

Rachel Johnson, Cherryland Electric Cooperative ([00:07](#)):

Welcome to co-op energy talk. I'm Rachel Johnson, the member relations manager here at cherry land electric cooperative. And I recently had the opportunity to sit down with Tony Anderson, our general manager here at cherry land and Eric Baker, who is the president and CEO of Wolverine power cooperative, our power supplier. And, uh, we created a two part podcast series talking about all things, power supply. This podcast series is timely because beginning in November, our members will see the return of a power supply cost recovery charge on their bill, the power supply recovery charge, or PSCR as we like to call it is a rate mechanism that allows us to manage the volatility of power supply cost that are often outside of our control. The PSCR operates as a pass through of actual costs, paid for wholesale power, and it's generally tied to fuel costs. This means it can operate as a charge when costs are higher than expected and a credit when costs are lower than expected.

Rachel Johnson, Cherryland Electric Cooperative ([01:05](#)):

The last time we had a PSCR charge on the bill at cherry land was 2019. At that time, the PSCR was a credit because we had lower than anticipated wholesale cost. Uh, moving into November, our members will see an, a charge of eight 10th of ascent per kilowat hour. So what that will mean for the average member using 750 kilowat hours a month is about \$6 per month in a new charge on their bill. That is a direct passthrough of power supply cost in the form of the PSCR while the amount is likely to change as wholesale cost change. We also, uh, do think that we're entering into a period of volatility that could last for a little while, and we're expecting to have that PSCR on the bill for a while. We don't have any predictions about what it will look like, uh, you know, six months from now or, or a year from now.

Rachel Johnson, Cherryland Electric Cooperative ([01:51](#)):

But we do think it's a, a, a time when we're gonna need that charge in order to manage volatility. And so we wanted to sit down with Eric and Tony and just talk through what we're seeing in the power supply markets, right, and what that might mean for our members. And so in the first part of this series, uh, we talk, uh, quite a bit about the electric transmission system in Michigan. There have been significant investments made in Michigan's transmission system for a very good reason, but those investments have increased the cost of transmitting power in, um, in our system. And then in addition to that, we dig deep into the volatility we're seeing specifically tied to, uh, natural gas prices. So listen in as Eric and Tony and I discuss power supply in this first part of our two part series on power supply. So Tony, you know, we're implementing this PSCR, I'm not sure everybody fully understands kind of what that is and why we can't just absorb any, any additional power supply costs. So can you talk a little bit about

Speaker 2 ([02:48](#)):

That? Sure. It's the power supply cost recovery mechanism, and we use it to balance our power supply. We, we set a budget for power supply and when we go over or under, we have to Institute a, a PSCR charge or a, a credit in, in the case we're looking at is gonna be a charge. So why can't I just absorb that for every dollar we spend 70 cents goes to power supply. And so the other 30 cents is all I have for wages, poll, trucks, wire, all the materials, everything that it takes to run cherry land is on that 30 cents. So if I miss my power supply budget and I take it out of the 30 cents, I, I'm not gonna make margins to cover our debt and our mortgage obligations or have money to pay back in capital, capital credits like we've been doing. So it's, it's just is fair and equitable to put it on the power supply, where it belongs then to, um, reduce our equity and erode our strong financial position on the other side.

Rachel Johnson, Cherryland Electric Cooperative ([03:51](#)):

And ultimately the PSCR is one of the best tools we have to manage volatility and power supply markets. So we're, um, really lucky to both Tony and Eric here today to talk about that. And I thought we could just kind of talk a little bit about what is driving the volatility we are seeing today in power supply and Eric, I know one of the, one of the things we're hearing about is that the volume of the grids peak is increasing. Can you explain what that means and how it's impacting our cost? Sure. Let's, uh,

Speaker 3 ([04:21](#)):

