Courtney Doyle, Cherryland Electric Cooperative (00:16):

Welcome back to Co-Op Energy Talk. I'm Courtney Doyle, communications and marketing specialist at Cherry Land Electric Cooperative. For 13 years, cherry Land was included in a state mandated energy waste reduction or ewr program. The mandate required us to incentivize a 1% reduction in our annual electric sales by offering specific rebates to members for things like energy star rated appliances and lighting upgrades. When that mandate expired in 2021, it opened a door to expand and adapt our energy use programs in a number of ways. Now, lawmakers are considering reinstating that mandate for cooperatives and even increasing it. And this episode of Co-op Energy Talk, we are sitting down with GDS Associates, managing director Rich Haselman and Cherryland CEO Rachel Johnson, to talk about the programs that we developed in the absence of that mandate, how they've expanded our offerings to our members, and whether or not this proposed mandate will be beneficial for cooperatives like Cherry Land. Take a listen. Well, thank you both, rich and Rachel for joining us today. Your very busy schedules taking a little time. Before we dive into some of the really exciting stuff, Rachel, can you give us a brief overview of what the old EEW r Energy waste, uh, reduction requirements were and what changed in 2021?

Rachel Johnson, Cherryland Electric Co-op CEO (01:37):

Yeah, sure. And, and thank you for putting this together. This is a, a project we're really, really passionate about and excited to share with our members. But as you pointed out, historically, we were under a state mandate from 2009 to 2021 that was called Energy Waste Reduction. We referred to it as E W R, and the simplest way I can think to describe that mandate is all utilities in Michigan were required to incentivize savings that were the equivalent of 1% of their three year average sales every single year by giving out rebates for energy efficiency measures on the surface, that sounds like a really good thing, and it is right, like helping our members become energy efficient as something we've been doing since the seventies. But what was challenging about that state mandate was that it was very prescriptive. So we had very, very rigid rules we had to follow, and you could only rebate things that they said you could rebate and you could only claim certain amounts of savings.

Rachel Johnson, Cherryland Electric Co-op CEO (02:26):

And so it was just a very complex program to Yeah, it was, it was complex to administer. That said, we did a lot of good work during the years of that program. Um, we, I mean, we re rebate everything from light bulbs to room controls with hotels and, and, and just really made, we made a lot of progress. But what we found is we got towards the last few years of that program, we are 95% residential utility. Most of our, our consumer members are homes. And so we kind of ran out of those big ticket items to do energy efficiency investments. That made a big difference and helped us meet the mandate. It got harder and harder, more and more expensive, so more squeeze less juice, I guess is the best way to describe where we got to with that mandate. Uh, in addition to that, like I said, it was very administratively burdensome for us.

Rachel Johnson, Cherryland Electric Co-op CEO (03:09):

Over the 13 years of the program, we spent about three and a half million dollars meeting that mandated requirement, but only a little over half of that was actually going out in rebates. A lot of it was just this, just really, really complex reporting requirement. So, uh, what happened with that mandate in 2021 or at the end of 2021, co-ops and municipal utilities in the state of Mich, Michigan were exempted from the mandate. And that wasn't accidental. That happened because the legislature and the public service commission at the time said, we recognize this is just really administratively burdensome for

very, very small utilities. And so instead of having you follow the state's reporting requirements, we'll let you run programs that you design in partnership with your own member consumers, which is what we decided to do after 2021. And so that

Courtney Doyle, Cherryland Electric Cooperative (03:51):

Changed December 31st, 2021. We were no longer under that, that mandate.

