

Rachel Johnson (00:06):

[inaudible]. Welcome to Co-op Energy Talk, I'm Rachel Johnson, the member relations manager here at Cherryland

Rachel Johnson (00:11):

electric cooperative. One of the trends that we see dominating our industry in the next few years is beneficial electrification, which is a super technical term or a super technical way of talking about the idea that using smarter electric appliances to replace older guests powered ones might make sense and might help accomplish some of both our clean energy goals, but also our efficiency and home comfort goals. Uh, I'll give you a maybe a little more specific example of what beneficial electrification is. One of our trade magazines, rural electric magazine summed it up quite nicely in a recent article. They said there are four pillars of beneficial electrification. One, save money for electricity, consumers and providers to reduce environmental impacts. Three, create greater grid flexibility and resiliency. And four, improve the quality of life for members in their communities. And basically any product or service that checks at least one of those four boxes without harming any of the others would be considered a beneficial way to use electricity.

Rachel Johnson (01:14):

Utilities and consumers are increasingly really interested in this trend because we see it as an opportunity to take advantage of technological advancements and innovations that are making electricity more attractive. So recently I sat down with Sam Hogg, who is the director of business origination at Wolverine and Tony Anderson, some of you may know him, marathon runner, extraordinary and captain of the Cherryland ship to talk about beneficial electrification. And here's what they had to say. Pretty much. So Sam, I know it will rain set load growth is a strategic priority several years ago and we haven't really talked about it much on the podcast, but like how's that going?

Sam Hogg (01:49):

Uh, it's going really well. So, you know, Wolverine is a cooperative achieves load growth in two main ways. One is, uh, obviously helping with load growth initiatives within the distribution co-ops, which we serve. Um, that could be as simple as trying to attract new economic development to the area. Um, and talking about ways, uh, to, you know, switch over to things that are electric like we're going to talk about today. Um, but our two main initiatives are, are, uh, are building up our, uh, member load so that, you know, talking about things that can increase sales within the distribution cops we serve. And then also, uh, selling excess, uh, Wolverine generation to other utilities. You know, uh, easy way to think about our business is everything from, you know, generation to transmission down to distribution is like a big pipe and we size that pipe for the, the one or two days a year where we have to fill it. And then all of the rest of the days there's air in that pipe and that air in that pipe is lost opportunity for our members. So the, uh, the more sales we can get, the more water that flows through those already built pipes. And, uh, that impacts bottom line because that means more sales for a co op they own and the generation transmission co-op that they also own. So,

Rachel Johnson (03:06):

and I know it's not the purpose of, of the kind of conversation we're gonna have today about beneficial electrification, but I do want to point out that Wolverine's been very successful in helping a lot of municipal utilities meet their power supply needs by selling to them as well in both Indiana and now in Michigan.

Sam Hogg ([03:22](#)):

Yeah. We, uh, when you look at other utilities that are aligned with our mission of, uh, you know, affordability and reliability, municipal utilities often fit that bill. Um, so they're very likeminded utilities. We, uh, starting this year we'll be serving, um, five or six new, uh, utilities in Indiana. Um, all municipal, we already serve one non-member, uh, cooperative and Michigan and onto noggin, uh, rural electric. And then, uh, in 2025, we'll be serving our first Michigan municipal and [inaudible]. So those, that kind of speaks to filling up that, uh, extra air in the pipe. And speaking of that air in the pipe, almost extra air is there. If we were to grow the load at Cherryland and Wolverine. Sure. And all the members of Wolverine, how much could we grow it today? I think are there in our pipe is more limited by generation that we have, uh, in service today, there's probably an extra hundred megawatts in, in this, uh, service footprint or in the Wolverine service pro footprint that we could grow.

Sam Hogg ([04:24](#)):

So almost another distributor, another Cherryland we could grow. Now that being said, uh, there are things that could, uh, fill that in that aren't just finding new utility, new, uh, distribution utilities to serve. If our existing distribution members grow or you attract a large industry, you know, a data, a large hyperscale data center alone could fill in that or you know, half of that void. And then all of these things happen over time. So, you know, Wolverine is always rightsizing our generation portfolio and sometimes that means decommissioning existing plants and replacing them with, you know, newer renewables that are lower capacity. So, uh, endless growth for Wolverine isn't necessarily the goal. It's, it's growing to a level where we're, uh, we're, we're performing better.

