

ACEEE 2018 Rural Energy Conference – Mark Cayce Keynote Address
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Transcript Courtesy of Appalachian Voices

CAYCE: [...] Is helping our members improve their way of life, at the lowest possible cost available. And we're in the business of service, not sales. And this is a message that a lot of utilities are struggling with, and having a hard time. But the world is changing. And we're rocking along and we're doing pretty well with our energy efficiency programs.

[...]

And about that time, our largest customer at the time, 2015, came to me, and said, we wanna do a renewable energy project. And I explained to our board that this is our largest customer, they make up over 10% of our total load, and they make up about 125% of our total margins. [laughing] And, I've told the board we've got, we've got work to do. We cannot - we cannot lose another large employer. It can't happen, our community cannot survive. And so we did whatever it took to help them put in a new solar facility, which at the time was the first one ever built in Arkansas, a utility state. And as we worked with them, we were worried about what was gonna happen, we didn't know. But we knew we needed to keep them going. And we knew that if we could get them to commit, to our community, that they would stay there and that there was possibility of expansion. And we helped them put together a behind the meter 12 megawatt solar facility. And this was really about twice the load that Aerojet actually had. And we went behind the meter though to avoid state regulations, so that this could be allowed to be built. We convinced Arkansas Electric, our wholesale supplier, to buy the access. And so that facility was constructed, it went online in 2016. We had a busy year in 2016 [laughs].

What we found out is we worked with them and I began to call and went and visited some other solar facilities, we had never-I had never seen one. And went to Chattanooga, Tennessee to look at one there by a [inaudible] plant. And we talked to people out in Sacramento where this conductor customer was headquartered, about the impact there. Our own engineers were telling us, this would never work. Not in Arkansas. It's gonna destroy, the-the distribution system, every time a flood comes over it's gonna disrupt the power system for everyone, it's gonna be a whole thing. But after talking to places in Chattanooga and Sacramento and a few other places, that's not the story we were getting around the country. It just doesn't work that way. And so we went against what our own engineers were telling us. And what everybody else in Arkansas was telling us - it's too cloudy, it rains too much, you're never gonna [inaudible] make it work. When we brought that system online in 2016, we lowered their bill 8 to 900,000 dollars a year. And a really interesting thing happened. We lowered our total expenses over a million dollars a year. Because in Arkansas, and I think in most of the south and the southwest, we peak in the summertime. And when it's 105 degrees in Arkansas, it's not raining. It's not cloudy. But the sun is shining. [laughing] And it fits perfectly to reduce our peak load.

And so, we gained additional peak capacity. A lot of people said there's no such thing as peak capacity for solar, it can't be dispatched - no, it can be dispatched. And it - and since 2015,

we've lowered our peak demand by over 35%. In just three years. Which is an amazing number, innit? And I go back to our residential program.

When we first started that program we had some economic, financial analysis done. And the analysis we got from that program - because of [inaudible] structure because of the value and peak demand savings, we knew that we would get a return for every house that we improve, we give 'em good air, good insulation, their city would invest in [pause]. We got a return of over 10% - per house. The more we invested the more we saved. And so we invested funds in these homes. And for every home that we did we were getting about 2kW per house of additional peak demand sales. So at the same time we decided to build - well first of all we built a small solar field behind our own office. If we're gonna support solar we needed to be an example. And we put a 96kW solar field behind our office, everything we use for our office and operation center is now - about 92% of all our energy comes from that solar field. Because we want to demonstrate to everybody, it does work. It can save, and it will work our cost.

We also decided that we wanted to build because Arkansas Electric Co-op agreed to let every member co-op to build up to one megawatt of their own solar. And so we built it, that one megawatt of solar. And because we were getting savings from the demand costs, we wanted to be able to give that back to our members of the co-op with the community solar program. So we had filed a tariff with our commission instead of waiting to be approved and the basic fundamentals are 13 dollars and 15 cents a month, someone would get four panels, and they'd get a return back of about 14 dollars to 17 or 18 dollars depending on the season of the year. So they actually get more than they put in back every month. And the way we do that is because we're able to monetize our demand sales. In fact, we're able to share that with the members of the community solar and with our other members of our-of our co-op by lowering our power costs.

