

**Before the House of Representatives**  
**Committee on Energy, Utilities and Telecommunications**  
Wednesday, February 15, 2017  
**Testimony in Opposition to HB 2166**

**By:**  
**The Kansas Electric Cooperatives, Inc.**  
**Midwest Energy, Inc.**  
**Sunflower Electric Power Corporation**

Chairman Seiwert and esteemed members of the Committee:

I am Kim Christiansen, representing the Kansas Electric Cooperatives, Inc. and the organizations listed in the heading, above. We thank you for the opportunity to voice our objections and opposition to enacting HB 2166.

The electric utility industry is a complex one, with both state, regional and federal overlays, interconnections, laws and authorities. Changing the laws may well create unanticipated effects on the entire industry. HB 2166 would amend the current definition of a “public utility” and “retail electric supplier.” It would allow anyone who wishes to install a vehicle charging station on their premises to charge those looking to re-charge their electric vehicle. This bill would exempt those installing the charging stations from being defined as a “public utility.”

We do appreciate the intent of the bill’s author to be helpful to the electric vehicle emerging technology. In that vein, we have attached an article that highlight how electric cooperatives are beginning to address electric vehicles and their need for access to charging.

**Our opposition can be summarized in 3 simple points:**

**1) *This is unnecessary legislation***

We do not believe legislation is necessary to achieve a system of charging stations across the state as the need arises.

The simple analogy to a charging station is a gas pump for an internal combustion engine. You pull up to the pump, get your “gas”- or in this case, your electricity- and leave. The electricity is a “commodity” that the merchant wants to take out of a big tank (the utility) and insert into a smaller tank that the customer can take with them. When the consumer buys gas, the consumer pays for the entire package of services to deliver the gas: the gas pump, the clerk, the delivery truck, etc., not just the gasoline. Similarly, anyone setting up charging stations will price their service to cover all of their costs, of which the commodity of electricity is just one component.

In our opinion, there is no apparent prohibition in current law for recouping costs or, making a profit from installing a charging station.

So, in the instance of a charging station: Let’s suppose ABC store wants to provide a charging station. It could approach a local utility and reach an agreement with the utility to install such a station and bill for it. Another option would be to install such station and implement a fee for the convenience of charging at the store - i.e. re-coup the costs of the land, the station and the electricity. For example, a store could determine that if they charge 20 cars per month, the cost

of electricity, the charging station and the stall for providing the charging station would be \$10 per 2-hour charge. The store could install a system to collect that fee and not violate current laws.

We contend as long as the store providing such a station does not charge by the individual unit of electricity, current laws pose no obstacles for so providing the station and charging for the use and convenience.

**2) *The legislation, while an admirable effort to predict a need, presupposes the direction of the industry before it can be reliably forecast.***

There is not a sufficient Kansas electrical car charging demand or data from that demand, at this time. As of last year, 200 out of 2.6 million vehicles in the state of Kansas were electric. This total is .0077 percent of registered Kansas vehicles. As you can see from the article (attached) a number of cooperative efforts are underway to assess and address the need for electric vehicle charging. . At this time, given the relatively few electric vehicles in Kansas, lack of data on need or use for charging, lack of long-range battery options and innumerable other data and statistical needs, there is no need to jump out ahead of the curve and craft legislation. Kansas can address this issue if it becomes a true need in the state.

**3) *The legislation would, in effect, interfere with existing business models and the ability for companies to enter contracts for such services.***

Under current law, businesses are free to contract for services, create opportunities and even derive a profit, as they deem fit and see a business model develop, from car charging technology. There is no need to create an exemption for what can be done now, nor should the Legislature attempt, even in subtle form, to interfere with a Kansas business' ability to contract for such service. In addition, opening the act and creating the first exception for individual business seems, on the surface, innocent. However, this sets an undesirable precedent and could result in more applications to exempt entities from being considered a "public utility."

While we are, indeed, watching the electric vehicle industry and its emerging technology and needs, we oppose this bill for the reasons stated.

Thank you for your attention. We will stand for questions at the appropriate time.

**Attachment;**

*The Future is Electric; As the EV market Grows, Co-ops Prepare for their Role as Vehicle –Fuel provider*

*By John Vanvig*

*RE magazine February 1, 2017*



An electric vehicle outside of Piedmont Electric Membership Corporation. (Photo courtesy Advanced Energy)

Brunswick Electric Membership Corporation (BEMC) serves about 91,000 meters from its headquarters in Shallotte on North Carolina's southeastern coast, and the co-op knows precisely how many

electric vehicles are recharging on its lines every night.

