal point of computing power used to be in rooms, right? Yeah. And so as we've moved to become more efficient and we've moved to, we all take pictures, a lot of people have social media accounts and data centers have existed primarily to this point to house data. So Wolverine has data, Cherryland has data. We all use some form of the cloud and we store things in our own servers. So data centers are very much a part of technology generally and a part of our lives and they're a critical aspect of things that we do.

Zach Anderson (02:32):

But the hot differentiated topic right now is what we'll probably spend the most of today talking about, which is AI and hyperscale data centers. These are new and they're very, very, very large electric

consumers as opposed to we might have something that looks like the equivalent of a small grocery store data center in the communities in and around us all the

Courtney Doyle (02:58):

Time. Yeah. Rachel, can you contextualize a little bit, um, I just, we just wanna be clear about like data centers have existed. They do exist in our communities. You could make the argument they exist in the basement right now, but not, um, not to the scale that Zach just explained, the hyperscalers.

Rachel Johnson (03:15):

Yeah. I think the best way to contextualize it for our members is the entire electric load of the Cherryland system at its peak right now is somewhere between 110 and 115 megawatts. And that is comprised of all different sizes of consumer, right? But we do have, like our largest consumer right now is a ski hill and they're about a five megawatt load and our smallest consumer is a house, right? And so that's kind of the, the, the range of electric loads we're used to serving. We do serve data processing facilities today that are smaller than five megawatts. Mm-hmm. And as the data processing capabilities of the US build out, there will continue to be a need for those types of smaller latency edge type computing processing centers, perhaps even more than we have had historically. Those are, um, those loads fit very nicely into the way we think about serving electric load today.

Zach Anderson (04:09):

But the, the hyperscale development, like what Zach mentioned, that might be a, a single location that is 10 times the entire electric load of Cherryland's whole system. So a, a thousand to 1500 megawatts of load in a single customer. And so it's just a, it's a, it's a very different type of, um, load than we have historically served. And it is expanding at a pace that I think is, is putting pressure on our industry and that we're working very hard to, um, manage responsibly and, and, and right back here, back at home, make sure we're doing everything we can to protect our members as that happens.

Courtney Doyle (04:47):

I think that does a good job of explaining why there's so much, uh, urgency. And I don't wanna say fear, but right like concern, the unknown around this because, um, it is something we're paying really close attention to. It's something that is popping up more, more frequently and it's, it's that unknown. So I also, I, I like the idea of being able to say these things already exist just a little differently, um, than we're seeing them pop up right now. And you, you put some numbers to some of those loads and those are also part of what I think scares people. Um, so I just wanna talk a little bit, Zach, about those numbers. What, contextualize for me what, what a thousand megawatts is or, um, you know, how, how that compares to some of the loads that Wolverine already serves, um, or that the co-ops, that the distribution co-ops already serve.

Courtney Doyle (05:36):

And then also. So c- contextualize that size of a load, but then also how you manage that kind of load, some of the infrastructure alongside that. Yeah.

Zach Anderson (05:45):

So I'll start with, um, a couple of ways to think about and contextualize a load of that size. It's <laugh> very plain terms, it's massive. <laugh> How massive - Hyperscale. How massive is it? So if I, I'll think about it first as one, when we talk about hyperscale, that's typically a thousand megawatts or one gigawatt or, um, a million kilowatts in one load. And so Michigan, in total, we serve 10 million people in the whole state, not just the co-ops, but there are 10 mil- million people in the state, all the manufacturing,

everything that we have here is a 20,000 megawatt peak. So 1,000 megawatt data center is a 5% overnight increase in load. And so if you extrapolate that across the country, that's why everybody's super focused on it, because it's like, you get one of these and you're 10 million people, all of a sudden they grew - uh-huh.

Zach Anderson ([06:42](#)):

By 5% overnight. Mm-hmm. So it's growth that we haven't had to, uh, grapple with, not just as co-ops, but as utilities across the country, and it's happening faster than our population's not growing anywhere close to that. Our regular electric load as a state is not growing anywhere close to that. And so 5% overnight. The other perspective I often share is that, uh, Virginia, which was the original hotbed for data centers, largely, uh, and initially just cloud computing because you have so much, uh, fiber infrastructure in and around Department of Defense, think Washington DC. There's a lot of fiber coming into that area. So a lot of data centers early on, they attracted, um, to that area. So they alone in Virginia have about Michigan's peak worth of data centers, 20,000 megawatts of data center in Virginia just to support largely cloud computing. And now they've started to expand out to add these hyperscale AI data centers on top of that growth.

