The future of transportation has arrived, and it’s powered by electricity.
Kim and Robert Celley stand beside their Tesla Model 3.
The future has arrived... and it’s electric

STORY AND PHOTOS BY KRISTA RAUSCH

Robert Celley has been a car enthusiast for most of his life. So, when he brought home a Tesla Model 3, those who know him best weren’t entirely surprised. What surprised them is how the electric vehicle compares to other cars on the road today.

“It’s more fun than any sports car I’ve ever driven, and I’ve driven a lot of sports cars,” says Robert with a smile. “The acceleration, the handling, everything about it is over the top.”

The Model 3 has been hailed the car of the future. The electric vehicle offers Tesla’s most refined design and engineering, a 310-mile battery range and 0-60 mph acceleration in 3.5 seconds. But for the Celley family, the car is about more than fancy gadgets and fuel savings.

“Our oldest daughter has Down Syndrome. With current transportation there is no chance she will ever drive. That’s just the reality of it,” says Robert. “The technology that’s in this car completely changes that. As soon as they get everything worked out, the car can be completely autonomous. When you get in the car, you can tell it where you want to go or you can set your phone down, and the car will look at what time it is, what your schedule is for that day and go to that destination.”

Self-driving cars, embraced as a stress-reducing convenience for harried drivers and a potential advance in road safety, could prove to be a life-changing breakthrough for the elderly and many people with disabilities, granting them a new measure of independence. But first, the laws need to catch up to the technology.

“The North Dakota Department of Transportation (NDDOT) is very positive about autonomous vehicles, but we want to make sure we are ready for them,” says Strategic Innovations Manager Linda Sitz, NDDOT. “That’s why we’re initiating meetings with key stakeholders. We want to be proactive on this. We are preparing for the future.”

Sitz says legislation regarding autonomous vehicles could be considered as soon as the 2019 legislative session, and many car manufacturers estimate that fully autonomous vehicles could be on the road as soon as 2020. In the meantime, drivers can enjoy some autonomous features, including self parking and enhanced autopilot technologies.

Think of enhanced autopilot as autonomous cruise control. With two quick taps on the shift lever, the Model 3 takes control of the vehicle, following the roadway and matching speed to traffic conditions. The car will even change lanes at the flick of a blinker – after scanning for possible obstacles, of course. While the driver needs to be prepared to take control, the car can do much of the work. And much like cruise control, the driver can exit enhanced autopilot by the press of a button or by tapping on the brake pedal.

“I freaked my brother out. We got on the interstate up by Stamart in Bismarck. We got all the way to the MVP exit in Mandan, and I never touched the wheel. I never touched the gas pedal,” says Robert with a smile. “It’s absolutely crazy. When a car in front of you pulls off, it speeds up. When a car merges, it slows up and lets that car in. If you turn on the blinker, it automatically changes lanes when there is an open spot. It’s ridiculous.”

New and improved technologies make it possible for the car to interpret its surroundings. Eight cameras provide 360 degrees of visibility around the car at up to 250 meters of range. Twelve ultrasonic sensors complement this vision, allowing for detection of both hard and soft objects at nearly twice the distance of the prior system.

A forward-facing radar provides additional data about the world on a redundant wavelength that is able to see through heavy rain, fog, dust and even the car ahead.

“If you look at the test data for the Model 3 and the Model X, you’ll see they’re the safest vehicles on the road. When the autonomous feature of enhanced autopilot was released, the car became 40 percent safer than any other vehicle on the road,” says Robert. “The car has accident avoidance. If someone pulls in front of you, it will turn to avoid that accident, but it won’t leave that lane. It doesn’t create a hazard itself.”

For the Celley family, these benefits are only the beginning. One day, autonomous technology could help shape their daughter’s world, giving her independence they never dreamed possible.

“As a mother, it scares me,” says Robert’s wife, Kim Celley. “But, knowing she could [use an autonomous vehicle] is a good feeling. I don’t know how independent she’ll be in 10 years, but to know that this technology could help her be more independent is a nice feeling.”

