## Rachel Johnson, Cherryland Electric Cooperative (00:15):

Welcome to co-op energy talk. I'm Rachel Johnson, the member relations manager here at cherry land electric cooperative. You are listening to part two of a two part co-op podcast series with Zach Anderson. Zach is the CFO and vice president at Wolverine power supply, our power supplier, and Zach and I talked in part one about the energy markets and in particular, how volatile they are right now and what that might mean for a utility that was heavily exposed to buying power out on the energy markets. In this part, we give the good news part of that story, which is really digging into how we have structured our power supply portfolio to protect our members against that volatility. So we're gonna first kind of discuss what our power supply portfolio is, what it involves in terms of planning and structuring it, how we take a really a long term approach to doing that in order to give as much stability and flexibility as we can, as we navigate, uh, an unprecedented time of volatility in the power supply market. So please listen in as Zach and I discuss the power supply portfolio and how it impacts cherry land members.

# Rachel Johnson, Cherryland Electric Cooperative (01:21):

So I'm here today with Zach Anderson, from Wolverine, and we've had the opportunity to talk in a previous podcast about the energy markets, how they evolved and really talk about how they've been really, really good for our members and for electric users in general, in terms of efficiencies and cost savings. Uh, but we also wanna talk about how our portfolio is performing and how we make decisions about market exposure versus portfolio. So, so I guess where I would start, Zach is first, thank you for joining us and, uh, educating our members on this. But when we think about the Wolverine portfolio, since the markets exist and we can buy everything, we need to meet our members' needs, why don't you simply do that? Yeah,

## Zach Anderson, Wolverine Power (02:00):

I that's that's the beauty of the market is now we don't have to worry about where is our energy going to come from? And if we can access energy that we have certainty around that the uncertainty that we have is at what price. And so what we, what we do to manage that at what price, and as we think about where we are and where we expect to go over the next 10, 20, 30 years, that's how we try to think about our portfolio all the time is it's a long term thing is as we see more volatility coming, having a portfolio to manage that volatility. And what are we ultimately trying to do? We're trying to give our members competitive, stable, and certain rates pricing long term. That's our, that's our goal with the portfolio. And when we think about what's our strategy, fundamentally our strategy is to think about it like a very conservative investor.

## Zach Anderson, Wolverine Power (02:57):

You're going into retirement. You're going to live 30 more years. How do you make sure that you're positioning yourself, that you have enough income in retirement to be able to live well into the future those 30 years, we want to think about our energy portfolio, the same. We're not trying to find the one sexy stock and, and make a big win and big splash that all of a sudden rates go way down. And then five years later rates go way back up because we're no longer in that position. We're looking for long term stable and steady investment. That's how we think about our strategy is how can we best manage our members costs long term, not short term.

Rachel Johnson, Cherryland Electric Cooperative (03:36):

Well, and I love the, uh, analogy of the stock markets and investing. Cause I just think that's something most people can relate to as they think about their own retirement. But I, I think it's really important to kind of put a fine point on this idea of the amount of risk we're willing to take on for very small rewards is different when you have that long term thinking. So yes, there might be times when we miss a little savings opportunity, but what that allows us to do long term is this idea of, uh, competitiveness and stability, especially in a volatile market that becomes even more valuable. Even if you did, maybe miss that short term win. The long term payoff is so much better than the short term win because maybe you were gonna hit the lottery with your stock purchase, or maybe you weren't gonna be able to afford the next 30 years of your retirement.

# Zach Anderson, Wolverine Power (04:19):

And, and so, uh, to put a fine and specific point on that. So 2020, the best position anyone in the world could have been in, in the energy market, would've been to have no portfolio energy hit a record low since the market had existed since 2005. So the best thing to do was simply do nothing. Two years later, you would've paid all that back almost three to five fold. So you would've lost big, you would've won big, felt really good in 2020, and then two years later, it would've been gone in a matter of a few months.

# Rachel Johnson, Cherryland Electric Cooperative (04:55):

This is starting to sound more and more like my retirement. Uh, so you you've talked kind of about why we have a portfolio. Can you just explain to our members, first of all, what the portfolio is, what's in it and kind of how we define that?

