

# FEC® POWER

## Source

Vol. 25 No. 10

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

## FEC Utilizing Drone Technology

Farmers' Electric Cooperative (FEC) is using drone technology to enhance the safety and efficiency of our daily operations. Unmanned aerial vehicles (UAV) or "drones" are being used to inspect our infrastructure, especially transmission lines, within the service area. UAV technology is a new way for FEC to monitor the operational aspects of the industry more efficiently and safely. Some advantages to using UAV or "drones" for inspecting are: getting to and from hard-to-reach sites, reducing overall costs, improving response time, and shortening the length of outages. This "bird's eye" perspective gives FEC Operations personnel an up-close look at potential problem areas well before there is an issue. According to FEC Manager of Engineering Services, Michael McCord, "It helps make our crews more proactive and less reactive. The drone operators have found some issues that would have been virtually impossible to spot using traditional methods."

FEC is working with ACE Drones, LLC out of Albuquerque for our UAV inspection services. So far,



Stock photo: UAV near substation

they have inspected the transmission line between Tucumcari and Santa Rosa, between Clovis and San Jon, and 10 miles of distribution line out of Melrose. In the very near future, they will be inspecting the transmission line between Fort Sumner and Santa Rosa. So, if you are out and about and see someone flying a drone around our equipment, know that it's probably ACE Drones helping us work for you.

## Pole Top Rescue Training

As a lineman, you hope you never need to use it. As a victim, you pray someone knows how to use it. Pole top rescue is just as the phrase implies. It is a routine that linemen learn and practice because, if there is ever an accident involving a fellow lineman, he or she can be brought down safely.

During their training, the lineman first climbs the pole. They are safely belted around the pole so they will be able to work, "hands free." A rope is looped over the cross arm and then tied around the chest of the injured lineman. A life-sized mannequin, weighing approximately 175 lbs., is used during this exercise in training. This may sound fairly easy so far, however, consider this – the rescuer has to think about where his hooks are in the pole, where to throw

the rope over the cross arm so it doesn't get crossed or snagged, how he is going to tie the knot around the victim so that it will stay tight, and finally, how they will lower their buddy down in less than three minutes in order to start CPR – it gets very difficult and very stressful.

Our linemen practice pole top rescue procedures until they become routine. If a situation in the field ever arises, the rescue would almost be second nature. FEC linemen attend monthly safety meetings to sharpen their skills and learn safe working practices and procedures. As for pole top rescue, this is one skill they hope they never have to use.



*Manager's Message...*

## Renewable Energy - It's not all Peaches and Cream

Over the past few weeks, I have had several Farmers' Electric (FEC) members ask interesting questions about the future of the electric utility industry. Basically, folks want to know that, if state and federal legislators and regulators are working to eliminate traditional sources of electricity generation, such as coal and natural gas, and pushing to convert retail consumption of natural gas and transportation fuels to electricity, how long until these two forces converge and result in electricity shortages?

More and more folks are paying attention to state and national efforts to overhaul how the electricity we depend on each day is generated and delivered to the end user (that's you and I) at our homes and businesses. Over the past few decades, state and federal lawmakers have incentivized a transition to electricity generated by renewable technology, primarily wind and solar, through a variety of tax breaks. In addition, many states, including New Mexico, have imposed requirements that utilities include an increasing amount of energy generated by renewable technologies in the resource mix to serve retail customers.

More recently, New Mexico increased the quantity and pace of change through passage of the Energy Transition Act (ETA). Under the ETA, signed into law in 2019, FEC is required to have at least 40 percent of our wholesale energy supply from renewable resources by 2025, increasing to 50 percent by 2030. In addition, the ETA requires New Mexico to be 100 percent "zero carbon" and 80 percent renewable, by 2050. In working with our wholesale supplier, Western Farmers Electric Cooperative (WFEC), we believe we are on pace to meet and exceed the first two goals.

There continues to be a significant technology gap between renewable energy generation and keeping the lights on. Until these gaps can be resolved reliably and economically, state and national goals are not achievable – unless we go nuclear, and I do not see that happening! Technologies that show promise are battery storage of excess renewable energy generated; green-hydrogen from water; and blue-hydrogen, basically taking hydrogen out of coal and natural gas and using the hydrogen as fuel and utilizing or storing the captured carbon somehow.

Battery storage is an interesting idea, folks are generally getting comfortable



*Utility grade battery storage*

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### **POWER SOURCE**

is published monthly by Farmers' Electric Cooperative, Inc. Questions or article ideas should be directed to :  
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**RENEWABLES** *from* PAGE 2

with the battery technology used in electric vehicles, which is similar to the rechargeable batteries we now find in everything from cell phones to power tools. When using battery technology at utility scale, the specific battery technology/components come into play as the system is designed around specific operating characteristics such as how quickly can the system charge and discharge to meet system demand for electricity. Batteries lose their capacity to charge and discharge over time. In addition, most battery technologies in use today are constructed of costly materials not produced in the United States. In short, there is quite a bit of room for development before batteries play a significant role in supporting the electric grid.