While the Celley’s aren’t sure what the future holds for their daughter, they are certain about one thing. “She knows she could use the car to go to the beach house,” says Kim with a laugh. “Hopefully, she doesn’t ever do that to us or we’ll have to track her down.”
When most people think of a highway department, they think of road maintenance and improvements. What they probably don’t think about is trees. But, one highway department’s efforts to protect and beautify the prairie could change that.

The Burleigh County Soil Conservation District presented the Burleigh County Highway Department with the 2018 Tree Care Award at its Appreciation Mixer on Nov. 14. The award, which is sponsored by Capital Electric Cooperative, recognizes the department’s extraordinary effort to establish more than 31,000 feet of trees planted in 2011 and 2012.

“Planting trees is only half the battle,” says Soil Conservation Board Chairman David Bauer. “A continued effort is key to a successful tree planting. The Burleigh County Highway Department has been diligent in replacing any trees that did not make it, resulting in vibrant plantings.”

Pine, spruce, lilac and a variety of berry trees help protect and beautify two of the department’s facilities – the headquarters building near Bismarck and a shop in Wilton. They also help protect adjacent roads from blowing and drifting snow and provide shelter and home for wildlife.

“Sometimes, I’ll go walk around the trees, and I’m amazed by the wildlife we have already,” says County Engineer Marcus Hall, Burleigh County Highway Department. “There are lots of birds and some smaller animals. We have lots of ducks and geese. We’ve even had a badger and a skunk.”

While landscape screening is a requirement for county developments, Hall says the department decided to go beyond what was required.

“When we have developments go in around the county, we require screening. We felt it was important to not just preach that, but to actually take the lead in doing it,” says Hall. “We had two different projects. One was up in the Wilton area where we have a shop with 40 acres. The other was at our facility near Bismarck, which also sits on 40 acres. For both projects, we lined the perimeter with trees and went from there. In addition to the tree rows, we’ve planted trees on berms and roundabouts.”

It’s been more than six years since the Soil Conservation District helped the department select and plant the trees. And today, they are thriving. But, Hall says the department may never be done planting trees.

“Every spring, we go over to the Soil Conservation District’s tree area. At the end of the season, they have different trees available, and we always decide we have to have one of them!”

Since 2011, the department has planted more than 2,000 trees.
Linemen recognized for service

At Capital Electric Cooperative (CEC), we exist to serve our community and member-owners as their trusted energy provider and partner. Linemen are often recognized by our members for the vital service they provide to keep the power on, to restore power after outages and to often work through the night in terrible weather conditions to make these things happen.

CEC recognizes two of our linemen, Steve Kuball and Jesse Goehring, as they reach milestones in their years of service. Kuball has been with the co-op for ten years, and Goehring has reached the five year point in his co-op career. Both men work hard and are dedicated to providing the best possible service to you, our member-owners.

Kuball joined the co-op in August 2008 and has worked out of the Bismarck headquarters location his entire career. He lives in the Bismarck area with his wife, Claudia, and their three children.

Goehring has been working at the co-op’s Wing outpost since October 2013. In 2017, he married his wife Allison, and they make their home in Wing.

We appreciate the dedication these two linemen have shown in their positions for the past several years. Thank you guys for keeping the lights on!

Curiosity and cats usually don’t result in a happy ending. This adventurous feline decided to climb and perch atop a light pole without the foresight to how he would get down. Luckily, Capital Electric Cooperative (CEC) Linemen Steve Harrington and Seth Lothspeich were called into action. With the use of a bucket truck and some gentle coaxing, they brought the cat back to his fretful owner without further incident.

“I knew I’d have to move slowly but I also knew I’d have to grab him with both hands to get a good grip,” says Harrington, a 33-year veteran lineman. “You never know what their reaction is going to be. This one just turned out to be positive. We’re happy to be of assistance to our members.”

It’s not uncommon for linemen to rescue cats that have ended up in similar unfortunate circumstances. CEC Lead Lineman Matt Hagen has saved the same cat south of Bismarck on two separate occasions. This is just one way CEC linemen go above and beyond to help members when needed.

Thank you, Steve and Seth, for taking the time to care!
Be an engaged co-op member

BY WES ENGBRECHT

Being a member of Capital Electric Cooperative (CEC) means you are a part owner of the cooperative. As an owner, you have the right to know what’s happening and also have a voice in it. CEC is doing its best to encourage member engagement through various programs. Here are two ways you can become more involved.