Zach Anderson ([07:45](#)):

And so again, it's a massive leap forward very quickly. And then some other things, not to, um, cycle analyze the global population, but you've got, everybody's seen the Terminator, so it's AI and people are concerned about, you know, is this Skynet? And people are rightfully concerned about what does this mean for my job long-term? If AI comes along, all we've seen over time in Michigan is really a, a case study in how this goes bad is as technology comes along, good paying manufacturing jobs go away. That doesn't look like that'll be the impact here where hands-on work will still be needed, but if you're doing white collar work, middle management type work, people are afraid for their jobs. So you have both that boogeyman from the movies, but also the practical reality is people want to work, people need to work. And when you take rising prices, really large tech companies and threats towards jobs, that kind of creates this perfect and uncomfortable storm that gets everybody talking about data centers.

Rachel Johnson ([08:51](#)):

Yeah. And I, I think to, to Zach's point, the other thing I've noticed is in the, in the midst of all that, then we've lost the ability to have calm, rational, rational and reasonable conversations about how we manage through this. And it has turned into, to deeply entrenched kind of people on the edges of it. So they're either, we should just all data center development unrelegu - unregulated or we shouldn't do any of it ever. And at the end of the day, we have to figure out how to do it in a way that is reasonable. I mean, I think that data computing is a, is quickly becoming a found, like a bedrock of a modern economy. So we have to be able to do it. And in some ways it's no different than, you know, 80, 90 years ago when people said, "Hey, energy is a bedrock of a modern economy."

Rachel Johnson ([09:34](#)):

"In the absence of electricity, we can't compete globally in manufacturing and all these different things. I think we're now in that same moment tied to the ability as a nation to, to, to compute, right? To, to do, uh, data processing. So there's, um, there's a lot at stake in it. And I, I'm glad to do this podcast and have these discussions because I think it's important we continue to try to find common ground and reasonable solutions that help us continue to move this forward. And, and then one other thing that Zach said, I just will put a finer point on. Yes, there's certainly complexity with the size of the load, but I think the larger complexity is the, the timeline. The speed at w- we, we actually have. I mean, again, go back to the 40s and 50s, right? Like we built a ton of power generation very, very quickly.

Rachel Johnson ([10:21](#)):

The demand for electricity rose very, very quickly. Like when we were first putting, when we were first hooking up farms people, we would come and hook it up and they'd be like, "What am I supposed to do with this electricity?" They'd turn on a single light bulb, right? And we went from that to people using it for everything from washing their clothes to right. I mean, think about how much electricity a home uses right now. That happened actually very rapidly. So it's not that we, we can't do that. It's the timing of where we're at today in terms of our investment in power generation in, in, in the cu - in the US and also the pace at which that load wants to connect, I think is where the complexity comes.

Zach Anderson ([10:55](#)):

And I wanna, I wanna touch on that timeline point in terms of just the utility sector. And this is. So the speed of tech is very different than the speed of utilities. Mm-hmm. And so I don't wanna spend a ton of time on this, but I think it's important to highlight how things have changed and continue to change, especially as you have hyper competition for all the same inputs, which means new generation, primarily new transformers, new, new lines, et cetera. If I give you an example, just in the last 25 years, Wolverine was able to put a power plant on the grid in less than 12 months in the year 2000. In the 15, 16 years later with our Alpine power plant, we were able to go from start of construction to on the grid in 18 months. Today, just 10 years later, it takes about seven to 10 years to plan, site, and build new generation.

Zach Anderson ([11:46](#)):

And so this is such a great point that Rachel made in terms of the timeline. The, the tech companies are used to how fast can I do anything and everything because that's what people want. I gotta get speed to market. Mm-hmm. And then you meet that with utilities need to actually build physical things and those things need to be manufactured. And now that takes seven to 10 years to do the studies, to get the turbines built, and then to get everything installed and connected. And so you have this collision course of speed meets, um, I'll say lack thereof. Mm-hmm. Yep. And, and that's causing a real challenge too. So that's such a good point you bring up in the timeline.

Rachel Johnson ([12:24](#)):

Utilities are, are deeply regulated and have been, right? And we have both regulatory and political headwinds that impact what we can do. And, and, and that's, and, and that's, I'm not, that's not a value statement, it's just a truth. Mm-hmm. Um, so certainly there's, there's. It's fa - it's kind of fascinating to watch those two things move along, which I know is not at all what you brought us on to talk about. So I've derailed your podcast, Courtney, I'm sorry.

Courtney Doyle ([12:42](#)):

No, it's a really important part of it though because, right, it's, it's not just the load. It's obviously, it's obviously having the generation for the load, but then you also brought up the procurement of some of the things needed to serve the load and to build the infrastructure necessary to carry the load, uh, and get, get the power to where it needs to go. And that's also a really real part of the challenge that we're grappling with as an industry, right? So I think that's a really, um, important point.

Rachel Johnson ([13:09](#)):

An- an uneasy relationship between tech and energy. You know, like in every marriage, there's always one person who wants to spend money and the other person who never wants to spend money. Yes. Welcome to the marriage of tech and energy, right? Like we're just ve - w - w - it's complimentary. Hopefully we make each other better by working out compromises, right? But there's, there is a sense of just we see this same problem through very different lenses. Mm-hmm. So, yeah.

