

**MARTY ROSENBERG**

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**CHUCK CAISLEY INTERVIEW**

Q: Hi, we're with Chuck Caisley. Chuck, welcome to the podcast.

A: Hey, I'm glad to be here. Exciting stuff.

Q: Chuck, you're Chief Customer Officer of Evergy and Vice President of Public Affairs. We're excited to talk to you about the EV initiatives that you've put on the Genesis and the updates on their status. Just tell us some of the landmarks. I believe you're one of the more aggressive deployers of EVs. What was the genesis of that strategy, and what were the early steps that you put into place?

A: Yeah, well, we are very involved and engaged with electric vehicles and electric vehicle charging. That really all came about and started in 2014 when we had the idea that electric vehicle charging wasn't something that just needed to happen in California or on the coasts but was really something that our customers in Missouri and Kansas, if the proper conditions would be present, would be extremely interested in, and so we started to take a look at, you know, what could and should the utility role be, and you know, what would the impact of electric vehicles and

electric vehicle charging be on the grid? Essentially, out of that, we came up with what we now call the clean charge network which, I believe, is still the largest investor-owned utility charging station network in the United States, and essentially what it is is we've got close to 2,000 places to charge throughout our service territory, and we own them, and we operate them, and the whole notion really was if you break down range anxiety so that, in a metropolitan area like Kansas City, there is always some place in people's daily lives that they know they can charge, that people will adopt and want to adopt electric vehicles and electric vehicle technology, so we set out to put, in 2015 is when we started to deeply, we wanted to have a big bang where we had a lot of locations, and they started going up, and people started seeing them.

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Literally, people would say, or could say, "Gosh, that's at my bank" or "that's where I shop" or "that's where my kids play soccer." Then, if you did that, it'd be a little bit like solar, right? A neighbor would get a car because they felt like they could charge it. They knew where to charge it. They'd tell their neighbor, and you'd see exponential adoption, and that's actually what ended up happening.

Q: Chuck, let me just ask-- was it kind of out of culture for then Kansas City Power and Light to pursue this? I will say this; you're in the middle of the country. These kinds of initiatives have been associated with California and maybe PSE&G in New Jersey, coastal communities. Why did you think it would fit with your culture, and did it require a corporate change of culture and education of your customer base?

A: You know, I think when we first started talking about it, there were probably a lot of employees who were questioning it, maybe like regulators did when they first heard about it which is, wait a minute, we don't have very many electric vehicles here. Why are we doing this again? But relatively quickly, as we started talking about it inside the company, it became something that people attached to pretty quickly because a number of key reasons. (1) All of our research showed that people were very interested in electric vehicles, and if they knew there was somewhere that they could charge them reliably that they would adopt it.

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But the second thing is electric vehicles are like price line for the electrical grid. They naturally charge at times

when we have plenty of generation capacity and at times when there's plenty of transmission and distribution capacity to deliver electricity, so if, you know, 80% of it happens overnight in the homes, the next big chunk is right after people get to work. When they're not charging is when we have our natural peak conditions which is from about 3:00 until about 7:00, you know, in the summer time. This is really taking an existing asset that's paid for, and it is using it a lot more efficiently which is good for us as an electric company. It's good for our customers from a cost perspective, and then of course, you've got the environmental advantages as well, so it didn't take long for people at then KCP&L (now Evergy) to say, hey, this is kind of a triple play. It's a win for the environment; it's a win for our shareholders, and it's a win for our customers from a cost perspective.

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Q: As we're sitting here in the fourth quarter of 2019, of your 1.6 million customers in Kansas and Missouri, how would you say they are utilizing those 2,000 installations, and what has been the trend lines in terms of increased usage?

A: The trend line has been exponential growth. When we

started this in 2015, the Kansas City region wasn't even in the top 50 cities or regions across the United States adopting electric vehicles. 2 months or 3 months after deployment, so the second quarter after we started deployment, that all started to change. The Kansas City metro has not been outside of the top 5 fastest-growing regions for electric vehicles in the country since then.

Q: When you say "top 5" is that in the number of vehicles per 1,000 people or actually-?

A: Percentage growth, so just we continue to see growth here that is outside of, that is higher than most other places. It was number 1 for 4-5 quarters, but now, there's a couple other places that are starting to creep up a little bit.

Q: For the financial folks in the utilities sector that are listening into this podcast, what's been the business impact? Has it been negative? Has it be positive or neutral in terms of bottom line for Evergy?