First let's, let's talk about the PSCR history is, uh, really these are regulatory mechanisms that were put, put in place in the, um, original oil embargo days in the 1970s. Uh, back in the day, utilities used a lot of fuel oil to generate electricity. We don't any more, but, um, the increases in the fuel costs were so high that utilities were doing rate cases every two to three months and couldn't keep up. So we, we, we came up with this idea, really not just in Michigan, but around the country of these fuel cost adjustment mechanisms. So that if there were things that were out of our control, both bad news or good news, we could just pass that back to the customer, cuz we're not trying to make, we don't make any money on that fuel cost. We need to simply recover so that we can pay our bills. So that's sort of the history of these mechanisms. And even when, when cherry Lynn went to self-regulated status in 2008, uh, around that timeline, July, 2009,

Speaker 2 ([05:22](#)):

We,

Speaker 3 ([05:22](#)):

We, we still kept those mechanisms because they're so effective and Wolverine has a similar mechanism that it uses with its members. So it, it really, uh, it's an important financial tool for us. Um, really the, the two things that are driving volatility right now, uh, one is volatility and other is just cost increases. Um, so on the volatility, natural gas prices are much higher this year, almost double than what they were last year. And you think, well, does Wolverine burn natural gas, some, but the market really follows natural gas prices. And we do buy some of our energy on spot markets for good reason. And, and so when those prices go up, uh, we, we recognize higher prices, uh, in the market. So that's on the that's on the volatility side, on the cost side. One of the costs that's completely out of our control is, uh, increasing cost of transmission.

Speaker 3 ([06:15](#)):

Um, everyone in west Michigan, whether you're consumer's energy, customer, cherry electric, or, uh, traverse city, light and power, we all pay the same exact rate for transmission. Uh, each of those entities has some transmission, it's all rolled into a pot, it's spread out and everyone pays the same rate. So it's not to different for trailing than it is for any other utility, but those costs are up almost 30% or in the case of Wolverine, um, almost 10 million a year higher than they were just in 2016. So those costs have really gone up, um, in the last few years, what, what have

Speaker 2 ([06:56](#)):

We done between 2016 and 2021 with the increasing transmission cost?

Speaker 3 ([07:01](#)):

Uh, essentially it's about a billion dollars of transmission investment in, in Michigan in this region of new, new transmission or in most cases, replacement of older transmission that was largely built in the 1950s

and sixties. So a lot of investment by Wolverine and transmission, but also by, by other utilities as well in our region.

Rachel Johnson, Cherryland Electric Cooperative ([07:24](#)):

So let's, I wanna dig a little more into the transmission side of things, cuz we really have not talked a lot about transmission on the podcast. It's just, I mean, I say this with an engineer in the room, but it's just not the sexiest of, of concepts, but we are seeing this massive investment, partially aging transmission infrastructure, but also partially because of trends we're seeing and where we generate power and where we use power. Can you talk through some of that and why what's, why this investment needs to happen?

Speaker 3 ([07:49](#)):

Yeah. So two I'm really glad you raised that point because there's two things that are happening. One is a lot of this is age related. Some of it is load growth related as more power move over the grid, but also a, a significant part of this build out is changing where power is, is changing, how we move power on the grid. So we used to in Michigan have a lot of coal plants that were on the perimeter of, of the state. So if you think of the mitten of just follow around the mitten in, and, um, we had nuclear plants in the Southwest part of the state and big coal plants up up the west side of the state. And then we had coal plants on the east side of the state and nuclear plants and all that power in Michigan, essentially flowed from the lake shore to the inside of the state. Now drive to Lansing. When you drive through, uh, us 1 27, you see lots and lots of wind turbines. You see a lot of wind turbines over in the thumb area. And so we're moving power from in many cases now, especially on windy days, we're moving power from the inside of the state to the outside of the state. And as those plants have come online, we've built more transmission to move those, to move those, uh, kilowat hours in a different way.