Courtney Doyle ([13:31](#)):

Mm-hmm. Uh, quickly before we jump into kind of the what if scenario, um, for you, Rachel, we're gonna jump into what, like, what happens? What happens if a hyperscaler? Before we get there, I do just wanna talk a little bit about the infrastructure piece though and the cost of that and the necessary, um, the necessary work that has to go into serving a, a hundred megawatt load or, you know, a, a, even a, a small hyperscale, uh, kinda situation, because that's a really important piece that's gonna inform some of what Rachel's gonna talk about in the what if. Um, so talk to me about what it takes in terms of the infrastructure necessary to serve a really, really massive load.

Zach Anderson ([14:10](#)):

So the, the position that you're in when you're talking about loads of this size, there, there aren't just, I'll say, unused generators that are sitting around waiting to produce this power, number one. Number two, this power is needed 24 hours a day, 365 days a year. So the type of power plant you need or power plants, a portfolio that you need to build around them, again, are not just sitting there ready to serve this load. And so whenever you talk about you've got a thousand megawatts of new load, you need, quite literally, a thousand megawatts plus a little bit of reserve because you know the power plant will need maintenance and can't operate twenty four seven, 365 no matter, no matter the technology. So you need redundant resources. So think of it as if you've got a thousand megawatts of load, good utility planning would mean you need about 1200 megawatts of generation.

Zach Anderson ([15:08](#)):

Mm-hmm. Michigan adds an additional layer to that. Michigan law does require that you have capacity, meaning you have a generator that you can point to to support that, call it thousand megawatts plus a reserve margin. You have to point to that, but also by 2030, which is a very, very near term thing, it needs to come 50, 50% of that energy must come from renewables as well. Mm-hmm. So you need to have enough generation built and you need to have enough renewable energy in your portfolio. And that's all incremental. Nobody's sitting on this amount of generation capacity that's just sitting there waiting for somebody to plug in, and nobody's sitting on this renewable capacity. So I'm sure we'll talk about the dollars, but just to put those, those two pieces in perspective, that's six to eight billion dollars of new investment to back that hyperscale load.

Zach Anderson ([16:05](#)):

And that's before you get to, you need to build new wires and interconnect - It's got to get from

Courtney Doyle ([16:10](#)):

Point A to point B. You

Zach Anderson ([16:11](#)):

Need, you need to build distribution facilities to plug in. And so that's another, it feels like a small number once you're talking about six to eight billion, but that's still multiple hundreds of millions of dollars of additional infrastructure investment. And so that'll be a lot of what we talk about is how do you manage all that cost and ensure that new load is paying for that? 'Cause that's really job one once you get through the planning for it. Yeah.

Rachel Johnson ([16:37](#)):

Um, Zach mentioned that if you were going to serve a, a typical one gigawatt hyperscaler, you'd, you'd need about 1200 megawatts of energy. That's one and a half times the Palisades nuclear power plant is probably the easiest way to contextualize it. So if you think, uh, and any listeners of this podcast, they've

been listening. I know they're loyal. Thank you, my friends. Uh, they've been listening since the beginning. They remember when we first started talking about the restart, not build, restart of Palisades, which has involved a, a significant amount of investment in, um, getting that s - that plant ready to go. Mm-hmm. But even still, three years later, all those dollars later, you'd need one and a half times that plant to, to have adequate capacity to serve a single data center. So I think that, that helps kind of just contextualize it.

Courtney Doyle ([17:21](#)):

Well, and timing-wise, right, that wasn't starting from the ground up, to your point. Sure. It sure wasn't. Yeah. That was as close as you're gonna get to something sitting waiting for you to come turn and back

Rachel Johnson ([17:28](#)):

Up. Something ready to go. Yeah. And then I, and I think it's al- also important to keep in mind, this happens at a moment in time where we were already working with razor thin power supply margins as a part of this transition away from your traditional coal-heavy power supply portfolio towards, uh, more distributed smaller projects, because renewables generally are smaller projects than those big, um, power, uh, coal plants or, or, uh, nuclear plants. So we were already in the midst of that transition. We were already m - operating under pretty thin margins. And then we said, "You know what we should do? Let's just start building thousand megawatt loads one at time," right? And so those two things, uh, combined, I think, are part of what also makes that pressure feel particularly acute at this moment. And

Zach Anderson ([18:16](#)):

Adding a point to that, we've had this reliability conversation. We've talked about those razor thin reserve margins, but that was just to keep at par. Mm-hmm. Yep. Mm-hmm. So from a manufacturing base, if you think about the big turbine manufacturers, GE, Siemens, um, any- anybody that's making this equipment, they were building to keep up with demand that that demand had really been flat. Like if we look at Michigan, the peak in Michigan was h - a little bit higher in 2003 than it even is today. Mm-hmm. We've had the recession and all of that. So that load's been flat. So as a, as a power plant gets retired, it gets replaced. The load doesn't grow beyond that power plant. And so all of the support systems from turbines to transformers to major, uh, power lines were all designed to, "We just need to keep up with what we served yesterday." Now again, all of a sudden, you had really big increments, that whole supply chain looks remarkably different, and that's on the heels of COVID that did all kinds of other crazy things - uh-huh.