Tony Anderson ([05:10](#)):

certainly. But the, the point for our listeners is we have a lot of room to grow without adding infrastructure and spending more money. We can, we can grow a lot and when we grow, that lessens our costs for everybody that we're currently serving.

Sam Hogg ([05:24](#)):

The pipes are already built. Yup.

Rachel Johnson ([05:26](#)):

And certainly this conversation about beneficial electrification is a part of that is uh, it's about helping us to make sure we're building load at times where maybe not using all of the, uh, the capacity in the pipe. So one thing I find really interesting, and I'd love to hear both of you weigh in on this, but for years the general thinking has kind of been we should use less electricity and we have like kind of a long history of regulatory and um, laws and things like that that, that are pushing us to incentivize people to use less. But what's really changing now the, the public conversation is shifting towards wanting to use more sure. Based on this idea of beneficial electrification, what has changed to get us to that point?

Sam Hogg ([06:05](#)):

You know, I think a couple, there's a couple of dynamics that are in play. The first is it's getting harder to just use less electricity. A lot of the low hanging fruit with, you know, the initial energy optimization movement, which some of it is regulatory mandated and some of it is just people's choice to use less energy. It's getting harder to do that. You know, you can only change out so many light bulbs in your house. You can, a lot of that stuff has been happening over five years. So we're getting to a point where that's plateauing and um, or leveling off and you know, kind of the shift of beneficial electrification in my

mind really is occurring around three different things. The first is that a lot of the appliances and gizmos, things like electric cars, air source, heat pumps, uh, you know, uh, geothermal heat pumps, those things are starting to get better. And from an economic end use point, uh, uh, with, with their competitors in the, in the fossils, uh, world. So an electric vehicle, you know, dollar to dollar, you could make the comparison. It's getting closer, but the user experience is also better. Um,

Rachel Johnson (07:14):

I, you know, weigh in on that cause you're absolutely right. It's not just that people may have been before. You would only make that decision because of some, I don't know, devotion to electricity, which we can all understand and relate to. But now it's like, no, I really love this experience of having this appliance or this HVAC source or this vehicle in the case of electric vehicles more than I liked having my other gas powered.

Sam Hogg (07:34):

And you can tell that based on how they're marketing them, they're no longer marketing and you know, gases at record lows and an electric vehicle sales are, are on the upswing and they just don't market them based on the fuel savings anymore. They market them on the driving experience. I'd argue the same thing as true with the in the heating world. So I have a dual fuel, um, I have a dual fueled furnace at home and I always know when I'm running on electricity because my house is more, uh, [inaudible], the air is more conditioned and the dehumidifiers on more and all that stuff. So there's just better experiences associated with electric things. So, you know, so that's number one is some of these things are just better. Uh, the, the second thing is just diversity and that kind of plays to the economics. But when, when your gizmo is tied to a single fuel source, um, then you don't have the diversity, you know, you have more chances in a swing in that when it's tied to the electrical system, we use a variety of fuel sources, which is why electric rates tend to be more stable than propane prices or natural gas prices and all that. So, uh, diversity is always good. And then the third is obviously the, the environmental implications. The, there's probably no industry in the world that's decarbonizing faster than the electric power industry. Now granted we're starting from a pretty high point because we're making a shift from coal and oil plants and all that to more clean, natural and renewables. But to take advantage of the benefits of that. And when you start thinking about how can I run my dishwasher on something that is, that is low carbon, your only path to that is electricity. Or how can I, can I use things that I've traditionally used fossil fuels on and make that little carbon that you're, your pathway to that is electricity.

Tony Anderson (09:15):

And that's where I would like to weigh in because that's what people need to realize is electric coops have done a great job of decarbonizing their power supply portfolio at Cherryland we're over 60% carbon free, so it only now's our time to sell electricity because we now have a product that's far less carbon intensive than it used to be.