# Zach Anderson, Wolverine Power (05:07):

Yeah, so we have four key and main long term components within our portfolio. So we own operate and maintain natural gas peaking plants. And what those plants allow us to do is from a reliability perspective, they're super low cost and they're reliable. They're dispatchable, they're flexible. All of that stuff we need when load is the highest from an energy perspective, what they allow us to do is that when markets go really, really high, we know that there's a cutoff point in terms of what our costs will be because we have these generators and they can provide us power at a, at a known price in those moments. And that's a key foundational, both from a reliability standpoint and from, as we're talking about here in energy standpoint. So that's really the foundation that we can build off of the rest of our portfolio. The next piece is we do have coal in our portfolio.

## Zach Anderson, Wolverine Power (05:57):

We own shares small shares in three coal plants, two on the Ohio river, one here in Michigan, that they provide long term stable energy pricing. Some of the lowest price, energy that you can find are really three things. Nationally. We don't have a lot in Michigan, but hydro nuclear and coal, low operating energy cost, and historically coal prices, unlike natural gas or gas that you buy at the pump to fuel your vehicle, coal prices are set it and forget it's steady over time. We're seeing more volatility in coal with a move away from coal and some of the global instability that we're seeing, but over the long term, super steady part of the portfolio.

## Rachel Johnson, Cherryland Electric Cooperative (06:38):

And you have the ability to store fuel on site with coal, which gives you the opportunity to purchase based on pricing and maybe store. And also it gives you a little bit of flexibility or not flexibility, but a, um, if, if with natural gas we dependent on real time delivery, I guess, is what I'm trying to say. And, and

coal operates the opposite of that. You can have, I don't know, what is it, 40 days or something like that of coal on site to run a plant. So you have a, just a, a little bit of an extra, um, redundancy there if you need it in terms of operating through a high price period of time.

# Zach Anderson, Wolverine Power (07:08):

Correct. And then the third piece. So we've got natural gas, we've got coal. And then the third piece, which is key for our portfolio is renewables right now. The majority of those renewables they're fixed priced they're long term, and they're, they're built around wind in the long term. We're looking more towards solar because there are key advantages for us in the summer months. And we do have some solar in our portfolio today. And then the last and final piece is more of a market based part of our portfolio, where we have some contracts that we sell. And we have some contracts that we buy that are really designed to give us long term stability within the portfolio. And those are more financial type transactions that we operate in the market to give us fixed price certainty within our portfolio.

# Rachel Johnson, Cherryland Electric Cooperative (07:51):

So you would come to, uh, another plant operator and say, we're willing to commit to purchase a certain amount of the output of this plant for a long period of time in order to lock in a price, right. That

# Zach Anderson, Wolverine Power (08:02):

Basically at an own price. Yep. And then what we do for that gives us certainty in higher markets in the lower markets that we've experienced. We also sell on a competitive basis to other parties. Um, we sell to some municipals, we sell the one small cooperative in the upper peninsula. And so those transactions help us keep rates lower when the market prices go down, that gives us a key advantage. So we're trying to strike a balance between high market and low market with that portfolio piece. So four pieces in our portfolio, natural gas, coal renewables, and then the market component where we're hedging our cost

## Rachel Johnson, Cherryland Electric Cooperative (08:42):

And a, and a, some significant part of our market is specific to nuclear, which is what allows us to get to that 60, 62% carbon free piece of our portfolio as the combination of our renewables or our power purchase agreements for renewables. And then, um, some market agreements for nuclear, which is something we're really proud of that we've managed to do all of this and also blend in and balanced environmental impact in our portfolio. So we have pricing, we have affordability kind of tied in there with what you talked about, certainly reliability by having multiple different sources and then, uh, environmental impact as well.

Zach Anderson, Wolverine Power (09:15):

Exactly.