Serve on the Member Advisory Committee: Each February, CEC welcomes a group of co-op members to its Bismarck office for a member advisory committee meeting. During the meeting, the co-op updates the committee about what is happening at the co-op. Members hear from managers and supervisors in each department and are free to ask questions.

During this meeting, CEC asks for feedback on important topics and decisions the co-op needs to make to benefit its membership. Before CEC consolidated its transmission and substation assets with Central Power Electric Cooperative a few years ago, the co-op ran the idea by its member advisory group first. That June, the co-op brought the consolidation issue to the annual meeting for a vote. By educating member representatives prior to the annual meeting, we were able to spread the word about the importance of the merger in a more efficient way. This process allowed questions to be answered in advance, thereby making the voting process easier at the meeting.

To ensure we obtain feedback from a diverse group of our membership, we ask that members interested in serving on the member advisory committee complete a simple application. The Board of Directors will evaluate and approve the applications in order to obtain the best overall representation of our membership.

Participate in the Know Your Co-op program: The Know Your Co-op program kicked off two years ago, and we are nearing the eighth and final installment of the first class. The program, which includes tours of a local substation and the plants and mine near Beulah, aims to educate our members about the inner workings of each department, explaining in detail how things work.

CEC holds a two-hour class once each quarter at its headquarters building in Bismarck. We try to keep the group to a small size, about 25 people, so it is more manageable. We encourage members to attend as many of the classes as possible to get the most benefit from the program.

Interested in joining? We always welcome feedback from our consumer-members. If you would like to go the extra step and learn how to become involved in one of these member engagement opportunities, please do the following:

If you’d like to be considered for a position on the member advisory committee, complete an online application on the Member Engagement section of our web site at www.capitalelec.com.

To reserve a spot in the next Know Your Co-op program, contact Wes Engbrecht at (701) 712-7923 or wese@capitalelec.com.
Capital Electric offers student scholarship

Capital Electric Cooperative is offering a $1,000 student scholarship, in partnership with Basin Electric Power Cooperative.

To qualify for the scholarship, seniors must be enrolled or planning to enroll in a full-time undergraduate or graduate course of study at an accredited two-year or four-year college, university or vocational/technical school. Their parents or guardians must be members of Capital Electric.

Our cooperative will assemble a panel of impartial judges to review all applications. The judges will select the winning application based on academic performance, potential to succeed, leadership and participation in school and community activities, honors, a statement of education and career goals, work experience and an outside referral. The scholarship will be awarded without regard to other awards, loans or financial assistance the applicant may have obtained.

Application forms may be downloaded at www.capitalelec.com or picked up at co-op headquarters at 4111 State St. N. in Bismarck. Applications need to be completed and returned to Capital Electric on or before Friday, Feb. 15.
Board minute excerpts NOV. 21, 2018

The Board of Directors of Capital Electric Cooperative, Inc., held a regular meeting on Wednesday, Nov. 21, 2018, at the co-op’s headquarters building in Bismarck, N.D., pursuant to due notice to all directors. All directors were present, except Richard Koski.

Also present were General Manager Paul Fitterer, Business Manager Luke Steen, Director of Communications Wes Engbrecht, Manager of Engineering Ron Lipp, Energy Services Supervisor Josh Schaffner and Attorney Carol K. Larson of Pringle & Herigstad, P.C., who acted as recording secretary.

Financial Review: Prior to the board meeting, Directors Kyle Hilken and Rex Hollenbeck reviewed the October 2018 check register and expenditures. Hilken reported that all checks were in order. It was moved, seconded and carried to approve October expenditures in the amount of $3,278,921.16.

Management Reports (Business Department, Operations and Engineering, Member Services, and Public Relations/Communications):

Business Department Report: The business manager presented the financial and statistical report to the Board. Total kWh sales for October were over budget by 5.7 percent. The actual monthly electric revenue is ahead of budget by 3.5 percent.

CEC’s load factor was above budget, leading to a cost savings of $65,797. The total operating margin for October was $49,951, versus the budgeted amount of -$100,565. The total margin for October was $70,558 compared to the budgeted amount of -$94,619, ahead of budget by $164,977.