Rachel Johnson, Cherryland Electric Cooperative ([09:04](#)):

I think that's such an important point because that is also a part of the cost of the transition towards using more renewable energy. It's not just the cost of building the renewable energy. It's also the cost of change, changing how our grid has to work in order to incorporate that while maintaining the reliability that all of our, our members have come to expect.

Speaker 3 ([09:22](#)):

That's true. And, and it's a real thing and it's going to continue, we'll need to build additional, uh, transmission in Michigan. Typically this does not mean new transmission corridors. It simply means taking existing corridors and replacing those just like Wolverine has done with taller structures, uh, larger conductors so that we can move a lot more power over longer distances than, than we did in the past.

Rachel Johnson, Cherryland Electric Cooperative ([09:47](#)):

So, um, just before we move, I want to go back and talk a little bit more about what we're seeing with generation trends, but before we go to that, you know, we've seen a lot of investment, clearly it's driving up our transmit cost. Are we done? Or if you were to put on your, look in your crystal transmission ball over the next decade, you know, how much investment is left to make or, or

Speaker 3 ([10:07](#)):

I think there's, there's two, uh, two answers to that question. One, Michigan is really blessed with one of the most robust interest date. So within the borders of Michigan, one of the best transmission networks in the country, we have a really strong network, um, much stronger than many other states to our west. And so we're blessed in that regard. Um, so in terms of the age related replacements, I think some of that will slow down. What is not E easy to figure is the additional high voltage lines that are going to be needed to bring more power into Michigan from other places. Michigan is sort of constrained. We don't have many outside transmission PLA uh, flow paths. And if we're going to make a major move toward more renewables and shutting down more coal plants, we are going to need a lot more transmission from the outside to keep our lights on.

Speaker 2 ([11:05](#)):

And that's because we're not building in inside of Michigan.

Speaker 3 ([11:08](#)):

That's because of two things. One is we're not really building any fossil generation in Michigan and given the intermittency of, of renewables, wind, and solar, where you need to move that from areas where you've got some weather diversity and solar diversity. And I think we're gonna be moving power over bigger and longer distances on the grid in our future, if we're going to achieve the decarbonization goals that, um, that we're talking about of 80 to a hundred percent. Yeah. But

Speaker 2 ([11:38](#)):

Sun for solar in Ohio and

Speaker 3 ([11:39](#)):

Indiana very much so. And we see it in market pricing. Um, we have, uh, lots of clouds, especially in the, especially within the snow that we all love and enjoy up up north, but it also makes for more, for more cloudy days

Speaker 2 ([11:54](#)):

For us, I'm not thinking love and enjoy, but <laugh> endure and put up with maybe

Speaker 3 ([12:01](#)):

Love and enjoy. I'm a native. So I love it.

Rachel Johnson, Cherryland Electric Cooperative ([12:04](#)):

Embrace the seasons. Um, so along the lines of, of generation, can you just, both of you talk kind of give us an overview of, I, the last time we talked last couple times, we've talked about generation here. We've either been talking about a big project that was happening, right? Like it was specific to something that was being built, but in general, if you were to describe what's going on with the electric generation landscape in Michigan, what, what types of projects are on the are, are being built or at least in the process of being permitted, what's being decommissioned. What does that look like?

Speaker 2 ([12:33](#)):

Go ahead, Eric. This is your wheelhouse.

Speaker 3 ([12:36](#)):

Well, and on, in terms of new generation for traditional sources, natural gas, coal, nuclear, very little, um, no real, um, projects of any size are, are being discussed. Lansing's potentially replacing oil plant with a natural gas plant. It's fairly small in the scheme of Michigan's total output. There's one project that may be getting built in the Southwest part of the state. It's not clear to us whether that will go forward. So very little in the cont and sort of in a traditional context of fossil fuel, all the focus is on really two things. One is how fast will Michigan's coal plants be retired. So sort of anti generation generation being retired and going away, not new generation. And then how fast can large scale renewables or broad scale renewables be deployed in Michigan? Can we achieve, can we achieve the deployment of renewable generation as fast as, um, some of the coal plants are being

Speaker 2 ([13:42](#)):

Retired and who is doing the math for a thousand megawatts of coal being retired, where's the thousand megawatts of solar wind or gas to replace it, who, and I'm talking of maybe the whole grid who who's the keeper of the math, cuz I that's what I worry about when it comes to transmission generation. If, if we're not building enough new stuff fast enough, at some point we're shutting down more than we're building and when do we get to zero?