Sam Hogg (09:37):

Right. And an electric vehicle for all the environmental possess that it gets is not all that environmentally friendly if it's charged with something that's very, very high carbon intensity.

Rachel Johnson (09:47):

So sure. Yeah, absolutely. So it's interesting because in addition to the, well I guess I would say part and parcel with this move towards having a cleaner electric pro portfolio is that much of that electricity is coming from renewables, which are very intermittent and there's such a nice symbiosis between intermittent generating sources and then load that we can control and move across the peak. Exactly. That's another and it goes back to your pipeline example. That's the other thing that's driving this from the industry. So not just from the public perception of beneficial electrification, but from the industry as a whole is looking at how do we, what do we do with this power that's tons of wind power generating in the middle of the night to make it useful.

Sam Hogg ([10:24](#)):

Right. And the, you know, in a lot of that, a lot of that intermittency right now is being met with gas peaking in the future. Uh, I think storage will have a huge element of that and it's not just big utility scale storage that will, it's the fact that we can load up your cars every night with the fuel source that they need this effect that you can set your new dishwasher or washer and dryer to run at two or three in the morning when you can get an incentive to do that. So, uh, it's kind of a, it's how do we keep more water flowing through that same pipe as much as possible. Yup. Better utilization of the assets. We have.

Tony Anderson ([11:00](#)):

Another way to think about beneficial electrification is strategic electrification. How can we do some activity today with electricity that we may have used gas for yesterday? Exactly. And that benefits everybody. The consumer benefits with stable prices, the utility benefits with increased sales, which leads this state continued stable prices and then the environment wins regardless if you believe in climate change or not, environment's going to win because we're going to use carbon-free resources.

Sam Hogg ([11:33](#)):

And one, one thing that's been interesting too, you know, I think the, the push back on more renewables is always the intermittency thing. But what we're seeing from the utility is from a generation utility is that the more you layer those different resources on top of each other, solar and wind in different locations, in different geographies and all that, the more it starts to look smooth. The peaks and valleys all start blending together and it starts to look more like your traditional baseload coal or nuclear plant. And so it's, it really is a, all of the above type strategy. And that's why we've been very, uh, focused at Wolverine on having a very, very diverse portfolio. Because all these intermittent resources that people kind of pushed to the side and say, it'll never be the solution. When you start putting them on top of each other, it starts to look like the solution.

Rachel Johnson ([12:20](#)):

So yeah. And so one of the things that we've kind of hinted at and circled around here is that it's not just about the utility doing all of the planning, but the consumer is not going to play a role in Tony. I want to quote something that you wrote recently for you. And here we go. This is my best. Tony voice. Yeah. In the decade ahead, consumers will be tasked with the responsibility of making a low carbon choice, saving the environment will evolve from a utility responsibility to a consumer choice. Can you expand on that?

Tony Anderson ([12:47](#)):

The utilities in, I've been at Cheryln 17 years now and in that entire time we've been challenged by the environmental groups to do better, be better, reduce your carbon footprint. And we've always railed

back with, we gotta be affordable first and we've maintained affordability and we've now, like I've said previously, we're over 60% carbon free. So maybe we can do better than 60% and we're certainly going to try if we can keep the prices affordable. But now that we've reached a significant level like that and the other utilities in the state are at that level, I think it's, it's changing the paradigm of now it's up to the consumer. You've been railing on me for 17 years to be better. I'm much better, I'm way better than I was 17 years ago. Now what are you doing? Are you still mowing your GAT more than your grass with a gasoline lawnmower? Are you still heating your house with a propane furnace or a natural gas furnace? Why is that? It's on you. If, if we want to continue to save the environment, if that's what you believe in, and that's what you want to do, it's time for you to take action. And when you take that action and electrify your house, everybody wins regardless of what you believe in the climate change. If my sales go up, I can keep my rates stable. So it's, we're at a point of it's win win if the consumer steps forward and makes those improvements like maybe an Evie in the future. EVs are huge for us.