Zach Anderson ([19:18](#)):

To supply chain and what get, what was getting built.

Rachel Johnson ([19:21](#)):

One of the things that, um. And I would actually really love your opinion on this too, Zach, because this is only my opinion. I do not speak for anybody else. But I hear a lot of, uh, political rhetoric around the idea of, well, just make those data center tech companies build their own generation and serve that plant with something they own. Let them, let them just, you know, take care of their own house. And I, I personally have very real concerns about that concept because they're still inside our same supply chain. Mm-hmm. So now I'm competing against big tech that has a lot of money to spend for the next generator I need just to keep the lights on for the local Meyer. And so that, I, that's just kind of an interesting. I think that solution looks good on paper, but I think in reality for those of us in the industry, for me at least, I, I, I, I'm not sure that would work the way people say it would.

Zach Anderson ([20:10](#)):

It,

Zach Anderson ([20:10](#)):

It, it definitely doesn't. I couldn't agree more because Inflation 101 is too much money chasing after too few goods. Mm-hmm. What does big tech have? They have a lot of money and there are very finite resources. And so those finite resources become more expensive. Mm-hmm. So even if they're supplying their own stuff and they're paying for their own stuff, we all feel it in other ancillary ways that that transformer that you need at Cherryland just got more expensive. Mm-hmm. That, that transmission wire that we need for Wolverine, that just got more expensive. So did the poles. And that's indirect cost. We can't pass all of it onto the data centers, but we all feel that inflationary pressure where you have literally multi-trillion dollars - uh-huh. Circulating in the economy for big tech. There was a Wall Street Journal article just last week, \$5 trillion of total tech commitment to all of this big data build out chasing too few goods.

Zach Anderson ([21:05](#)):

And that's, that's an inflationary pressure set aside, you know, anything else that's happening - uh-huh. Uh, globally right now from a supply perspective.

Rachel Johnson ([21:14](#)):

And it's one of the reasons, Courtney, I think it's. I'm really proud of the way we've approached this as co-ops. I think through the lens of, if that money's gonna get spent, I want it to, to get spent in a way that I can at least get as much benefit from my members as I can. Mm-hmm. And so that. And that's a hard. That is not the easiest needle to thread here. No, you.

Courtney Doyle ([21:32](#)):

I think the problem we've laid out is a little comp - Yeah. I think you guys have done a great job laying out the complexity of this problem in a way that feels digestible and understandable to the average member. But it is not a simple problem to solve. But, um, to your point, Rachel, I wanna walk through now, okay, what, what happens, right? 'Cause a lot of what we just talked about, people are probably like, "I thought you guys were gonna make me feel better about this." <laugh> I am feeling more nervous. It's okay. Stick

Rachel Johnson ([21:56](#)):

With us. Stick with us. We'll, we'll land the plane. Because,

Courtney Doyle ([21:59](#)):

To your point, Rachel, there's been a lot of thought. And, and in Michigan specifically, we're in a great position to learn from the Virginias and to learn from other states who've maybe seen a more rapid growth in this space than we have. And now, we're in a position to be proactive versus reactive in this situation. So, talk me through, Rachel, what would happen, and maybe walk me back a little bit of, uh, kind of a different measure that the board took to, um, cap one of our rates. I just spoiled it a little bit, but explain the thought behind that. Um, and then, and then what would happen if, if a hyperscaler was like, "What's up?" Mm-hmm. Traverse City. Yep.

Rachel Johnson ([22:37](#)):

Well, I think it's important to start by saying that hasn't happened. And I, and I always start this conversation with our community to our members by making sure they know I am not currently in discussion with a single large scale data center that is interested in connecting inside Cherryland system.

And I don't know that w - that will happen, right? Like when I look at the areas that I think are, um, most desirable for that kind of large data processing, I, I, I don't know that we're gonna get something like that here. However, I think it's important that we take advantage of the time we have while we aren't having that active discussion with someone looking to connect to figure out what we would do if they did ask, right? So the first thing we did last year, we had historically. And again, keep in mind, because it was never a problem, we had a rate that basically said everything above five megawatts, or 10, I can't remember, above, above, above, above a megawatt.

Rachel Johnson (23:24):

It was a rel- relatively small number.

Courtney Doyle (23:25):

Yeah, it was above a megawatt.

Rachel Johnson (23:27):

You're in the same rate. Mm-hmm. Well, that was because we didn't believe that 1,000 megawatts is gonna try and connect all at once, right? And so we said that, that rate structure isn't, isn't probably quite the right fit for something of this scale, something that might be 10 times the, the size of Cherryland's total system. So we just capped it and said anything above for us now, 10 megawatts, has to. It needs to be a, um, a custom contract that protects our members' interest. So we started by capping it so someone couldn't show up and not take advantage, but leverage a rate that was sitting on our books that we had an obligation to offer them. 'Cause that's the other thing I don't know that people understand. I don't get to tell an interested load that is willing to pay what. To, to connect, no, right?

