June 2020 "Your Electric Connection Since 1938"

FEC® POWER Source

Vol. 24 No. 06

Farmers' Electric Cooperative, Inc. is an equal opportunity provider and employer

Introducing: FEC's Newest Member of the Family

Farmers' Electric has added a "100% Electric" powered car to its fleet of vehicles. The 2020 Tesla Model 3 has a driving range of 322 miles on a "full charge." Its Dual Motor drives also make it surprisingly responsive. The car is a very comfortable drive with plenty of extra trunk space.

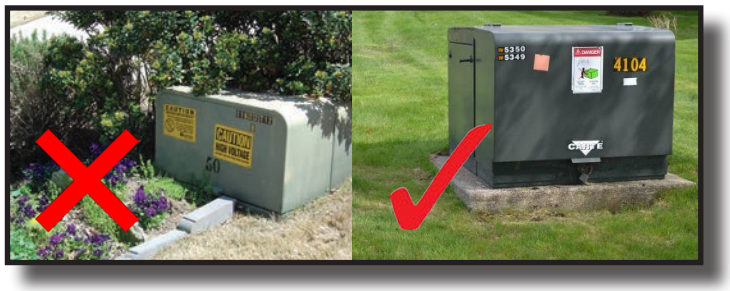
Currently, there are Tesla Level 3 charging stations in Santa Rosa and Tucumcari. Farmers' Electric is working closely with Francis EV Charging on electric vehicle (EV) supercharging infrastructure in New Mexico. This cooperative effort will eventually expand Level 3 charging in FEC's service area to include Fort Sumner and Clovis. Francis EV Charging was recently awarded grants from the State of New Mexico, part of a large VW settlement case, to further enhance charging opportunities around the state. Most of these charges will be located along the Interstates and U.S. highways. By placing these vital chargers along these major thoroughfares, with an anticipated 70 mile radius or less, the hope is to reduce EV range anxiety.

Other Cooperatives around the state have invested in EVs as well, particularly our neighboring Co-ops on the eastside of the state. Once it is deemed "safe" and the Covid-19 restrictions are lifted by the State of New Mexico, be looking for a Ride-N-Drive event near you!

Too Close for Comfort

If your home is served by underground electric cable, you may be tempted to plant flowers or shrubs to disguise the transformer cabinet on your property. Please don't give in to your temptation.

Line crews need easy access to those cabinets to perform routine maintenance and repairs. Shrubs, trees, and flowerbeds can block access or make access more difficult. After the necessary utility work is done, you may be unhappy about the condition of your plants.



It is dangerous to plant or work close to transformer cabinets. They contain high-voltage connections originating from and traveling underground from our distribution power lines. Our most common voltage to these cabinets is 14,000 Volts. Please avoid these cabinets at all times – and teach children to stay away too.

Only trained professional personnel are qualified to work around these cabinets. Additionally, when not being serviced by our line crews, these cabinets should remain padlocked. If you ever notice a cabinet missing a lock or a lock not fully engaged, keep everyone a safe distance away and call Farmers' Electric immediately. This call could mean the difference between life and death.

Manager's Message...

Lance Adkins, GM

What's the "Source" in Resource?

I enjoy conversation with folks who want to know more about the Cooperative's (FEC) wholesale power supply resources. Generally, the conversations begin with questions about how much power is FEC receiving from an existing or proposed new wind farm or solar project. Others, who are aware that FEC has historically received power from Tolk Station, a coal-powered plant owned by Xcel Energy located to the northeast of Muleshoe, Texas, are interested in how much longer that plant will continue to operate.

Most folks are not aware that the United States is divided into three primary electric power grids, the Eastern Interconnection, further divided into six coordinating councils including the Southwest Power Pool, where FEC is interconnected. Most of New Mexico is interconnected with the Western Interconnection, also known as the Western Electric Coordinating Council (WECC). Texas is largely electrically isolated from the rest of the country, operating under the Electric Reliability Council of Texas (ERCOT). While Tolk Station, and Xcel Energy/Southwestern Public Service Company (SPS) are in Texas, they are "electrically" located in the Eastern Interconnection, not ERCOT.

Caprock Wind near San Jon, NM

For many years, transfer of electric energy between the eastern and western power grids has been possible and transacted through direct-current (DC) Ties between the two grids. One such DC-Tie (Blackwater) is located along the Curry and Roosevelt county line. For those who are curious, the SPP website SPP.org, has additional information on the current price of wholesale energy in the market footprint, with the price expressed in dollars per mega-watthour (MWH) at various locations. As an example, a price of $22/MWH is 2.2 cents per kilowatt-hour. In addition, the website has a graph depicting the current generation resource mix running. At the time of this writing the market was operating at 23 percent coal, 46 percent wind, 17 percent natural gas and the balance of resources being comprised of nuclear, hydro, solar and a few other odds and ends.

Today, FEC is a member/owner of Western Farmers Electric Cooperative (WFEC), along with 21 other distribution cooperatives in New Mexico and Oklahoma. Under the terms of our wholesale power supply agreement, a portion of our supply comes from our previous supplier, SPS, on a declining basis through the middle of year 2026. Combined, WFEC and SPS must have sufficient generation capacity, that they own or control, to meet the instant-demand of FEC and the other wholesale and retail customers they are contractually bound to serve.

One component of FEC's wholesale power bill is a "demand charge" which recovers for the wholesale supplier the capital cost of building and owning generation resources. Historically, the electric energy that flowed to area homes and businesses was directly

See **SPP** *on* **PAGE 3**

POWER SOURCE
is published monthly by Farmers' Electric Cooperative, Inc.
Questions or article ideas should be directed to :
Thom J. Moore,
POWER SOURCE
P. O. Box 550
Clovis, New Mexico
88102-0550
Phone (575) 762-4466
or
1-800-445-8541
thom@fecnm.org

To Report An Outage

We are on-call 24 hours each day, 365 days each year, to serve ***your*** electric power needs.