Rachel Johnson, Cherryland Electric Cooperative (09:16):

So how does all of that benefit? My members, the people that I serve

# Zach Anderson, Wolverine Power (09:20):

The key benefit is that it provides stability and certainty over time. Now you don't want to pay too much for that stability because I could tell you, well, Rachel Cherryland, we could fix your energy price for the next 30 years and you wouldn't like the price. So we put ourselves in a position that we're not trying to

just well, we'll pay whatever it costs, as long as it's guaranteed, we want it to be competitive. And so by having diversity in that portfolio, all four pieces of our portfolio in play that allows us to not only ensure certainty and stability, but it also helps us ensure that we're cost competitive over time, by balancing those things. I think to give you a perspective of what it means to have a portfolio, we've spent some time talking today about this idea that the energy market, as at record highs. So what should members expect their, their energy bills to look like? Or what should they expect that Wolverine's paying for energy? Well, if we were just buying at the market, if we had no portfolio whatsoever, we would spend just year to date through the end of July, 140 million on energy cost on a normal year. That's closer to full year. That's closer to 120 million for a full year. And so through seven months, we would expect to be at about 75 million.

## Rachel Johnson, Cherryland Electric Cooperative (10:44):

So we're at, if we were fully exposed to the market and did not have a portfolio, we would be at two, almost two times what has been our historical cost of energy. And because we are in not for profit electric cooperative in you, not for profit electric cooperative, all of that would get passed directly through to the members in the form of higher rates immediately because we would have to, we would have no choice. That's where we would have to be pay. We'd have to paying, you'd have to paying your power bill. I have to pay my power bill and all that gets passed on the member at the end of the line, paying their power bill, basically.

# Zach Anderson, Wolverine Power (<u>11:11</u>):

Exactly. So again, to bring it back to where, where we would be in the market would be 140 million where the market has averaged historically close to half of that, as you shared, Rachel 76 million has been the long run average. We're a little higher than that, that average this year in terms of what our actual cost is, 79 million. So

Rachel Johnson, Cherryland Electric Cooperative (<u>11:36</u>):

It could be worse. I heard <laugh>,

# Zach Anderson, Wolverine Power (11:38):

Our portfolio has delivered 61 million of benefit through through this year. Those four pillars, all working together to keep energy down again, it's higher than the long run average, but the long run average has been a really good deal. And we're not far away from it to put that \$3 million in perspective of higher costs. That's that's real money. That's a, a big number. But if I think about it on a per member basis, what we're talking about is about a dollar to a dollar 50 per month. So \$12 to \$18 for the whole year for each of the members that we serve, if we do it on a, you know, meter by meter basis for everyone we're servicing. So I think that's a really big deal, 60 million of benefit to have that portfolio versus versus the alternative, which would be to your point, significant rate increases. When we know people are feeling the pain at the grocery store, the gas pump on and on and

## Rachel Johnson, Cherryland Electric Cooperative (12:36):

On. Yeah. And it's kind of an interesting message to have to work through because ultimately what we're saying is we are seeing higher costs. Even with our portfolio, our members have to anticipate that is going to impact their costs. We know that's gonna happen, but at the same time, the, the things that we've entrusted Wolverine to do on our behalf, as it pertains to laying in place, these hedges with our portfolio will help to make sure those increases are more reasonable. And within what I, I would argue is

kind of a reasonable bound than they would've been if we were only on the market. So I don't wanna, I don't wanna call anybody out, but are there utilities out there that are, that are more exposed to than the market than we are? And, and what, what are they doing right now? How are they approaching this?

# Zach Anderson, Wolverine Power (13:18):

Well in this, I, I don't want to pick on any individuals. Mm-hmm, <affirmative> I won't name names, certainly. But if you think about it from, uh, the steady investor standpoint, the, the market, the energy market, the third wave of the market, I'll call it 2012 to 2020, the incentive and the signal that it sent I'll, I'll take this on me, literally, everything that we did at Wolverine, that was part of my responsibility for power supply. If we waited until the next day, the deal would've been cheaper, <laugh> that, that's what the market was doing. Wait until the next day, it'll always get cheaper. It'll always get cheaper. And so that market psychology of, Hey, I'm a.com investor, the pets dot. Com's never going to blow up. I'm just going to throw my money in this and watch it go to the moon. I love crypto.