Rachel Johnson (24:09):

And, and everybody's, "Oh, well, you should be able to tell no. Let's tell no." Well, that, that same logic means we may not have ever connected someone's farm. Maybe I don't like Zach because he wears red. Well, Zach, I don't like your red, okay? So I'm not gonna connect Zach because I don't like the color shirt Zach's wearing. I don't. I, I can't do that, right? We're not allowed to be discriminatory as it pertains to allowing some, someone to interconnect to our system, and that's a good thing. Yes. Um, so we, we know that if they come to us and, and, and make an application for service, we have an obligation to provide it, but the first thing we need to do is make sure that it happened under a rate structure that we feel is sustainable and palatable and that protects our members' interest.

Rachel Johnson (24:44):

So we kept our large, uh, power rate. And then we've spent the last year working with Wolverine and with our, um, fellow Wolverine co-ops on a set of policies that are designed to make sure that if an interested data center were to reach out to us, we can very quickly figure out whether they're serious or speculative by requiring a non-refundable application fee, not a deposit, application fee. And this is their skin in the game to make sure we're not running around Wild Wild West, spending a bunch of Cherryland employee and Wolverine employee time on projects that don't ever come to fruition, because that is also happening right now. Mm-hmm. Um, so first, make sure they're serious. And then if they are serious, we, we now will have policies on the books that require them to pay 100% of the cost of the engineering and modeling and any infrastructure upgrades we need to make to serve them.

Rachel Johnson (25:34):

Most of that upfront, because we also wanna make sure our members don't get stuck later holding the bill on infrastructure they no longer need because that data center decided to move to wherever else, right? So

we've done quite a bit of work to proactively put in place rate structures and policies that protect our members if a big data center were to call us. So to answer your question, if they called, that's what we would do, right? We would lean on those policies, we, um, would require that non-refundable application fee, but we would also have to work very, very closely with Wolverine because in all fairness, the hooking it up at our end isn't actually the hardest part. It's making sure we have the juice and we can get the juice to where they want to take the juice is, is actually really the, the, the harder part.

Courtney Doyle ([26:20](#)):

Well, and part of those, and you kind of touched on this, that they require long-term commitments or commitments that cover the membership for the long-term. And Zach, I think that's a really important piece about what you, the, the, the role you play at Wolverine, right? Power supply isn't like a, we'll get it figured out in December for next year. Like this is a, this is a long game. So talk, talk to us a little bit about why that long-term thinking is really important in terms of power supply.

Zach Anderson ([26:51](#)):

Number one is the cost. When we're talking about multiple billions of dollars, Wolverine has about a billion dollar balance sheet. So we've talked about the size magnitude. If you're talking six to eight billion dollars larger than our balance sheet today, we can't just go get that cash from a bank and they'll say, "Sure, Wolverine's good for it." <laugh> We can't grow in, in that way, in that order of magnitude. So we need to be able to support that, and that means we either need cash in hand or some form of really large letter of credit to back that up for the long term because we're going to have to go finance the infrastructure and that new load must be required to cover 100%, not 99, not 98, 100% of those costs long term. And so once they get through the application process, that's where we have to negotiate a unique contract for each one of these.

Zach Anderson ([27:43](#)):

I would say it would be beautiful if we could just put a contract on the shelf and say one size fits all, but there's a, um, term in the co-op industry. If you've met one co-op, you've met one co-op. Mm-hmm. Very same with data centers. What's their credit quality? What's their ability to post cash? How large is it really? What if they're not as large as they say? Because sometimes they might say, "I'm 1,000 megawatts," and they show up in their 300 because it was somebody that was selling compute power and they only got a third of their data centers subscribed, but now you've put in the infrastructure for all of that. So you have to have that. It really comes down to cash on hand, multiple billions of dollars of cash on hand to be able to support that infrastructure investment. Because just like Rachel said, there's an obligation to serve.

Zach Anderson ([28:33](#)):

That doesn't mean your obligation isn't to serve it responsibly. And that responsibly means you have 100% of all those investment costs covered. That way, if they don't show up like they say, if they go away sooner than they expect, we've seen technology over time, it becomes more and more efficient. So if they become more efficient and that load goes down, you're, you're not left, Wolverine's not left, Cherryland's not left. None of the co-op members are left holding \$1 of that responsibility. Worst case scenario, they go away, you've got a power plant that's paid for, and then you can decide what you want to do with it.