Rachel Johnson, Cherryland Electric Co-op CEO (03:56):

Yep, that's right. And we knew that was coming. So we had already started to put kind of plans in place for what we wanted to do. And this is where, um, GDS and Rich came in for us. We had a good sense of what our goal was, but we needed an expert to help us design how we would meet that goal. So, uh, one of the things that was really important to us was to kind of modernize our program. We'd already started getting a lot of feedback from our members that they wanted us to not focus so narrowly on energy efficiency and broaden that scope to focus on what's known in the industry as beneficial electrification, which is essentially things where someone might be moving from a technology that currently burns a fossil fuel to electricity. So instead of a, um, you know, a, a propane stove, they might move to an induction stove top or instead of using, uh, natural gas for their heating system in their home, they use electric or, or electric vehicles are kind of the, you know, benchmark example of this. So we knew members were interested in that. We just needed a way to monitor what we were accomplishing if we started Inc including those things in our rebate program. So

Courtney Doyle, Cherryland Electric Cooperative (04:50):

To begin this, this new road of building cherry land's own program that does keep the environment in mind does keep that carbon reduction in mind. We needed to find a way to set that benchmark, right?

Rachel Johnson, Cherryland Electric Co-op CEO (05:03):

Yep. And what I, um, what I really wanted to see happen and what has happened now is to move away from measuring energy waste reduction and instead start measuring greenhouse gas reduction. I think it's more modern, I think it's more in tune with the world we live in today. But also, just to be totally candid, I believe that in our future we will be regulated for greenhouse gas emissions. So this was a way of setting cherry land up to be successful in a greenhouse gas regulated world, and also giving us just a, that, and, and Rich can certainly talk to the details of this, but by measuring greenhouse gas reductions, we were able to bring efficiency and beneficial electrification together into one benchmark we were trying to move. So

Courtney Doyle, Cherryland Electric Cooperative (05:40):

Before we get into exactly how we got that benchmark and how we got away to track that, rich, can you explain to us a little bit who is G D s? What do you guys do?

Rich Hasselman, GDS Associates Managing Director (05:49):

Thank you. Um, g d s is an energy consultancy. We, we do specialize in the, uh, utility sector and we really cover the whole value chain of, uh, electric utilities and gas utilities. But everything from power supply, procurement, planning, transmission and distribution, wholesale and retail rate design, and down to the customer facing programs, which is really what this is about. Um, looking at energy efficiency, beneficial electrification, really how does a utility manage its load or, or help, uh, optimize its, uh, members or consumers, um, energy consumption.

Courtney Doyle, Cherryland Electric Cooperative (06:25):

So when Cherry Land came to you and said, okay, we're no longer under this mandate. We need to figure out how to track the benefits of essentially our rebate program, what was the first thing that you guys kind of said, okay, here's what we need to know and here's where we need to go?

Rich Hasselman, GDS Associates Managing Director (06:40):

Yeah, so, you know, the, the, the first step was understanding the goals, right? So, so where did, where, where did Cherryland want to end up with this? And then secondly, well, where are you now? Right? And so that tells us sort of the, the, the journey we have to go on. And so we sat down and looked at, um, how are the programs currently set up? Where are you heading with them? How are things tracked? You know, just the administrative processes and, and looking at databases and things like that to kind of just establish a, a good, uh, a baseline of, of where are things now so we can then see how to best move things forward to meet those goals.

Courtney Doyle, Cherryland Electric Cooperative (07:20):

So what were some of those things, Rachel?

Rachel Johnson, Cherryland Electric Co-op CEO (07:22):

Well, so one of the nice things about working with G D s and what really made us very confident they were the right partner for us was their willingness to design this model to be, to incorporate data that was unique to cherry land. And so we start, we worked a lot with our power supplier, Wolverine Power Cooperative to make sure that all of the, um, power supply assumptions that were built into the model were accurate to our actual power supply portfolio. And then in addition to that, rich and his team looked at not just what, like the Michigan, it's called the Michigan Energy Measures Database, which kind of says, if you do, if you convert from this to this, here's what you saved. But they pulled in a lot of other data from, um, other sources to help us figure out not only how our power supply portfolio impacted our, uh, program, but also the types of technologies that we were rebating going from technology A to technology B, what the impact would be.

Courtney Doyle, Cherryland Electric Cooperative (08:13):

So a lot of different variables go into defining this really complicated equation, essentially. Right. So what were, so I guess if you could tell me as basically as possible, and I know that's really difficult to ask, um, you know, what are some of those key variables that you need to consider when you're creating something like this?