A: You know, I would say to this point (and so we're at the end of 2019 and we started at the beginning of 2015), we're roughly 5 years in. I would say to this point it's been neutral to slightly positive. The reason for that is when we installed these charging stations, we asked regulators for recovery of all of the capital investment. Now, we got

some of the recovery. Anything that was required going up to the actual charging station did get to be recovered in rates, but the charging stations themselves in both states, principally because of the number of electric vehicle drivers that were present at the time, were not recovered in the early rate cases. [00:07:55]

Here's the thing. One would think, well, you've got to write that capital investment off then because you're not recovering it, so that will be negative except that, in the end, our accountants took a look at the kilowatt hour growth that was occurring in between rate cases just as a result of having these electric vehicle charging stations deployed, and they came to the conclusion that over the depreciable life of the charging stations, the increased usage would indeed recover those costs, so there was no write off, and then, of course, everything else is in rates, and we're earning on it. We're still seeing significant electrical growth, electrical usage growth as a result, so at the end of the day, I'd say neutral to positive. From a financial perspective, 5 years in, 10 years in, I think we'll be saying it was extremely positive.

Q: Can you quantify "extremely"?

A: You know, I don't have that in front of me right now, but I think this is something that would be, ultimately we would get the value of, at a minimum, earning our authorized return on what we invested.

Q: Okay, and in terms of impact on load, which many utilities see flat to declining, can you register the increase on load and give it a percentage?

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A: Yeah, so we can absolutely see increased usage. Again, I didn't know we were going to get into the details of that, so I don't have all those, that information in front of me. What I will tell you is one of the very key benefits of doing this in a networked system is that we've got very good insight into when the charging is occurring and the impacts that it could potentially have on the grid as it continues to scale. So, unlike other areas where that information is not necessarily easy to come by, anything that's done on our system we have. The good news is, again, most of the charging, probably 90+% is happening outside of a time where we would have a generation or an electric grid constraint, so this is by definition all beneficial kilowatt hours put on the grid, meaning we are having higher utilization of an asset that's already paid

for by having these electric vehicles on the system.

Q: Okay, and part of your portfolio is you oversee smaller generation. As Evergy builds that distributed grid platform, how do you see EVs integrated, and can you get pretty sophisticated in terms of dispatching with storage on these cars? Is that part of the plan?

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A: Absolutely, and again, you know, when we first purposed this, having a network that is owned and operated by the utility has a couple of advantages. (1) Just from a customer education and adopting standpoint, it is something that is now known and understood within our service territory, so something at McDonald's, right? Nobody goes to McDonald's because they have the absolute best burger ever created. People go to McDonald's because they know exactly where they're going to be, exactly how much it's going to cost, and exactly what they're getting at every single McDonald's across the United States. Our clean charge network works the exact same way. People know how they're going to pay. People know what to expect. People know how to find them, and so it is great to foster adoption. The second major advantage of having a utility own and operate something like this is that we now have



something that we have all the data on. Because it's a smart system, meaning we can use it to control things at the edge of it, we have the opportunity to do some things in the future that you can't with a patchwork of third party providers, and one of those things is ultimately being able to see how much storage capacity is sitting at stations and either control how much and how quickly the charging is taking place there, or in the future, we absolutely do contemplate that it might be able to provide localized, stored electricity that can be put back on to the grid right there where those cars are sitting.

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Q: In a recent podcast, we talked to Mary Powell of Green Mountain Power. They're experimenting with regulators on a flat, monthly rate for customers that would bundle things like their usage, solar, EV, and storage on the wall in their garage. Is that something that you're looking at back-of-envelope for maybe 10 years out? How-- what kind of contingency plans are you developing?

A: Yeah, I mean, I would say I'd be very disappointed if it took us 10 years to get to that point. I think that electrical usage, you know, almost all segments of the economy now are electrified. Really, the only thing that

isn't electrified is surface transportation, so as surface transportation starts to scale and electrify, as you start to see more distributive generation, I think you're only going to see user profiles for our customers, residential, commercial, and industrial change depending on the types of technology that they're deploying, whether it's for sustainability or cost or other performance issues. I think the future for all utilities and certainly investor-owned utilities is going to be having rates that are designed to fit kind of the use cases of individual customers, so yeah, I can absolutely see a time period and probably not as far away as folks would think where we would be doing something very similar.

Q: One of the things I spotted on your website is you're undergoing some substantial increase reliance on renewables at 1% in 2005 to a targeted 27% next year in 2020. Talk about that a little bit, how you're achieving it and what role, if any, the EV deployment is having.