Rachel Johnson ([29:08](#)):

Yeah. One of the things that I think doesn't actually get as much attention as it should that, that Zach pointed out at the. Right now, I, I. Let me preface by saying I don't run a data center, but I'm gonna go out on a limb and guess probably one of their largest input cost is energy. That, that, like logically, right? So if you run a business where your largest single input is energy, you are highly motivated to figure out how

to do that more, with more efficiency. Mm-hmm. So I think we're going to see a real sh - a lot of focus and a real shift in the actual efficiency through which they can do data processing and how much energy they need to use to do it. What isn't entirely clear to me yet today is, does that mean we'll have less energy use at that single point, that data center that was a thousand megawatts now becomes a hundred, or do they process more data at that single point and keep it at a thousand megawatts?

Rachel Johnson ([29:54](#)):

I don't know, but either way, they gotta figure out how to. They're gonna manage their number one cost, of course. Right. Motivated to, and there's an ROI on managing that number one cost. So that, you know, that also has factored into how we've thought through these policies is, is in the, in our industry what we call it is a load of questionable permanence, but essentially designing all of those contracts and terms around the idea that we just can't count on it. If you, Courtney, if you call me and said, "I'm gonna build a new high school over here next to your cherryland office and I wanna connect it and it's, you know, whatever, two megawatts," I mean, okay, I'm, that's a pretty permanent, like you, you build a high school, you bond the high school, the community pays for the high school, people pick where they live with their houses in order to send their kids to high school.

Rachel Johnson ([30:37](#)):

The high school probably stays there for like a really long time. Mm-hmm. <affirmative>. So it's a really sticky, less, um, risky, risk concentrated load. But these are a little more risk concentrated and, um, what I'm really proud of is that we've, we've thought through all of that and how we've designed these policies to, to protect against that risk concentration and that questionable long-term permanence of the load.

Courtney Doyle ([31:00](#)):

And I think that, um, right, that, that outlines the idea. I think the bottom line for members that listening to this should understand is that these protections are in place in order to prevent their bills from subsidizing a questionable load, right? Where the, the high school example is that's gonna pay itself over time based on their usage and benefit the membership based on their contribution to the overall load, right? It's going to help prove its own worth where the questionable load is where you go, "Mm, we wanna make sure we get that covered up front so that members don't foot that bill later."

Zach Anderson ([31:36](#)):

And, and with a, uh, if the high school becomes more efficient over time, they put in new HVAC and they become more efficient, you feel it, you might sell them a few, fewer kilowatt hours than you were before, but you don't feel that across the membership. When you're talking about literal megawatts, hundreds of megawatts, the difference between them coming in at a thousand versus 500 totally changes the ball game. And if that happens right away, it's one thing to deal with. I- if it happens in year 10 and now you've planned for what costs they're covering for the membership, everybody feels that. And so knowing that, you have to prepare for all those eventualities so that nobody feels that pain. If they're successful, it's awesome. If they're not, that's fine too. That's the position you have to put yourself in is to be agnostic to their success or failure.

Rachel Johnson ([32:27](#)):

Um, so the other thing I was thinking about as you were asking these questions, Courtney, too, is that we've talked a lot about, you know, the hard parts and the complex parts and the risks we're managing against. Uh, but I also think it's important to note that there are real, uh, opportunities here to bring revenue into our cooperative to, to, to really actually save our members money or leverage assets they already ha- ha - own some portion of or have inside our portfolio to bring more value back to them. Um, Wolverine is in a, I, I think a really, um, enviable is not quite the right word, but just a, a really, uh, that

we're in a position we're really proud of, which is we have consistently invested in generation for decades. We have a really strong portfolio of all types of generation, natural gas, a little bit of coal, nuclear, obviously with Palisades, renewables with several large wind farms and solar projects.

Rachel Johnson ([33:19](#)):

I mean, we have just an enviable power supply portfolio that is known across the state, across the entire region for being highly reliable. And so I think, um, and, and many of those assets are assets our members have already paid for. Mm-hmm. And so there are ways for us, I think, to bring more revenue to them through careful use of those assets. Mm-hmm. Um, so I, I just, I guess I should say, it's not all bad. Mm-hmm. I think, I think we are, we are in a unique position to potentially, um, s- someone told me recently, the young people say, was it just get the W? Yeah. Okay. So we're just gonna get the W on this, um, right? Shout out, Nick. Yeah. Podcast producer. Yeah. Yes.

Zach Anderson ([33:57](#)):

So that's, that's the really cool thing that we have going for us right now is that when you talk about a new Meyer grocery store, when you talk about a new subdivision, um, the, the term I often think of is I, I hear Craig Boer, a long term co-op guy, he would talk about just hit the single, just hit, keep the inning alive. We're in such a good position to hit a bunch of singles and to have the members feel the benefit of that because if I can provide a little bit of nerd math just for the moment - I love nerd math. If, if you put in the, in the numerator, we're a fixed cost business. All of us in this room, all the facilities that we own, they're fixed costs in the numerator. But if you make that denominator, the load, larger, that overall average goes down for everyone.