Rich Hasselman, GDS Associates Managing Director (08:31):

Yeah, so Rachel touched on some of this sort of the starting point was understanding the greenhouse gas profile and how does, how do changes in, um, electricity consumption impact, um, cherry lands, uh, contribution to emissions, but also then thinking about, you know, in the world of beneficial electrification, if you shift someone, say from a, from a propane furnace to a heat pump, um, what are, what are the greenhouse gas emission benefits by reducing that fossil fuel consumption? So that was sort of a, a starting point, um, just to, just to understand the, that that energy balance and the impact on greenhouse gas emissions. Then we started looking at, okay, how are the programs designed, structured? What are the, the things we focused on ended up being, um, primarily water heating and space heating, um, for the electrification component. And we looked out at the industry standards, um, for different equations. There's a number of states in the Midwest and elsewhere that are moving in this

direction of more focus on greenhouse gases. And so they've developed some standard equations and we were able to adapt those for cherry lens, um, specific case, which is a different climate, potentially different mix of customer types and things like that. So we, we built up the analytics around each of the types of equipment that would be electrified to, um, be able to calculate then the energy impacts and then the greenhouse gas emissions that come from that.

Rachel Johnson, Cherryland Electric Co-op CEO (10:03):

And, and one of the things I really love about the model we designed, well, one, first of all, I just wanna point out, cuz, cuz Rich said this, but I can't think, we can't put too fine of a point on it. This is unique to cherry land. So what we were able to do is design something that was unique to us, which we can never do inside a mandate that's meant to fit every utility in the state. Um, but the other thing that I think is really cool about this model, not only over the long-term will account for changes we make in what we rebate, it will account for changes we make in our power supply. So as we continue to invest in decarbonizing our power supply, we'll be able to track that impact through this decarbonization model. And I think that's just a, a really exciting data set for our members to have as we think about how these two things, both the supply side and the demand side work together mm-hmm. <a firmative> in, in kind of your picture in terms of environmental impact. Yep.

Courtney Doyle, Cherryland Electric Cooperative (10:49):

Yeah. Is this something rich that you see other co-ops looking towards, looking towards creating a model like this?

Rich Hasselman, GDS Associates Managing Director (10:55):

Absolutely. We're seeing a lot of interest in this, uh, area. I mean, obviously electrification is exciting for the electric industry as a whole with the greening of the grid. That just changes the whole concept around the value of electrical consumption in terms of reducing, um, greenhouse gas emissions. So there, there's a lot of interest there and we've been doing, whether it's forecasting, um, market impacts of electrification over time for the planning side for diving into the weeds and looking at how does, uh, particular piece of equipment, um, potentially impact, um, um, carbon as well as the energy or energy optimization of a particular, uh, end user. Um, this is something we're seeing, um, um, really just it's been blossoming over the last five years or so and it continues to, continues to grow and, and, and show a lot of interest.

Courtney Doyle, Cherryland Electric Cooperative (<u>11:47</u>):

Yeah. So a model like this creates a lot of room for change and to be able to be flexible as things evolve.

Rachel Johnson, Cherryland Electric Co-op CEO (11:55):

Yeah, and, and we, um, we kind of entered into like a, a long-term relationship with GDS that we would expect to continue to go back to them and ask them to update the model as we go. And so, you know, it might be true that today, and it is true that today the bulk of the types of rebates we're getting in our electric vehicles and HVAC oriented like Rich mentioned, there might be something totally new that starts emerging that people are asking for in two or three years. And we can go back to GDS and say, Hey, help us bring all these data points together into a projection of the greenhouse gas reduction of this new technology that we want to rebate. And then we start doing that. And again, the kind of the big, the big B benchmark that we're watching over time is what is the total greenhouse gas impact of

these programs in partnership with our, our power supply portfolios? I think it's an excellent foundation upon which to build the future of our energy programs.