“Twenty-four,” says Monte Herring, BEMC’s manager of distributive generation/renewable energy. “We’re sure that number will grow.”

The numbers are smaller at Wake Electric Membership Corporation in Wake Forest, just outside the Raleigh- Durham metro area of north-central North Carolina. Wake Electric has about 42,000 meters and a special overnight charging rate for electric vehicles (EVs).

“Twenty members are on the rate,” says CEO/General Manager Jim Mangum. “We think we have more EVs out there, but we haven’t connected with them.”

EV numbers may be low now, but interest is high and rising among consumers, utilities, and automakers. And that means co-ops should be getting ready for a maturing technology that could boost home electricity use by 30 percent, improve distribution systems’ load factors, offer some backup power and energy storage potential, and even yield economic development opportunities.

“Not being educated and prepared is the number one pitfall,” says Kristi Brodd, communications manager for Advanced Energy, a North Carolina non-profit that was commissioned by Raleigh-based G&T North Carolina Electric Membership Corporation to produce an EV strategy report last year.

“With close to 600,000 electric vehicles in the United States, co-ops are now the new vehicle-fuel provider for many drivers,” Brodd continues. “They should see this as an opportunity to provide leadership and guidance to their members.”

## ‘Range Anxiety’



A charging station in Raleigh, N.C. (Photo courtesy Advanced Energy)

That’s what’s happening at Randolph Electric Membership Corporation in Asheboro, N.C. The co-op says 236 EVs are registered with the DMV in the five counties it serves in the central part of the

state.

“Being a very rural co-op, the majority of our membership will be late adopters of electric transportation due to range anxiety,” says CEO Dale Lambert, referring to the fear of running out of charge before reaching a destination. “This gives us great opportunities to grow as battery technology continues to improve and increases the range capability between charges. We also have the opportunity to influence behavior with our ‘Plug N2 Savings’ time-of-use rate, which encourages using electricity during off-peak hours.”

However, even more than range anxiety, the high purchase price has been the steepest hill for EVs to climb. But prices are dropping while battery range is improving, with both changes due in part to regulatory requirements that gave electric vehicles a market toehold and turned a lot of intrigued drivers into EV converts, Brodd says.

A 2015 Advanced Energy survey showed that consumers have found a lot to like about electric vehicles. “Number one was cost savings,” she says. Fueling an EV costs almost



two-thirds less for the typical vehicle driven 12,000 miles a year, the report estimates, and maintenance costs are considerably lower too.

Consumers ranked EV performance second and environmental benefits third, Brodd says. “And the fourth was being energy independent. You’re supporting a fuel that is domestically created.”

At Wake Electric, Mangum has a hunch that, at least for the 20 members he has on the off-peak EV rate, there’s another reason altogether to make the switch.

“I think with this particular group, it isn’t any of those things,” he says. “They’re early adopters. We get a lot of technical folks, and if you’re an engineer/geek-type person, this stuff is just really appealing to you. It’s just that, ‘Hey, this is really cool stuff, and we want to do it.’”

## Keeping the Buzz Going



Electric vehicle charging station in Apex, N.C. (Photo courtesy Wake Electric Membership Corporation)

Whatever it is that rings a driver’s bell, the growing interest in EVs among car buyers has triggered a corresponding interest from automakers. As Brodd points out in her co-op presentations, Ford is investing \$4.5

billion in EVs with a goal of adding 13 new all-electric and hybrid vehicles by 2020, while Honda has predicted that two-thirds of its vehicles will be electric by then. BMW plans to make hybrid versions of every one of its models, and Audi has said it expects EVs to account for 25 percent of its U.S. car sales by 2025. General Motors “believes the future is electric,” Brodd says, and is investing billions “to support the development and manufacturing of electric vehicles.”

As a result, EVs constitute a power-use market that requires almost no marketing effort from the utilities that stand to benefit from them.

