



East Texas Electric Cooperative is currently working to increase hydropower through the development of the hydroelectric project at Lake Livingston. Water released for the Trinity River Corridor could power more than 12,000 homes annually, with a good part of that energy being used by WCEC.

HEALTHY FUEL MIX PROMOTES HEALTHY ELECTRIC SUPPLY

Power-supply issues have been in the news for some time now, with a focus on rising costs, as well as reductions in greenhouse gas emissions. The board of directors and employees at Wood County Electric Cooperative (WCEC) are doing all that we can to plan for a reliable future supply that remains as affordable as possible.

Because WCEC is a nonprofit electricity provider, revenue is used to deliver electricity as efficiently as possible, with margins being returned to the member-consumers in the form of capital credits. Our loyalties as a cooperative are not to shareholders, but to those who jointly own and benefit from the service. So, it is important that our members know and understand where their electricity is coming from and how that is tied to cost.

Now, there are cooperatives, and then there are cooperatives. In the world of electric cooperatives, WCEC is considered a distribution cooperative, meaning it's a nonprofit, customer-owned utility that purchases electric power at wholesale prices and then distributes this power to the member. But, where does that power come from? WCEC buys power from two nonprofit generation and transmission cooperatives (G&Ts). And these G&Ts are partially owned by WCEC while also being nonprofits. Confused yet?

In basic terms, starting in 1972, WCEC joined other East Texas distribution cooperatives to form several G&Ts.

The G&Ts, in turn, invested in ownership of power plants and built transmission lines to deliver power to the distribution cooperatives.

Of the three G&Ts formed then, WCEC is a member of two: Northeast Texas Electric Cooperative and Tex-La Electric Cooperative of Texas. Over the past 35 years, together with the G&Ts and jointly with another larger cooperative, East Texas Electric Cooperative, WCEC has developed a series of power purchase agreements with large utilities and has also acquired partial ownership in a variety of power plants that operate on coal, natural gas and hydropower. These various fuel sources and the geographic spread help to furnish WCEC with stable and affordable power. This approach also takes advantage of economies of scale to maximize benefits, reduce costs and minimize risks. Together, the East Texas distribution cooperatives and the G&Ts serve 340,000 electric meters.

Reliance on a diversified fuel mix is also just sound business practice. When there are peaks and valleys for particular sources, that dynamic drives up costs. A healthy mix reduces the impact of price volatility for various fuel sources (such as natural gas) and also aids in reliability of service. What's more, it can be used to reduce emissions.

But the mix selected by any electric utility depends on the availability of the resource to the region. At WCEC, we

receive quite a few inquiries about our use of various “green” options, with continued interest in wind power. As you will read about in the pages of this magazine (see story: “Electric Highways in the Sky”), there are plans for adding more wind power to the electric grid. But, while wind generation in Texas is growing by leaps and bounds, the challenge for East Texas will remain in getting it transmitted to us. Those utilities that can be served by this power are all in the Electric Reliability Council of Texas (ERCOT) power pool. WCEC is in the Southwest Power Pool and currently does not have transmission access to wind generation from other parts of the state.

Viable areas to harvest wind have been studied and given power classes, ranging from Class 1 (the lowest) to Class 7 (the highest). These grades are based on air density and speed at a given elevation and are the report card used to determine whether installing wind-harvesting equipment would be productive. For Texas, the areas with the best potential for wind harvesting are the Plains, the Gulf Coast and the Trans-Pecos ridgetops and mountain passes. East Texas is considered a Class 1 with poor potential, meaning the costly infrastructure to harvest wind, with only a minor potential, would not be practical or economically feasible.

At WCEC we are committed to the process of securing as much renewable energy as possible, but the sources must allow for significant production while remaining affordable for our members. That is why we are currently pursuing additional hydro generation resources. For East Texas, this is one of the green sources with the greatest potential at the most affordable cost.