Courtney Doyle, Cherryland Electric Cooperative (<u>12:43</u>):

Yeah. So now with this verifiable, credible model that we have, we have a year under our belt taking a look at that. Rachel, can you talk through what were the results? What did we see after that first year?

Rachel Johnson, Cherryland Electric Co-op CEO (12:53):

Yeah, so what we did, we, it took us about, uh, a solid seven or eight months to really get the model right and feel comfortable, uh, kind of using it and, and with what we were measuring. So what we did at the end of last year is we went back and kind of retroactively applied that savings model to our program to see what we had done. And over the course of last year, we gave out \$200,000 in rebates and we were able to, uh, reduce greenhouse gas emissions by emissions, excuse me, by about 254 tons. So to put that in perspective for you, that's the equivalent of what about 12,700 trees would capture in the course of a year. And that's just for the year. So the other cool thing that we didn't talk about is Rich and his team built life like lifecycle assumptions into this model as well.

Rachel Johnson, Cherryland Electric Co-op CEO (13:33):

So depending on the technology, it might be a technology that we think will exist in that home for 20 years. It might be a technology we think will need to be replaced in three. And so all those are built into the this model as well. So if you look at the lifecycle prediction of that model, last year we were able to reduce greenhouse gas reductions by 3,280 tons. So the tree example of that is 164,000 trees. And that's just in the first year. And already this year, year to date, we're already above last year's total mm-hmm. https://www.esample.com the symptote of that is 164,000 trees. And that's just in the first year. And already this year, year to date, we're already above last year's total mm-hmm. https://www.esample.com this year with more of a, uh, uh, impact on greenhouse gas emissions and even last year's. And part of that is now that we have that model, we can use it to inform how we promote our program going forward.

Courtney Doyle, Cherryland Electric Cooperative (14:08):

Well, and it goes back to, you kind of touched on this earlier in the podcast though, the eew R was about reducing energy waste, but things are increasingly being electrified so that those things just don't quite match up. Yeah.

Rachel Johnson, Cherryland Electric Co-op CEO (14:21):

Although I try to make sure people think of it this way, we're not, the new program isn't necessarily encouraging waste, it's simply acknowledging that we lead increasingly electric and energy intensive lifestyles. We wanna do that without waste. Mm-hmm. <affirmative>, but we can't pretend that we're gonna save our way out of any, any energy problems because they're more and more things are being electrified

Courtney Doyle, Cherryland Electric Cooperative (<u>14:40</u>): Just too fast

Rachel Johnson, Cherryland Electric Co-op CEO (14:41):

<laugh>. And, and the reality is the only path to a low carbon future is electrification period. And so this, this model is very much responsive to that. One other thing I was, I was gonna gonna mention that I

forgot that I think is really, really important, and I said this at the beginning of the podcast, we're a 95% residential utility. We don't serve a lot of large commercial and industrial load, but what's really cool about last year is that most of our greenhouse gas savings came from residential members doing these things in their homes. So the program is very, very much aligned with the idea that we're a residential utility and we're not, you know, I can't go get a half my savings from one big industrial plant converting their light bulbs, but we can make a really big impact, 38,000 homes at a time. And so it's, it's, it's really actually very exciting to have this to build on.

Courtney Doyle, Cherryland Electric Cooperative (15:25):

Well, and you talked about with, with Rich too, that this model is specific to cherry land, which we are unique in the way that we are mostly residential, mostly doesn't sum it up even, but like we're so heavily residential. So that's an interesting piece of that too. And so we're talking about this today in that there's currently Michigan legislation Senate Bill 2 73, which proposes to reinstate the ewr mandate for cooperatives and even, uh, increase it down the road, double it down the road. So what happens to this program if, if that's the road we go down?