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A: Yeah, you know, right now by the end of this year, we'll be just under 30% actually. You know, electricity from renewable resources, that runs the gamut. We've got solar; we've got wind; we've got hydro. The bulk of it though is

wind power from Kansas which is, of course, our home state. Right now, as we look forward, you know, over a 20-year time period, with the tax incentives at the federal level and the increasing technology that we see in turbine performance and the software that runs the turbines and seeing higher and higher capacity factors, there's just no doubt that layering in wind energy is something that is putting downward pressure on rates over a 20-year time horizon. We see doing as much of it as we can. We think in the next 5 years you're going to see solar be at a similar cost competitive position. So, it is a huge part of what we are doing today. It's going to be a huge part of what we do in the future, and you know the way EVs play into that is if you go on to our website, you know, there's a place that says, you know, right now this is how much wind energy as a percentage of what's being consumed is being produced. If you go at noon, say, it might be 15, 20, 25%. But if you look at that over night, you can see that 75, 80% of the electricity being consumed sometimes is from wind power. What EVs do is, you know, they charge over night. When you're charging your electric vehicle at home, you are disproportionately bringing wind energy from somewhere in Kansas because that's when the wind energy is

really blowing. This is another great example of how EVs are the price line for the electrical grid. We're going to have a lot of generation that is produced over night by wind power now and into the future if we can get more electric vehicles on the grid. Essentially, what you're doing is you're storing that power in a battery and deploying it during the day time when maybe there's not as much wind power on the system. It really goes hand in hand in a very symbiotic fashion.

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Q: As somebody involved in the communications efforts of your company, how well-understood is this both by your customers and around the industry. Why don't you talk about what you're doing to educate your customers, and tell me a little bit about how other utilities around the country and possibly the world are calling you up to try to see what you're learning?

A: Well, there's certainly been a lot of interest in the clean charge network. We've had multiple utilities come in and see what we're doing both from a network and an operations perspective, all the way to the customer education aspect of it. I mean, we've got a micro-site that's dedicated to the network and to EV drivers. We've got a very active

social media, social platform community of drivers that's very engaged and, of course, we work with dealers and things like that. You know, this is front and center on everything we do which is talking about the beneficial aspects both from an environmental standpoint as well as a cost standpoint of electrical vehicles. I mean, the value proposition is, it is currently the best way to store renewable energy produced over night and use it at a time when you might have peak demand on the system, and so, I mean, it's one of the first things that we talk to with any stakeholder. If you're environmentally-inclined, then you're very happy that it's being powered by wind. If you are concerned about cost, then the great news is that very cheap wind power is being soaked up by batteries overnight and being deployed at a time when we're not having to turn on something else that may be a fossil fuel generator but still being able to use electricity, so it's really part and parcel of everything we do which is talking about these advantages.

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Q: The last thing I would like to ask you is to kind of pull on suspenders and sit back and opine a little bit about the fact that I view Evergy as a solid mid-tier utility. It's

not a flashy company with 20 times the size viewers, but right in the middle tier, so what could utilities in Baltimore, Des Moines, Tulsa, cities like Kansas City learn from this effort, and what message would you like to share with them?

A: Well, I don't know that we have anything to-- I would never pursue them to tell, you know, our sister utilities, you know, they should do one thing or another. Every kind of metro area is a little bit different, has different sets of challenges and different sets of stakeholders and concerns, but what I will say is I think we have conclusively proven here in what most people think is fairly conservative fly-over country that if you build a system that meets the bare minimum charging requirements or a little better for your populous, they will adopt electric vehicles. Electric vehicles as a technology is ready to go and is something that people want. If they feel like they can charge, if you build it, they will absolutely come. They absolutely will adopt, and I would also say that, you know, maybe 2 other things. (1) Electric vehicle drivers are probably our most engaged customers. They are the ones that try different rate structures first. They are the ones most involved in energy efficiency measures, products, and

services that we have. They are the most likely to support our company when we're trying to do something new that folks haven't heard about before, so it's a very engaged, very positive customer base, and that includes people and businesses who host the charging stations. They are some of our biggest supporters as well. I would say that, and then I would say, you know, don't be afraid to take a little bit of a risk with your capital. Put these things in. I mean, in our case, we didn't get full recovery, but we're going to be held whole simply by the number of people that are adopting this technology. I think everybody, you know, most utilities are big enough that they can take 20-25 million dollars and put that capital to work and at risk and feel pretty good that they're going to get it back.

Q: Chuck Caisley of Evergy, thank you for joining us on the podcast today.

A: Thank you. Happy to be here.

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