Year-to-date sales are over budget by 6.4 percent; revenue is above budget by 4.3 percent; and the total margin year-to-date is a $852,157 positive variance.

CEC began billing 38 new services in October, bringing active services to 20,555 versus 20,148 at this time last year, or a net increase of 407 services over the last 12 months.

The business manager reviewed the comparison of actual to budgeted expenses, statement of cash flows and monthly power cost for the month of October 2018. The Board reviewed accounts receivable balances as of Nov. 20, 2018.

Sears/K-Mart Bankruptcy: The billing department is working on the K-Mart bankruptcy.

Vision Plan Implementation: The employee enrollment deadline is Nov. 16, 2018.

Phone System Replacement: CEC will purchase a new phone system.

Member Concerns: The Board reviewed member concerns on retirement of capital credits.

Estate Retirements: Following review of the financial condition of the cooperative and recommendation by management, it was moved, seconded and carried to authorize payment of capital credits to the following deceased members’ estates:

- Oscar O Wirta $ 289.24
- Maomi Oder $2,104.71
- Clarice Butterfield $ 951.34
- $8,721.36

Engineering and Operations Report: Lipp reviewed the written report from the engineering and operations department. CEC completed 62 work orders this month, adding 53 new consumers to the system. CEC crews are re-routing service for Central Power as they are putting up new overhead ground wire with fiber optic cable from their East Bismarck substation to their 71st Avenue substation.

VIP continues to rebuild old single-phase overhead line.

Fisher Contracting and Geiser Utility Contracting are trenching and boring in new services and replacing old underground cable.

In November, CEC had 13 total outages. Of note, one outage was a dig-in, and two were power supplier problems.

Following discussion, it was moved, seconded and carried to authorize the general manager to sign the amended Batis Purchase Agreement to extend the due diligence period, with non-refundable earnest money.

Energy Services Department: Schaffner reviewed the Energy Services Report. CEC completed 24 service orders in October. CEC employees attended Basin Electric Power Cooperative’s annual meeting with the Chevy Bolt to answer questions and give members a chance to see an electric vehicle (EV) firsthand. The co-op installed its first EV charging meter this month.

CEC employees visited solar sites and well sites with some members to go through seasonal shutdown procedures.

Prairieview has completed 90 percent of the water feature work under the new sign and next spring will install the pump.

ERC Loans: There were no ERC loan applications for approval this month.

Communications, Public Relations and IT Department: Engbrecht reviewed topics of interest.

Member Survey Options: Engbrecht has been working on member survey options.

CoBank No Barriers Program: The CoBank No Barriers program will be accepting applications starting in December. CEC is seeking a veteran with a disability who would be a good candidate for an outdoor excursion of this type.

Know Your Co-op Session 7: CEC held its seventh quarterly session of Know Your Co-op on Nov. 13. The session focused on rates and included a hands-on rate setting exercise for the 15 participants who attended.

Scholarship and Youth Tour Essay Contest: The deadline for the Youth Tour essay contest is Jan. 31, 2019, and the deadline for this year’s Basin scholarship program is Feb. 15, 2019.

Safety Report: There were no lost time accidents in October.

Without objection, the Board approved the 2019 Budget as presented.

Policies: The following policy was reviewed:

Rate Schedule “SP” Solar Pasture Well – Following discussion, it was moved, seconded and carried to approve the policy as amended, resulting in a reduction in base service charge and the per watt charge.

Basin: Fitterer reported on Basin matters.

CPEC: Director Sheri Haugen-Hoffart reported on CPEC matters.

Statewide Report: Director Dean Vilhauer reported on Statewide matters. NDAREC’s annual meeting will be held Jan. 14 to 16, 2019. Vilhauer was elected to be a statewide director and Director Bill Patrie was elected as alternate delegate to Statewide. All Board members will be delegates to the annual meeting.

NRECA: Directors Dave Charles, Vilhauer and Hollenbeck will attend the NRECA annual meeting scheduled for March 11 to 13, 2019.

Adjournment: There being no further business to come before the meeting, without objection, the regular meeting was adjourned.