And so those are the most incredible happenings going on. About that time in 2016 right after we opened up the big solar farm, our local phone company - that is a small, rural phone company, headquartered in Hampton, Arkansas - South Arkansas telephone company. And they came to us and they said they've seen the activities we had been involved in, and said [inaudible] look like a good progressive company. Would you be willing to partner with us to bring fiber to all your territory? And we said, y'know we really hadn't thought about it because we didn't think we were capable. But with the phone company - and this is a family owned phone company, like say it's been there 105 years, we've been around 80 years - and we knew that if we didn't do it, we wouldn't get fiber. And so in July that year we signed a contract to partner with them, to bring fiber to all of our members. And today we have just over 600 members involved now with high speed internet. In fact, small town in East Camden, Arkansas became the first city in Arkansas with one gig internet available in every single building, residence in the community.

And we had some questions earlier about broadband and why that's important. We have a lot of people that would move to our service territory but couldn't, because they couldn't work from home because they didn't have internet connection. If you get outside the city limits, we have

people on dial-up. We have people on satellite, we started in satellite business for bringing satellite internet when it first launched in 2005. There were some problems with some of the early satellites, they've gotten much better. We still provide that but it's not the same as a solid fiber connection. People in our part of the world didn't know, they didn't really know what netflix was. Yes they had Xboxes and PlayStations but they didn't really know what they're for. Because they're to be shared, with people all over the world. They had Xboxes but they had never done that. And so it's really opening gateways but people can now move to our territory, live at home, virtually commute, do their jobs, we're hoping we can attract more businesses, because we have the fiber available to all our members and [inaudible] industrial customers, commercial customers.

We're moving along with our other energy efficiency efforts and we included all of our schools, cities, counties, municipal buildings, and we did lighting improvements for them. This year we added nest [?] to our program because we're bringing broadband and you have to have wifi for a nest [?] to work. And guess what, we know where the wifi's available. Because we're taking [inaudible]. As we get enough customers connected with the nest, we will, at that point, start using the nest for additional load control. And through their rush hour rewards program, we will get additional demands savings. The thing I really like about nest - it's all voluntary. You don't have to participate but you can. And it really fits the strategy that we have. Same thing with our community solar, it's all voluntary. If you wanna get in, you can get in. If you don't like it, you can get out the next month. There's no contract, there's no obligation. If you want it - I'm hoping we can put this up for sale, the commissions been holding this for several months. We're working with a couple other clients on some large solar and there's some sticky issues in Arkansas about that, but we're trying to work those out. And we think we'll be successful.

But, there've been some amazing things that happen in, but for [inaudible] better for me, and those guys that are up here, we've just been approved for a [inaudible] [clapping] Starting in November of this year, we're gonna include home solar as part of our PAYS program. [clapping] It's interesting that we're gonna do this, because right now, today, we have one residential customer in our service territory with solar. And, if you've been around in electric co-ops and talked to the members, they don't mind sharing their opinions with you. [laughing] Especially if they don't like what you're doing. So we put solar in our office, we've built the community solar, and I've got one complaint.

A lot of people didn't think people in rural areas really wanted solar. Well, come to find out, they didn't know it was there. They didn't know how to do it. It wasn't available. But we're trying to bring this to everybody in our service territory. And as I look towards the future, I think we've secured our area of having law members with us being their energy advisor, we don't sell to solar but we wanna make sure that they had qualified scholars that do it correctly.