# Zach Anderson, Wolverine Power (<u>14:06</u>):

I'm gonna go invest in crypto and watch it go to the moon. That's really what the energy markets were doing over the last decade is they were incentivizing a behavior that it's always going to be cheaper, just wait until the next day and the next day. And so to bring it back to your question, there are many out there in the market that said, it's always going to be cheap. I don't need to have a portfolio in place. I'll just take what the market will do. And as we talked about, if you're in that position and you're the same size as Wolverine, you're talking about almost a doubling of your, of your energy cost and that's 70 plus million dollars of, of impact. That is real. And so that's where I think a lot of people are because it was easy to say, don't do the deal. Don't be the steady investor, ride the ride, the hot stock. It's gonna go to the moon. We don't do that. Mm-hmm

# Rachel Johnson, Cherryland Electric Cooperative (15:02):

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## Rachel Johnson, Cherryland Electric Cooperative (15:48):

I mean, we've been here for 85 years and in two, two thou 21 0 7, 85 years from now, we still wanna be here. Right? Mm-hmm <affirmative> like, we want a new board of co-op members to be thinking, wow, they really did everything necessary to keep this place in, in business to think long term and to sustain and meet the needs of the electric needs of their community. So that's, I, I love, I, I really like thinking about that story and thinking about the, the long term piece, we talked about the fact that we've had immediate savings. We've talked about the fact that what this gives us is some great stability over time, right? Mm-hmm <affirmative> so instead of trying to pass 140 million on right now, we're, we're working on 79 million, um, in terms of energy cost, let's, let's talk about, um, kind of what you see going forward. We know we're in a period of volatility, we know our portfolio is working to help us balance that volatility. Do you see our strategy changing or what, what pressures are you watching that are making you think about how to be planning right now for what we need five years from now and 10 years from now? Yeah.

## Zach Anderson, Wolverine Power (16:50):

So what we can do from a resource perspective is definitely changing. We can't Wolverine, can't go out and you're not going to build or buy nuclear. You're not going to build or buy new coal, likely I'm talking brand new coal plant. We're not seeing those two things get built in the immediate term, natural gas potentially, but it's getting harder and harder because long term, a lot of the goals and the talk out there are net zero or, um, carbon neutrality. And so even though natural gas is significantly cleaner than, than a coal plant, it still has a carbon attribute to it. And so when we're thinking long term 30, 40 year investment does natural gas make sense in our portfolio, a and B, can you permit it and actually get that

# Rachel Johnson, Cherryland Electric Cooperative (17:45):

Built? And is it fair to assume we'll be allowed to operate it for its useful lifetime? At this point, there there's a risk. There,

# Zach Anderson, Wolverine Power (<u>17:51</u>):

There there's a risk there mm-hmm <affirmative>. And so, as we think long term, you're starting to narrow the available assets that you have. So really a lot of where that lands us is onto renewables and solar and wind and partnering with members on new technology, battery storage, improves load management systems improve, but that's long down the road at this point to be able to do what we're doing now as cost effectively as we can. We're not in that world yet. The good news is for us on the renewable standpoint, our national trade association known as N R E C a, the national rural electric cooperative association that lobbies on our behalf for the first time, not for profit co-ops are on par with, for profit utilities and, and other investors when it comes to what we're formally only tax credits for renewables. And so when I say tax credits as a notfor profit Wolverine, Cherryland, our other members do not pay federal income tax. Therefore we were at a disadvantage 30% disadvantage, uh, to put that in perspective. So if we invested a hundred million into solar or wind, and we are not being taxable prior to the inflation reduction act, a taxable company could get \$30 million off of that project. We had to bear the full hundred million of that cost.