Speaker 3 ([14:09](#)):

Uh, I I'm very uncomfortable with that question. Not because I disagree with it because I don't know the answer to it. Right. I I'm nervous. I'm I'm mostly nervous about the, the, the five, five to 10 year horizon. Um, I don't see enough renewables being built fast enough to replace the amount of energy we're losing. Um, the second bit of it is that to what you, what your feelings are regarding coal. Um, it is coal that keeps our lights on today and there is no technology that can keep our lights on in a polar vortex today, uh, for a 30 day polar vortex like we had in, in 2019 and, and Wolverines peaking plants are being dispatched by, uh, by the Indiana market. They're the Midwest market were being dispatched for 30 consecutive days, 24 hours a day. And they were designed as peaking units to come up and come down each or only on the coldest days. And we're running those 24 hours a day. And if we, when we lose our coal plants, it is not clear to me how we keep the lights on five and 10 years from now. It's very much faith based planning that's happening at this point. Okay.

Rachel Johnson, Cherryland Electric Cooperative ([15:28](#)):

That would make me slip. Good. Right. <affirmative> okay. Let's turn this around. I'm just kidding. But so you talked about peaking and I actually just make sure our listeners are following along. I want us to talk a little bit about Alpine. So when, when Wolverine built Alpine, it was built as a peaking plant. Yep. In, in kind of a more traditional mindset, what would you, how, how, how many hours a year or days a year would you, would you build a peaking plant assuming that it on a run

Speaker 3 ([15:52](#)):

Traditionally you'd build it for 10 to 20% of the year. So 500 hours to say 1500 hours a year. Something like that. And Alpine has consistently been running over 2000 hours a year since we built it.

Rachel Johnson, Cherryland Electric Cooperative ([16:05](#)):

It's terrifying. But in addition to that, it also helps explain some of what we're seeing with volatility, right? So if you're running Alpine, running natural, a natural gas plant where you might have historically been running, uh, coal, which is a more stable cost fuel source yep. That introduces more volatility in the

market. Alpine can't be the only natural gas peaking plant that's running more than would be expected. Right.

Speaker 3 ([16:27](#)):

That's correct. And it's, that's why natural gas essentially sets the price of, of um, of energy in, in the market. So if you wanna do easy math, you know, if you see a trade wagon, it says, uh, the Michigan hub gas price is, or ish Citygate gas prices, \$3 multiply that by 10 and that's today's market. Um, so last year that that number was about two. And this year that number is about five. So when our peaking plants are running, that means electricity, um, is getting really expensive for everyone in, in the Midwest.

Rachel Johnson, Cherryland Electric Cooperative ([17:07](#)):

Okay. So we've, we've talked through some, some challenges that we're facing, but I think it's really important to reiterate that despite all of this, the PCR chart we're looking at, putting on the bill is gonna come out to be about \$6 for an average member per month. Mm-hmm <affirmative>. And, and can you talk about what Wolverine and, and cherry land, as one of your members have done to put us in a position to absorb these kinds of challenges with what is really a very reasonable, um, I mean, to, to like all of these things we're building, what did you say? A, a billion dollars in transmission and seeing twice the, the cost of natural gas we did last year, and yet we're still able to manage our cost. Why?