And it's the same thing we do with our residential program, we have - we've met HVAC dealers and we've had to lose a few. Because everybody gotta do the good work all the time. It's paying off for us. The ideas of combining - and I love the slides you had up there earlier - of combining energy efficiency and solar and high speed internet is that-we make a formula for us for success in the future, and it's bringing growth back to our part of the world and in fact, as of today, it was

announced earlier this year that Aerojet - the company we worked with to get the large amount of solar, they had a little over 800 employees the day we signed the contract to do the solar farm. Today they have over 1200 employees. It has brought jobs. They're staying, they're expanding, and they announced just a few months ago that they're gonna add another 150 jobs. We're seeing [inaudible] growth, which we had not had in years. The last 20 years, we've had steady population decline. We think that energy efficiency and solar is supposed to bring that back. And I just appreciate that, to be here today and share our stories of what's been going on. And thank you. [clapping]

FACILITATOR: Any questions?

AUDIENCE MEMBER: How do you do it? [laughing]

CAYCE: You know, we made a commitment to save, that's really all this is. We've not added one employee. We hire contractors, we have [sic] program implementer that finds good contractors. We've had to bring qualified auditors in from Little Rock because we don't have qualified auditors in Camden, Arkansas and they've helped us bring 'em. Now we have made it a requirement that only local HVAC dealers will do any of this work. Because we want the money that we're getting - we want it reinvested. And something I didn't mention, all of our new loans, including home solar, will be financed at .5% for ten years and that's thanks to the RES program. And we've tried to pass that-those savings straight back to our members. And we think that could make a big impact. And when we started this we wanted to say - we wanted to change the landscape of South Arkansas. And we see solar farms popping up and fiber going in - they're happy. And what an exciting time it is to be in utilities.

AUDIENCE MEMBER 2: What about is an average spend per residential house and what expenditure-what portion of that 35% peak load reduction is coming from your residential PAYS programs?

CAYCE: About - percentage of peak load production right now we're getting about 900kW. So say about 2kW per house, we start to go back, because we can go back with these homes and maybe add solar to them and maybe bump that to 4 or 5kW per house. And every new house that we do going forward will get that. So, of that peak load reduction that's about 10%, 15%, of peak load reduction. Most of it came from solar, but I see the residential business and small commercial growing. And I say commercial, really we might jump into commercial, we worked with institutions that we know are gonna be there like schools or counties or cities. And we probably will work with them about putting in some projects. We initially did light, and we'll go back and do HVAC. Most of our schools have ancient equipment. We're working with the Arkansas law enforcement academy right now and they have [sic] 1950 vintage boiler system and heating system. We finished all the air conditioning work, we converted all those to mini-split heat pumps for all their dormitories. We put in more efficient heating and new lighting. That program's gonna save them about 7,000 dollars a year on their electric bill. And we couldn't be happier. It's also gonna keep those jobs in our community. Because we're in danger of the facility [inaudible] being shut down.

AUDIENCE MEMBER 3: Hey Mark. If you had a chance to do electric school buses with [inaudible]

CAYCE: We're really looking at that. We wanna do that and you know, the tariff that we have allows us to do - if it'll pay for itself we can do it. And so it was wide open in that nature and so that's why we've been able to go back and add different things that we try [inaudible] use. And we hope to have the first electric school buses in Arkansas. And also - [clapping] And by the way I gotta share my own excitement, I gotta text message that said our plane was landing yesterday and Ouachita Electric has ordered a Tesla model 3 and it'll be available in two weeks. We're gonna [laughs] We're gonna install car chargers and build - we're gonna promote electric vehicles. And I can tell ya, until we put one up, there hasn't been one. In any of the five counties that we serve we hadn't build [sic] a charger. [pause] Yes?

AUDIENCE MEMBER 4: Mark, outstanding remarks tonight, but I hope that ACEEE had to be recorded, and if not, I hope we run it again and do a video for ACEEE and I hope they play that video in [inaudible] [clapping]

CAYCE: Thank you for your time. I don't wanna block happy hour. [laughing] [clapping]

FACILITATOR: I think I need to say wow, this is inspirational and we couldn't have asked for a better way in closing this day out. You know, this has been a personal passion for me for many years, I think you know, the rural energy efficiency area is an important area [...]