Clovis
(575) 762-4466
Fort Sumner
(575) 355-2291
Santa Rosa
(575) 472-3971
Toll Free
(800) 445-8541

SPP *from* **PAGE 2**

linked to these generation resources and it was reasonably accurate to point to a specific generator in our area and state "that is where our power comes from." From an engineering perspective, that is still reasonably accurate; however, the "paper trail' is infinitely more complicated today.

One way to think about the wholesale electric market FEC is tied to, the Southwest Power Pool (SPP), is to think of all the electric generation owners in the SPP as "pumping" electricity into a vast reservoir and wholesale customers pulling electricity out of that reservoir to serve retail consumers. SPP's Integrated Wholesale Market became operational in 2014. As market participants, WFEC and SPS, along with all other generation owners, bid their generation resources into the SPP Market on a day-ahead basis, as available to serve load. A generation owner's bid includes the price they will accept for running their generation and the operating conditions they are willing to run under. For example, a thirty-year-old coal-fired power plant can bid into the market at a very low cost; however, a coal plant has very limiting operating characteristics in that it takes a long time to start and is further limited in how much flexibility the plant has to increase output or decrease output. A simple natural-gas turbine may be more expensive to run, but has much greater flexibility, capable of starting and serving full load in a matter of minutes and can ramp down just as quickly. Both provide value in the market, but for different reasons. As the market operator, SPP decides which generation will run based on reliability and lowest cost to serve consumers.

Caprock Solar near Norton, NM

In addition to bidding their generation units as available to serve load, WFEC and SPS must also provide a schedule to SPP about how much energy they will require from the market to serve wholesale and retail consumers. Today, the SPP Integrated Market is an energy only market, meaning those desiring to purchase energy from the market must also have capacity (generating plants) available to support the market. Individual generation resources may not be called on to run, due to the bid pricing being too high, but they must be available in order to purchase energy from the market. Historically, SPP served as a reliability coordinator and their role in wholesale electric supply has expanded over time. SPP is now responsible for transmission planning, continually analyzing new load growth, new generation resources, including wind and solar, and what new transmission needs to be built to provide reliable transmission paths to move the power to consumers.

Since the SPP Integrated Market began operations in 2014, SPP estimates their market has saved consumers, including FEC, some $3.5 billion. SPP reports setting new renewable energy records, supplying more than 78 percent of load on April 27, 2020. SPP provides direct oversight over 66,892 miles of transmission line and had a peak load of 50,622 megawatts in August 2019. In comparison, the FEC peak load last year was just over 68 megawatts, also in August.

Until next month,

Don't Become a Target

Be Prepared

The National Rural Electric Cooperative Association (NRECA) has partnered with other industry leaders to create the "Consumer's Guide to Imposter Utility Scams" published by the Edison Electric Institute. To download the guide, visit Utilities United Against Scams at utilitiesunited.org

Notify the Authorities

Contact the Office of the Attorney General Consumer Protection Division consumer representatives at 1-844-255-9210 OR nmag.gov/consumer-protection-1.aspx

Responding to the census is not only your civic duty, it also affects the amount of funding your community receives, how your community plans for the future, and your representation in government. Specifically, data from the 2020 Census are used to:

- Ensure public services and funding for schools, hospitals, and fire departments.
- Plan new homes and businesses and improve neighborhoods.
- Determine how many seats New Mexico and other states are allocated in the House of Representatives.

In 2020, for the first time ever, the U.S. Census Bureau will accept responses online, but you can still respond by phone or U.S. Mail if you prefer. Responding should take less than it takes to finish your morning coffee!

Bottomline is, there has never been a more important time to complete a Census than this year. So many very important funding issues, etc. are riding on this. If you are encouraged to try the online response, here is the link: https://respond.census.gove/acs. If you prefer to call, to begin the process, dial: 1-844-330-2020 (English) and 1-844-468-2020 (Spanish). We are all "counting" on you.

Plant a Tree!

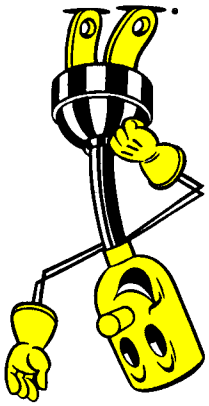
By planting trees in and around your property, you could help save money on air conditioning in the very near future and at the same time add value to, while beautifying your home.

Strategically placed trees can block your home from the hot summer sun well enough to reflect savings on your summer cooling bills.

Here's how:

- Plant ash, oak, Bradford Pear other trees on the west and south sides of a home to cast shade on walls or windows that would otherwise soak up the hot sun. When these trees lose their leaves in the winter, they'll let the sun's rays help warm your home through solar heating.
- Block strong winds from whipping around your home by planting rows of evergreens near your home.
- Locate trees near windows.
- Work with a landscaper or nursery to choose the right tree for your location and soil type.
- Choose trees that will grow tall and provide ample shade. Be sure to plant them far away from overhead power lines.

Before you dig, call New Mexico One-Call Center (811) to make sure no power lines or other utilities are buried where you plan to plant. It's a free service!



FARMERS' ELECTRIC COOPERATIVE, INC.
OF NEW MEXICO
3701 Thornton St., P.O. Box 550
Clovis, New Mexico 88102-0550

PRESORTED
STANDARD
U.S. POSTAGE PAID
CLOVIS, NM
PERMIT NO. 64