Speaker 3 ([17:47](#)):

So our, you know, we have, we have competing objectives at Wolverine. We want to, we want to be competitive in our power supply, but our members also want us to be stable, but they don't want surprises. And so, um, on top of that, we want to be agile as markets evolve. We, we don't want to be, we don't want to be held down by let legacy assets that, that make us unable to move and shift directions. Um, we also want to be responsible. We want to participate in decarbonization and not do it at the expense of our core mission of keeping the lights on. And that's a really challenging balance to try to find. So we have a lot of deliberation and dialogue with the, with the member CEOs like Tony and also the Wolverine board to try to figure out what's the right blend.

Speaker 3 ([18:32](#)):

So we, we to hedge price volatility, we do two things. One is our members have allowed us to invest in generations. So that, that creates sort of built in price hedges for us because we can control the market. Or we, we control the impact of, of market swings based on our generation. Number one, number two, we purchase long term contracts as financial hedges so that we're not always following the market, but we have some price stability. And, and essentially Wolverine only has about 15% of its per portfolio exposed to a market swing during any year to minimize that.

Rachel Johnson, Cherryland Electric Cooperative ([19:17](#)):

So in the, in the second, um, part of this podcast, we're gonna talk a little bit about some of the programs we could we see in the future that will involve a much, a much more, um, instep relationship with our end use members in terms of managing some of these cost. But before we wrap up this piece, really talking about what's driving this volatility, I guess I would ask both of you to weigh in on, are there any last thoughts you have on why we are, where we are and, and what our members can expect going forward in terms of power supply costs

Speaker 2 ([19:48](#)):

When it comes to transmission, why we are where we are it's because we've made good investments. We we've focused on reliability. We've focused on maintaining our system and very proud of that. And I think the other transmission providers in the state of Michigan has done the same. So people should leave this part of the podcast, knowing we have a solid transmission system in Michigan and that not gonna be part of our problem going forward. We're, we're gonna have problems on generation, but transmission we're, we're solid there.

Speaker 3 ([20:20](#)):

Yeah. I agree with Tony on the transmission, it's an, I think of transmission as an investment. Um, you make a major improvement in your house. It costs money, but you get value out of that for a long time. And that's what transmission does it does. It does two things for us. It, it gives, it keeps the lights on in stormy weather. Uh, if you contrast that to Louisiana, they've lost every transmission line into new Orleans. I mean, seven major transmission lines. It takes weeks to rebuild that, um, this year and the storms we've had in Michigan, I think in one instance, we had one outage for, uh, like one or two hours at Wolverine that allows us to redeploy our crews to help Tony and other co-ops up north, uh, for storm restoration work. And that's really important. And a good transmission network also creates more opportunities for purchasing and more opportunities to acquire additional renewables. That again, keep our cost down long term. So the transmission cost is largely out of our control, but it also creates other opportunities. So I see that as more of an investment in, in our members' future.

Rachel Johnson, Cherryland Electric Cooperative ([21:26](#)):

Yeah. I think that's a great way to think about it. And I think that hopefully the takeaway for our listeners is that yes, we've made these investments and yes, we do have to pay for them. We didn't wait until we had massive reliability issues to make them, we made them proactively. And as a result of that, it's going to help us manage the volatility and maintain the reliability our members have come to expect from us. So the, that was a great conversation about some of the trends we're seeing in power supply right now. Uh, just a reminder, this is a two part series. And in part two of our deep dive on power supply, we're gonna talk a little bit more kind of future looking about future trends that we see in the wholesale markets and in our power supply costs. And then talk about some of the things we think are opportunities. We think we have to help control those costs. So if you're interested in learning more about the power supply cost recovery adjustment, we are talking about here in this, uh, podcast series, head on over to cherry land, electric dot co-op and read Tony's managers column on the PSCR. Again, I'm Rachel Johnson, the member relations manager here at cherry land electric cooperative, and we hope you'll join us next time for more co-op energy talk.

Speaker 4 ([22:36](#)):

I.