# Rachel Johnson, Cherryland Electric Cooperative (19:20):

And, and I wanna talk about the impact of the IRA, but what's just to kind of give an example of that. What we've done now historically, is we've had to work we've, we've chosen to work with, for profit developers in order to bring renewables into our system. And then we essentially enter into a power purchase agreement for those projects, because we needed an entity between us and the project that could capture the tax credits. But that adds an entity in there. That's also going to make a profit, right? That's that's their job. That's what they're driven by. So we've, we've been, we have continued to develop renewables in order to meet our members' goals, but we've been at a disadvantage in terms of the tools available to us to do it, which is what you're getting at. So talk about what the ability to, and I'll just, I'm sure everybody knows this, but for my own sake, I'll explain it. What, how a direct pay tax credit would work is instead of reducing our tax liability, we essentially get paid a cash payment, if you will, for what would have been the reduction in our tax liability. So talk about how you think we could use that and what the impact could be for Wolverine and for cherry lands members. Yeah.

#### Zach Anderson, Wolverine Power (20:21):

So what, what key advantage we have as a cooperative and Rachel alluded to this earlier, whether you're talking about the board of directors living in the communities that they serve, or you talk about the nature of our service territory, it's rural. That means there's a lot of open in some cases available land, to be able to build renewable projects, you can't build large scale, renewable projects in densely populated areas. You need rural space and you need transmission systems and you need to be connected to the communities so that you can do it in a way that respects the, the landowners and the communities that you're investing in. We have all of those advantages. We've been on the outside, looking in, working through an intermediary to be able to develop renewables in the past. We've been successful at it. We have almost 20% of our portfolio coming from renewables today. But if we want to go beyond that, I think there needs to be a blend between those contracts that we've taken on and working through a third party and leveraging those opportunities that we have in terms of knowing the land, knowing the community members and having the transmission system to be able to interconnect and build out renewables. And so that's going to be a key part of our portfolio long term, and I'm excited that we have an opportunity to be able to do that on equal footing, as other investors. That's really exciting for co-ops

## Rachel Johnson, Cherryland Electric Cooperative (21:41):

And clearly even more important when we talk about this came up when we were kind of in our market podcast, but it's certainly come up here, the number of resources available for us to develop the number of the, the diversity of resources on the grid is decreasing, right? Mm-hmm <affirmative> we know, we know coal clearly has an end date at this point, unless a significant major technological development comes along. We know that it's very hard to develop nuclear. I still remain hopeful, but it doesn't change the fact that that is true today. So the more that we, we are limiting the number of things we can develop, it becomes even more important that co-ops have the ability to develop the things that are left, right. And which for us is renewables. And we see those opportunities to leverage those to the advantage of our members.

## Rachel Johnson, Cherryland Electric Cooperative (22:25):

So when you look forward at our portfolio, you're not gonna like this question. So I'll, I'll warn you about that, but we will never go back and hold you accountable for it. If that helps kind of, what do you think it looks like we talked about that combination of natural gas, coal, nuclear, I'm sorry, natural gas, coal, renewable, 60% carbon free. What do you see? What do you see it looking like in, in the future? Is it split evenly amongst three things? Is it kind of help me think through what that might look like for our members in the future?

## Zach Anderson, Wolverine Power (22:53):

The, the beauty of it is we don't know exactly if we had all those answers, we'd be marching down the path to put exactly what we need for the next 40 years in place. And it would be easy. So this is going to change. And one of the key things in terms of the, the local connection that we have with our board of directors and that leadership, and, um, my boss, our CEO, Eric, is that we're in a position that we're always trying to be nimble and look toward. What's next, the, the beauty of our position and not many co-ops Munis investor own can say this is we have a very, very solid foundation from which to build. And when I talk about the solid foundation, what I'm referring to is we have natural gas peaking plants that are flexible, they're clean, and they're low cost.

#### Zach Anderson, Wolverine Power (23:38):

And most importantly, in today's world, they're highly reliable. And so they can be dispatched or not to be able to meet the instantaneous demands of the grid. And we have enough of it to meet all of our members' needs. So when I talk about the foundation that clean, affordable, and reliable foundation of natural gas peaking, what it allows us and frankly, others to do as we're all interconnected is bring on more renewable. So on a cloudy day, on a calm day at night, if our peakers are needed, they can turn on when they're needed and they can shut off when they're not. And what, what that allows us to do is integrate more renewables. So in the biggest picture sense, what I see based on today's technology, storage, breakthroughs, other technology breaks through, you know, carbon capture for coal nuclear, all that stuff could potentially play out and hopefully does over the next 20 to 30 years.