“With battery prices dropping over 60 percent since 2010,” says Lambert of Randolph Electric, “EVs will be on a level playing field with gas-powered vehicles from a pricing standpoint. With the continuing improvement of battery technology, lighter and longer-range batteries will help reduce the range anxiety members may feel while the charging infrastructure is being developed. There are also opportunities to increase member satisfaction with electric transportation, including having a trusted energy advisor to answer questions and having stable transportation fuel costs that do not fluctuate like those for gas-powered vehicles.”

Still, it doesn't hurt to keep the buzz going, BEMC's Herring says. He and Heather Holbrook, the co-op's marketing communications supervisor, take every chance they get to keep members thinking about EVs.

“We keep our members informed with press releases regarding the opening of new charging stations, articles in our monthly newsletter, and social media posts,” Herring says. “We also had an EV informational workshop last June where the public was invited to learn more about EVs and how the co-op is incorporating this new technology. We also educate local home builders about incorporating charging stations into new construction.”

Randolph Electric has been following a similar path.

“We have had staff meetings and a board retreat with Advanced Energy to keep track of the current EV market,” Lambert says. “We are holding quarterly ‘REConnect’ member meetings, with one of the main topics being electric vehicles. We are including EV information in our member magazine and have included answers to basic EV questions on our website.”



## KWH At The Right Time

(Photo courtesy Wake Electric Membership Corporation)

Herring and Lambert agree with Advanced Energy's prediction that a home with an electric vehicle will probably increase energy sales to that home by about 30 percent. After a quick back-of-the-envelope

calculation of his own, based on his experience with the hybrid EV he drives to work, Mangum makes it more like 22 percent.

But all three say the right mix of rate incentives and consumer education can, and should, steer those additional sales into the off-peak, overnight hours.

“It’s not just about selling more kilowatt-hours,” Lambert says. “It is about selling more kilowatt-hours at the right time, so all members benefit from a better load curve. The great thing about charging EVs is that you can charge them during off-peak times with little to no inconvenience to the member.”

Things get a little trickier with public charging stations at places like shopping centers, offices, and schools. These stations, often installed to help ease the old range anxiety problem, can add daytime load, especially when the chargers are the faster, higher-capacity models.

“Due to their higher demand, the Level 2 and 3 chargers [higher-voltage rapid chargers] could give problems if load is not properly managed as the EV market grows,” Lambert says. “If properly managed, the additional flexibility in shortened charging times will allow better utilization of electric vehicles. As long as there has been communication between the member and the cooperative, we should be able to avoid issues with overloaded transformers and undersized secondary devices.”

Those high-speed, high-visibility public charging stations offer an advantage to trade against the potential problems, Lambert adds. Not only do local businesses have a shot at keeping customers in the store or at the cafe table a little longer while their cars charge up, but the stations also show that EV owners needn’t worry about running out of juice on the road.

“Having visible public charging stations where our members shop and eat will help ease range anxiety and increase EV adoption,” he says. “We’re looking at potential sites for public charging, such as workplace and destination charging.”

At BEMC, visibility and accessibility is key.

“Our service area covers 1,500 square miles, including beach towns, retirement communities, and agricultural heartland,” says CEO/General Manager Don Hughes. “We have six charging stations in popular retail and recreation locations, with more to come. We make it easy for members to use this new technology, and our business community benefits. It’s a win-win.”

# Like an Electric Stove



(Photo courtesy Wake Electric Membership Corporation)

All three co-ops are taking another Advanced Energy recommendation to heart: putting staffers in co-op EVs as they drive around the service territory. Randolph Electric plans to add an EV to its fleet early this year for one of its energy advisors.

“This will prompt questions about and promote electric transportation,” Lambert says. “And it will allow us to share our experience with our members and other folks in the communities we serve.”

Herring drives an electric vehicle, and Mangum just traded in his 2013 EV for a 2017 model.

“There’s no question that the second-generation [Chevrolet] Volt is better in every way,” Mangum says. “Everything about it is better. I think that’s what you’re going to see with electric vehicles. They’re just going to appeal to a broader and broader segment of our members.”

In many ways, he says, the emergence of EVs reminds him of an earlier time in the rural electric program.

“It’s kind of like an electric stove,” he says. “When I came to work at Wake Electric—and that’s been a long time ago—we actually had a demonstration kitchen here at the co-op. Of course we had ulterior motives. We were going to sell more electricity under the banner of, ‘This is really cool stuff; you ought to take a look at it. It can really improve your life.’”

“I think electric vehicles are the same thing—the parallels are exactly the same.”