Zach Anderson ([34:44](#)):

Mm-hmm. And that's where we could grow almost by 50% by hitting a bunch of singles all across the state of Michigan and see that average cost get driven down. The hyperscaler is a different piece, but that, I don't, I love that you're making this point, Rachel. We don't wanna get this twisted up with growth is bad because growth is very, very good if we keep focused on what's made us successful, continuing to invest for the long term, continuing with thoughtful, meaningful material growth. And you see it all over this region, that's Cherryland's growing in, in leaps and bounds in a lot of really neat ways. And we're positioned, we have generation capacity to be able to support that load. We have infrastructure. You all have distribution infrastructure to support that load to allow these communities to grow where you need housing, you want more business to come in.

Zach Anderson ([35:33](#)):

That's really what we're good at and that's what I'm excited about for our future.

Rachel Johnson ([35:38](#)):

Yeah. I mean, our me - our members are truly in the enviable position of having. Wolverine has secured for us the power supply we need to serve our existing membership across all of the Wolverine members and have room to grow. Mm-hmm. And there are a lot of utilities that are not in that position. So now we are in the driver's seat as it pertains to making sure that we're leveraging that to our members' advantage. And I think I will, uh, just put a finer point on one thing Zach said, which is we're not out there looking for a hyperscaler. I don't even think that's a good fit for how we're set up and who we are as rural electric cooperatives. Um, but we, we ha - we still have this thing that, that I think we have like a, an ethical obligation to leverage on our members' behalf, which is we have something that's highly, highly valuable right now and I want someone to pay for it so that I can use that to continue to keep my power supply rates as stable as possible during a period of time where all the dynamics we talked about earlier with so

much pressure and so much investment and such awkward timelines is gonna drive up the cost of power supply for a lot of other utilities.

Rachel Johnson ([36:38](#)):

And I think we're in a really nice position to weather that for our members and continue to have highly competitive power supply, uh, cost. And, and, and, and part of that means, again, kind of staying at the table on your own terms and making sure we're, we're working to bring load in that helps us spread those fixed costs and also, um, leverage those assets we already own.

Courtney Doyle ([37:01](#)):

I think that does a good, a point of bringing us back to the beginning where you kind of acknowledged like it's your job as the CEO of this organization, of Cherryland Electric Cooperative, to look at the things that might be hard, but then how do we leverage it to the best for the benefit of our members? Like that's, that's exactly what's happening here and it's really cool to, to watch that happen. Mm-hmm. Before we end, I have a couple rapid fire things I wanna run by you, just kind of as like bottom line takeaways, because again, this is commonly talked about. We're hearing these sentences, so I'm gonna read you a couple sentences. I just want you to respond to them. How would you respond when you hear this? Because these are things we're hearing. Is

Rachel Johnson ([37:38](#)):

This the true ca - true false quiz section? <laugh> Okay.

Courtney Doyle ([37:40](#)):

Kind of. Okay. It's what's your response? Pretend, pretend I'm Facebook. <laugh> And I say a data center's gonna use all of our electricity.

Rachel Johnson ([37:50](#)):

False.

Courtney Doyle ([37:50](#)):

<laugh> But what would, how, what would you say? What, what, what, what might be, make somebody feel a little more like, okay, we're, we have this under control.

Rachel Johnson ([37:58](#)):

I would say two things. Not all data centers are the same, which we've already discussed. And if someone is looking to invest in improving the local electric grid, building power generation and putting someone else's dollars into building up what it would take to serve it, it will benefit not just that load, but also our members.

Zach Anderson ([38:17](#)):

We, we have thoughtful and responsible caps on how this will be. Anything that's larger than 10 to 15 megawatts, it's going to be treated on its own so it won't touch the existing electric infrastructure. And all of that incremental investment will be the responsibility of that new load. So we've got our traditional co-op prudent utility practice. We also have Michigan law. And so we have to meet all of those expectations so it's not as simple as they just get to plug in and consume all the electricity at near lights go out. That's not what would happen.

Courtney Doyle (38:50):

I've got two more for you. Ready? Mm-hmm. Cherryland can just say no. If a data center wants to come here. Also

Rachel Johnson (38:56):

False. <laugh> Yeah. And, and we already talked about that. Obviously we can't just say no, but I, I can't stress enough, we do have the power to say yes if. And that's, that if is the space where we've spent a lot of, of time over the last year. I don't get to say no, but I do get to, to decide what the rules are for the yes. And I think that's a, a healthy way to approach it. And I'll also just say some of this stuff is very global. This is, this is much bigger than Cherryland, much bigger than Wolverine, much bigger than Michigan. And it's gonna require coordinated federal and regional solutions that, that we will continue to be a part of those discussions. Um, but, but, but yes if is I think the, the option available to us and how we've, we've, how we've spent our time.

Zach Anderson (39:41):

Mm-hmm.

Courtney Doyle (39:42):

Concur, Zach? I,

Zach Anderson (39:43):

I do. That's a good one. It's, it's all about responsibility. We have a responsibility and an obligation to serve, but that doesn't mean it's not without consequence and being mindful of all the things we've talked about today.