Rachel Johnson ([14:17](#)):

A ton of potential. Yeah. And I think that from the consumer experience side of things, technology is evolving to the point where it's not, it's easier for me to use to incorporate all these different technologies into my home. Think of your lawnmower for example. I schedule it once, now I can watch it on my phone and I never really have to do anything unless it gets off the rails. I can do that same thing with my lighting, with my heating, everything. Right. And so to the extent that we have tech savvy consumers, these types of things can be really easy for them and even fun for those of us who nerd out on it. Um, and I think that will, that will help drive that consumer adoption of what will ultimately be electrified.

Tony Anderson ([14:54](#)):

Cold water heating is a great, simple example. Everybody can do, you know, you may not be able to afford an air to air heat pump or a ground source heat pump, but we all need hot water. So next time you need a hot water heater, well what choice are you going to make?

Sam Hogg ([15:07](#)):

I think too, um, it seems like over time affordability and a kind of low carbon has, have always been in, you know, at arms with each other. And I think the difference now is that because co-ops have invested in being very, very affordable, that's enabling some of the things that wouldn't normally be considered if you're, if you're looking at the economics between something electric and something that's fossil, uh, solely fossil powered, the fact that you are 50% cheaper because you're at an a or a, a member of a rural power co-op versus a neighboring investor on utility that just bolsters that case. So because you've had w whether you, if you just shove the experience to the side, your fuel source for what you're, or you're thinking about buying is a third less than your neighbors. And so that may weigh into your purchase decision.

Rachel Johnson ([16:03](#)):

Yeah. Well, and, and did just, I guess put, put that more bluntly. If I'm going to buy an electric vehicle and plug it in at my house, it's, my return on my investment is going to be shorter than if someone buys an electric vehicle and plugs it into a house served by a different utility. And that makes me happy all the time. Just super happy. Um, so then the other thing that's interesting, I think in all of this in terms of co-ops being uniquely poised and you know, we've got the price thing, you've got the clean power supply

thing, but also I think that the, our approach to our relationship with the consumer is naturally ready for a, we're all in this together. Let's figure out how to make it work.

Sam Hogg ([16:41](#)):

Right. Um, I remember, uh, when I was growing up, my mom was part of a food co op in our little neighborhood food co op in the area and they'd buy it wholesale and they'd be staffed by volunteers and all that. And the whole goal was increasing the sales of that organization so that the people that actually put in the work and were members, um, could get the benefit of that. And now you have this amazing chance that you should be rooting for your rural distribution co-op to have more sales because you own it and that money is real and when they do better and when the G and T that they own does better though, that those dollars flow back to you as owners. And it's not that I think Wolverine and Cherryland have a great precedent of making sure those dollars are returned to their member consumers and, and making that tie that how I, I do want to fill up those pipes. I own a portion of this. Yeah.

Rachel Johnson ([17:37](#)):

Yeah. And using, using what we've all invested in together more efficiently. But in addition to that, everything we do that makes our work cheaper, we do pass it on directly in the form of lower rates. Right. We don't have any incentive to Pat our rates in order to have profits because we're not for profit. And so it's, it's, it's a really good time, I think, not just to be a co op, but more importantly to be a member of a co op and certainly in the Wolverine family. Absolutely. Um, so then I wanted to just kind of, you know, we've talked about all the good things, but we still do sometimes see sluggish adoption of some of these beneficial electrification technologies. So I would love for your thoughts on what are the, what are the biggest barriers that are still existing, um, for consumers that are to keep consumers from converting to electricity of, from gas powered technologies.

Tony Anderson ([18:18](#)):

It's obviously cost and education. I don't think they're totally aware of what, of what EVs can do for them yet. And I think we've had ground source heat pumps in the industry for a couple of decades now, but I think people really don't understand. And even the air to air heat pumps, I don't think they understand how it can take cold air and make warm air in the room. Uh, I think we need to do a better job of education and then educate people on the price and the return on that price. So education is key.

Rachel Johnson ([18:50](#)):

Yeah, absolutely.