So, what could go wrong? Most readers are familiar with California's experiences with rolling blackouts during weather events, specifically summer heat waves. These events underscore the critical importance of planning and utilization of all resources necessary, including non-renewable resources, to ensure grid reliability. Energy policy in California, New Mexico, and now nationally, at the direction of the Biden Administration, favors increasing reliance on renewable resources. Utility system reliability requires planning for and reserving sufficient generation, fuel, and transmission resources (capacity) for all reasonable contingencies.

I read with interest, an announcement last week by Governor Michelle Lujan Grisham, promoting New Mexico as a potential key player in development of a national hydrogen energy economy. Governor Lujan Grisham made the announcement at a meeting of the New Mexico Oil and Gas Association (NMOGA). Hydrogen from natural gas, also referred to as blue-hydrogen, is not green, not renewable, and not zero-carbon; I read where NMOGA was very pleased with the Governor's comments; proponents of renewable energy – not so much.

Until next month,



## Scholarship Applications Available Now!

Farmers' Electric Cooperative will be awarding scholarships again this year through the Farmers' Electric Education Foundation. Scholarship applications may be obtained from area high school guidance counselors or from cooperative office locations in Clovis, Ft. Sumner, and Santa Rosa. Scholarship applications can also be requested by calling the Clovis office at 575-762-4466 or 800-445-8541 or by going online to [www.fecnm.org](http://www.fecnm.org). All cooperative members and their dependents are eligible to apply for these scholarships.

### Don't Delay! Deadline For Applications Is February 1, 2022!



As in the past, there are two different scholarship forms. Be sure when requesting a form that you specify either the "Graduating High School Student Application" or the "Returning College Application." Both forms are available from any FEC office or are available to download from [www.fecnm.org](http://www.fecnm.org).

This year, the FEC Board of Trustees has authorized (63) \$1,000 scholarships and (1) \$2,000 Glenn Holland Memorial scholarship.

*The Farmers' Electric Education Foundation was established by the members of the cooperative in 1986 and is funded through donated and unclaimed patronage capital refunds and donations by private individuals.*

*Only the interest earned on donations is used for scholarships, ensuring that the Education Foundation will continue to support higher education for our members for many years to come. Through 2021, the foundation has awarded 1,383 scholarships totalling \$1,031,730.00.*

**Attention: Irrigation Consumers**  
**Subject: Irrigation Annual**  
**Minimum Charges**

In accordance with Farmers' Electric Cooperative's irrigation rate schedule, certain annual minimum charges apply to all irrigation accounts. Your original minimum charges were calculated through a contract with the Cooperative based on the cost of line extension to the irrigation load. Upon expiration of the contract, the horsepower on that account determines the annual minimum at the rate of \$20.00 per horsepower, but not less than \$110.00 for single-phase service, and not less than \$165.00 for three-phase service.

Under the irrigation rate schedule, consumers have one calendar year, (approximately December 20 through December 20 of the following year), in which to use the annual minimum charges. The December billing will reflect the remaining charges, if any.

If you have any questions regarding the annual minimum charges for your irrigation account(s), please contact the Cooperative's Billing Department at 575-762-4466 or 800-445-8541.

**SAVE THESE DATES!**

Each Saturday Jan. 15 - Feb. 19, 2022



**ANNIE'S PROJECT**  
 EMPOWERING WOMEN IN AGRICULTURE

This six-week course is a set of interactive classes bringing women together to learn from experts in production, financial management, human resources, marketing, and the legal field. There's plenty of time for questions, sharing, reacting, and connecting with your presenters and fellow participants.

It's a relaxed, fun, and dynamic way to learn, grow, and meet other farm and ranch women.

Classes will be each Saturday  
 January 15- February 19, 2022  
 9 am - 1 pm in Tucumcari

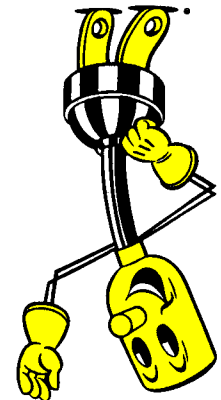
For more information, call Susann Mikkelson at Quay County Cooperative Extension Service at (575) 461-0562 or email: [susannm@nmsu.edu](mailto:susannm@nmsu.edu)

Register Online: <https://ezregister.com/events/35113/>

Early Bird Rate: \$100 for all six sessions!  
 (\$125 after December 1, 2021)



**BE BOLD. Shape the Future.**  
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