## Zach Anderson, Wolverine Power (24:33):

And we'll be ready for that. But right now with today's technology, the best portfolio that we can have is a little bit of market. A lot of peaking that we can rely on that can be turned on and turned off when needed. And then you layer renewable on top of that. So whatever the percentage of that is, I, I, I truly don't know exactly, but that's the idea is that if you have the resource base that we have with our peakers, it allows for massive integration of renewables so that when they operate \$0 variable cost, we get that energy. It comes back to our portfolio. If it's not windy, if it's not sunny, we have the resource to back it up. And that gives us opportunity to be at the lowest possible cost over the long term.

# Rachel Johnson, Cherryland Electric Cooperative (25:20):

I, I really like, um, kind of wrapping the, the portfolio piece of the podcast series up on that, because we talked a lot about how natural gas prices have created challenges in terms of pricing and volatility in the markets. But that doesn't mean they don't come with advantages. And, and your example of the kind of our peakers and other peakers on the system, being the foundation upon which we're able to integrate more renewables and be prepared to balance out their intermittency mm-hmm <affirmative>, uh, that's that shows there's value, even though there's volatility, there's also value to having those. And I, I kind of said this in the LA last podcast, but I'm going to say it again. And then I'm going to give you the last word on this one. The thing that I always think when you come here and talk to us, Zach, and, and I, and I'm, I'm always left with this is I, it is challenging and it is complex.

# Rachel Johnson, Cherryland Electric Cooperative (26:03):

The markets are complex, the technologies are complex. It's impossible to predict the future. The policies and regulatory paradigms are complex. But if I had to be in that kind of complexity with anyone, I would want it to be you all at Wolverine, because you're doing such good work on our behalf. And I, I have so much confidence that when you make decisions, you're doing it thinking about the person at the end of the line, who's paying the bill and who's dependent on us to help keep their business going and their home, the lights on and their kids in homeschool or whatever that is for them. Um, so I, I just wanna thank you for taking the time to come and talk about the portfolio. And I wanna give you the, the, the last word for our memories on and where we're at today and where, where, where we're going. Yeah,

# Zach Anderson, Wolverine Power (26:43):

Thank you. That's, uh, very high praise and very much appreciated because that level of member support makes what we do possible. This is a partnership in the purest sense. We're passing through cost. We're trying to look out for the member at the end of the line, just like cheerly trying to look out

for the member at the end of the line. And if we keep those things in focus and we work together to make this work as efficiently as possible, we're going to be successful. And so everything that we do is really getting ready for whatever that next thing is. And so we're, while I said, you know, our options are becoming limited. That doesn't mean that we're not trying to exhaust every option that we can. And that comes from partnership with our members trust from our members that we're trying to do what's best near and long term and ideas from our members.

## Zach Anderson, Wolverine Power (27:31):

Hey, did you ever think about this? Or I had a member ask me about that. We're member driven and member focus to try to provide that long term stable, reliable service. And if we continue to do that and keep that in the forefront of our minds, we are going to be successful because it's not what Wolverine does. It's not what cherry land does. It's what all of Michigan co-ops, that are part of this. We often refer to it as a family, what we get to do and what we get to work on together. And when we do things together, we set ourselves up to be very, very successful long term.

# Rachel Johnson, Cherryland Electric Cooperative (28:02):

Well, thank you, Zach. I, again, just really appreciate you taking the time to come in and talk to us and for all of our listeners out there. Um, I don't think this is the last time Zach will be on the podcast. It's certainly not the first time. So if you have any questions, comments, or things, you'd like us to cover in a, in a future podcast on power supply markets portfolios, please do reach out to us because we are all always excited to have him here to talk about energy. So thank you again, Zach.

Zach Anderson, Wolverine Power (28:25):

Thanks for the opportunity.

Rachel Johnson, Cherryland Electric Cooperative (28:26):

Join us next time for more co-op energy talk.