Rachel Johnson, Cherryland Electric Co-op CEO (15:59):

You know, I think the challenge we would have, Courtney, is that we would likely not be able to run both programs because of the fact that we are, and we are lean, we, you know, we can't staff to run endless numbers of, uh, administrative programs. So the, the most honest answer I can give you is if we get pulled back into the EWR mandate, all of this work will have, will likely just sit and we won't be able to continue to administer the program that we now know our members love. I mean, the feedback we're getting from our members is incredibly positive. So this would be a step backward, not just in terms of what we're accomplishing, but also in terms of our members' excitement about what we're accomplishing, which would be really, uh, unfortunate. And then you mentioned the, the, the doubling of the mandate.

Rachel Johnson, Cherryland Electric Co-op CEO (16:34):

So what that would do, the, the proposed legislation increases the mandate from 1% to 2%. And I don't know that it is actually possible for us to meet that with just straight energy waste reduction. The average, uh, cherry Land Home uses a little over 700 kilowatt hours a month. To put that in perspective, the average NA nationwide is about 1400 kilowatt hours a month. We just don't really have a lot of waste to trim. And we've done most of that work under the old 13 years of the mandate. And we do, and I should say this, we do continue to rebate a lot of the same technologies. If you're doing an energy star refrigerator, I'm gonna give you a rebate for that. If you're installing a new dryer, I'm gonna give you a rebate for that. So we're still doing those things, it's just that we're finding less and less interest in them because most of the homes we serve now have already made those upgrades. And so it would be, not only would we have to get rid of the program we have right now, I honestly am not convinced we would be able to meet the mandate as it's written right now.

Courtney Doyle, Cherryland Electric Cooperative (<u>17:24</u>):

So it'd be more difficult to meet the criteria of the, the mandate, but also would be getting rid of an arguably more effective program when it comes to the, the overall goal.

Rachel Johnson, Cherryland Electric Co-op CEO (17:36):

I think so, and I, and I think that, um, one of the things I'm really grateful to Rich and his team for is that they really did help us build a program that we're really excited about that matches our goals. And, and yeah, it would be very unfortunate to have to backtrack on that.

Courtney Doyle, Cherryland Electric Cooperative (17:49):

So before we finish up here, um, is there anything that can be done, or I guess what are we suggesting be d be done at Cherry Land to keep the program as beneficial as possible for our members?

Rachel Johnson, Cherryland Electric Co-op CEO (18:00):

Uh, Courtney, that's the politics of politics

Courtney Doyle, Cherryland Electric Cooperative (<u>18:02</u>): Right there, my friend. I had to ask <laugh>.

Rachel Johnson, Cherryland Electric Co-op CEO (18:03):

Yeah. You know, I think that, um, where I'm trying to, to kind of think through this as we move forward as a co-op, is to try to see both sides of this issue. So what I'm hearing from my friends at the state is we just need you to prove you're good actors. We need you to prove you're doing something. And I think that's a very fair thing for them to ask of us because we should be doing something. What I ask of them in return is, let me prove to you what I am doing don't necessarily impose down upon me a mandate that doesn't make sense for my members. And so what I would really love to see happen is this legislation evolves over the summer and fall is for it to kind of end with a, a, a basic reporting requirement every single year, every co-op and and municipal needs to submit some sort of a report to the Public Service Commission that can be justified and verified

Courtney Doyle, Cherryland Electric Cooperative (18:47):

Using like, models from Rich.

Rachel Johnson, Cherryland Electric Co-op CEO (18:48):

Yeah. Using, yeah, exactly. Like using the model from Rich saying, Hey, here's the, what we're doing, here's what we're accomplishing and here's how much we're spending. I think those are fair things to ask us to report on every year. And, and we would be happy to do that because we are really proud of our program and we are excited to share the results of

Courtney Doyle, Cherryland Electric Cooperative (19:03):

It. Well thank you and thank you Rich for, uh, I think you put it as earlier as explaining a really complicated spreadsheet. You did a great job of doing that for us. So thank you so much for your time and thank you Rachel, for helping us understand that from how, what it means to our members, because that's the ultimate goal here is, you know, to communicate with the membership. So thank you both. If you wanna learn more about this topic, be sure to check out Rachel's column in Michigan Country Lines or her c e o video update. Join us next time for more co-op Energy Talk.