Rachel Johnson (39:54):

Yeah. And one other thing I'll add to that is, you know, and I hope our, I hope our members and our listeners know this. Uh, we have a long history of being honest with our members of doing things like this podcast. If something came along that I believed was a true threat to their, to their bill, to their reliability, I would raise the alarm on that. And I would be as public about that as I could. I mean, there's a reason I have a reputation for being a little mouthy, Courtney, right? But I mean, so I, I, I would hope that our members know that they can also trust us to raise the alarm if we think something is coming our way that we're not prepared for, not equipped for, and that will fundamentally hurt their service.

Courtney Doyle (40:32):

I think that's kind of the answer to my last question, my, my last statement, I guess, which would be if a data center comes here, my, my electric bill's gonna skyrocket. I think you just answered that by, I'm not gonna let that happen. Like <laugh> -

Rachel Johnson (40:44):

You know, I, I, I, we would not let that happen simply as a result of a single data center looking to, to locate in Cherryland's service territory, but not ev - not, there are a lot of things driving pressure on electric bills right now. And, and it is, it also, so we talk about like myths, myths around data center. Mm-hmm. They're the boogeyman in this, but they are not the only driver of it. And I think that, that goes back to we were already working with razor thin margins. We already had significant, um, supply chain challenges coming off of COVID. We already had challenges with this rapid, uh, retirement of traditional power plants and replacement with other types of power generation. Like all those things were already

true. All those things were already working their way through our cost structures and will continue to. But, but I, we will not sit idly by if a single data center were to try to locate next to our office in Grand and we thought that was going to, um, hurt our members or hurt their bills.

Zach Anderson ([41:39](#)):

Mm-hmm.

Courtney Doyle ([41:40](#)):

Absolutely. Well, thank you guys. It's been a really fun conversation about a really complex topic, but I think a really important one, to your point, to address with our members and say, "Hey, we're thinking about it. Here's what we're thinking about it." Um, and, and just engage on that aspect. So thank you guys for joining

Zach Anderson ([41:54](#)):

Us. One, one last plug I will make in terms of we do have experience in these types of contracts. We've never done them at the scale that we're talking about, but we have done unique individual contracts for large loads for better than 25 years now. And so utilizing that experience positions us to think about that scenario Rachel talked about. Yes, if. And so we have a framework to work from, and I think leaning on the experience of others allows us to identify what those challenges are. So that I, I feel very confident that we're in a position not just to talk about it, but we have enough experience amongst the teams at the, at the co-ops here at Cherryland, at our other members and at Wolverine to be able to get our arms around this and, and manage the framework for it. We have national relationships legally.

Zach Anderson ([42:46](#)):

So I would leave the members encouraged that we, we have a good infrastructure in place to manage this. We've identified the risks that we need to manage and we're prepared to support, from a Wolverine perspective, our members like Cherryland and Cherryland's prepared to support their members at the end of the line. It's just a great symbiotic relationship that we

Courtney Doyle ([43:06](#)):

Have. And we're not taking a stab in the dark, right? Correct. There's lots of knowledge around

Zach Anderson ([43:10](#)):

Us. We're not starting from square one at all.

Rachel Johnson ([43:12](#)):

Yeah. No, and we have, um, w- when things get hard or when I, when I worry about how we're gonna handle a particular problem, the one thing I always kinda have to come back to is how deeply I believe in our business model. We have such a strong values driven business model, right? We were built to provide for, to, to provide for the long-term health of our community. And we, we, we, at that time, we knew that people who live and work in this community are best suited to know what matters to this community, right? And so I'll also just point out, I don't, I, I don't actually lose a lot of sleep about this. I have so much confidence in our business model, in our values, in our significant and documented history of making long-term investments that are tied to the really not all that exciting things like electric reliability and affordability, right?

Rachel Johnson ([43:59](#)):

Like affordability politics make me laugh. We've been affordability politics since 1938, right? We are affordability politics. Yeah. So like I, I just, I, I hope our members, um, also remember like we're still the same people we've always been with the same values we've always had. And so, uh, again, like these are big heart challenges, but I, I, I sleep like a baby on that one at night.

Zach Anderson ([44:19](#)):

And, and two points on that. Our, our directive and our charge, whether that's Wolverine or Cherryland, doesn't matter, from a co-op standpoint, is to assign costs to the load that's responsible. That doesn't change. It doesn't matter if it's one megawatt or 1,000. That doesn't change. And then the other is we don't have any other quote unquote master to serve. Our responsibility is to our members. There's no shareholder to please. There's nothing. There's nowhere to hide the peanut. All those dollars come back. And that's the beauty of the business model is that it's always cost-based and it's always member focused.

Courtney Doyle ([44:55](#)):

What a wonderful message to leave us. I did, I didn't see us ending. I love it though. That's because that is what this is all about. That's why we do this. That's why we have these conversations. So thank you guys both for - Thank you. Sharing your expertise in this. Join us next time for more Co-Op Energy Talk.