Sam Hogg ([18:51](#)):

I think that's a big part of it. People need to experience what these, uh, devices are and what these, what they can do. Um, and then, you know, we're addressing it already through incentives, uh, at the, at the district vision member level of being able to bridge that gap on the fixed cost of changing. So we're taking a hard look at what gives most can we put out there and put in people's hands that really have a win win for, for them and the electric co-op and making sure that we find a way either through rebates, you know, and historically a lot of this has been done through energy optimization, but now that the paradigm is shifting to things that actually use more electricity instead of less, we have to find the same sort of incentive making. Um, because we do all, when, when these devices get get put in people's houses, it just, it just works.

Rachel Johnson ([19:42](#)):

Yeah. And to your point at Cherryland we've kind of as a, uh, I guess an early adopter type of an initiative put a lot of uh, really attractive rebates out there for our members who are interested in fuel switching. But in the, in the long run you would hope your transition off that kind of a model into something. It might be more rate right based. Exactly. Then help incentivize people using those technologies. Then the way we need them to use them to have the maximum benefit for the system and then can we pass some of the savings of that benefit through to the person who's using them.

Sam Hogg ([20:08](#)):

I think rebates are the bridge to that eventual future.

Tony Anderson ([20:11](#)):

and we have a great module on our website as well where you can put in the gas car you drive in today and figure out how much you're going to save if you switch to an EV. It's the education's really easy if the consumer makes an effort in that regard.

Rachel Johnson ([20:25](#)):

Absolutely. Does anyone have any last thoughts for our listeners? I do have one thing I want to follow up on. I forgot to say it when you said it. Tony. I, I, if I got rid of my gas powered lawnmower, what would I do to keep my husband busy all summer?

Tony Anderson ([20:36](#)):

I guess you'd have to go for a long walk or a slow paddle on the Lake. There's a few things around Trevor city you can do besides mow your lawn and annoy your neighbors.

Sam Hogg ([20:46](#)):

You can get one that pushes still. It doesn't have to be the robotic one. It'll have to do that, but yeah, you'll be able to have people napping in the house much easier.

Rachel Johnson ([20:55](#)):

There you go. There you go. Just so you know, Billy, if you're listening, the only one that's available to you is the push one. Any last thoughts for our listeners?

Tony Anderson ([21:02](#)):

I have one in preparation for this podcast. I did a little bit of research, a modicum of research, and I found an interesting fact that says consumers in the lowest income bracket spend more than 20% of their household income to meet their energy needs. By comparison, consumers in the highest income bracket spend less than 5% on energy. So strategic electrification, beneficial electrification has a direct benefit to the low income person to where we spend a lot of time on that topic around Cherryland. And if we can sell more electricity, I know some people are gonna think, well, you're just out to make a bunch of money. I'm not out to make a bunch of money. I'm out to keep my rates affordable and this is one way to do it if by selling more of my product. And I just love where we're at now where renewables and affordability have come together and we have a great power supply portfolio where we can benefit everybody that high income and the low income, everybody wins when we use more electricity in the house.

Sam Hogg ([22:01](#)):

My final thought would be to, uh, encourage people to get out and try these things. It seems like a weird future with all these things being electrified, but you just can't imagine your world, uh, when you don't have to worry about things like oil changes, pilot lights going out. Um, the ability to control devices from your phone, it, the usability on a lot of this stuff really almost makes the affordability of them. You know, it starts to become a second thing as opposed to the first. So, uh, I'd encourage people to try things, and I know that Cherryland does a great job, but at, uh, doing demonstrations of a lot of this stuff and encourage you to go out and try some, uh, some of these electric electric things. So,

Rachel Johnson ([22:45](#)):

okay, great advice and certainly both, uh, both of your thoughts point to the fact that one, we've come a long way to get to this point, and that certainly could not have happened without the partnership between Wolverine and Cherryland. But even more importantly, we're kind of at an exciting cusp of possibility in terms of both the members' experience and what we see for the future health of the electric co-ops.

Rachel Johnson ([23:04](#)):

Thank you both. [inaudible].