Together with our G&Ts, we’ve begun a feasibility study, which we hope when completed will hold favorable results. Our current belief is that we will yield 26 megawatts from a hydroelectric plant at Lake Livingston, which will be enough to power 12,000 homes. This project is “run of the river,” meaning it will produce electricity only when water is normally released from the dam and will not affect the lake’s levels.

Additionally, we are working with our G&Ts on another

exciting renewable project—building a biomass electricity generation facility in Nacogdoches County. These types of plants generate electricity by converting plant materials into a biofuel, then burning that with net-zero greenhouse gas emissions. The early plans would be to use “leavings” from the logging industry as one of the main fuel sources, with other options for fuel to be based on the availability of energy crops being grown. This plant is in the early stages, with feasibility studies and cost projections ongoing, but it’s a prime example of the thought and planning that goes on behind the scenes to balance the mix while considering the environment.

It is important to note that even though WCEC’s use of carbon-free energy is projected to increase, baseload generation powered by coal and natural gas will remain a necessity for the foreseeable future. Renewable energy such as hydro, wind or solar is not considered baseload power because energy from these sources is not generated on a constant 24/7 basis. For example, a prolonged drought could reduce the ability to produce hydropower, just as cloud cover can disturb solar, or wind can cease to blow at a high enough rate. Weather is obviously something none of us can control, yet it remains a huge factor in reliability of renewables.

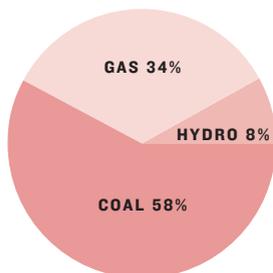
The fuel mix and planning for future generation is important, but maybe even more significant is an assessment of how WCEC is doing on costs in comparison to the industry. The numbers tell the story better than anything else can.

For a U.S. average residential use of 1,000 kilowatt-hours (including customer charges) the cost is \$102.* And this number ranges by state from a high of \$285.30 to a low of \$63.40. In Texas, that average is \$116.50, and WCEC members pay \$103.67, which is 11 percent less than the rest of the state.

As with all things, balance remains the key to a successful energy future for WCEC, as well as all other power providers. There must be a balance between energy affordability, reliance on foreign fuel sources and environmental responsibility.

THE COOPERATIVE ADVANTAGE

WCEC FUEL MIX



There are advantages to being a member of a smaller cooperative instead of getting electricity from a large investor-owned utility (IOU). All of the owners (the members) live in the cooperative’s service territory, and they are provided with electricity on a cost-of-service basis. IOUs are owned by stockholders who may not even live in the service territory, but are motivated to maximize profits.

WCEC maintains a diverse fuel mix to enhance reliability and decrease price volatility.

*According to the Department of Energy’s official statistics, Energy Information Administration



Friends and family gathered in Yantis at Wood County Electric Cooperative's newly named J.G. Walker, Jr. Substation to honor the late Walker's achievements and commitment to the cooperative and rural electrification.

WALKER POSTHUMOUSLY HONORED WITH SUBSTATION NAME

Wood County Electric Cooperative commemorated the construction of the Dallas Water Utility project on June 20, 2008, by recommissioning the Yantis substation in honor of the late Jesse G. (J.G.) Walker, Jr.

Walker, born in 1924, was a well-known dairyman and lifelong resident of Wood County until his death in 2003. Notably, he served the members of WCEC for 34 years as a director of the cooperative, spending 20 of those years acting as president of the board.

During his years of WCEC board service, Walker was instrumental in securing ownership stakes in generation and transmission plants, which gained affordable and reliable power through large wholesale purchases. To that end, he worked tirelessly on both the Northeast Texas Electric Cooperative and Tex-La Electric Cooperative of Texas boards to help shape power purchases and the policies of those two organizations that WCEC still enjoys today. In later years, Walker was also present during the formation of the East Texas Electric Cooperative, another partnership formed to purchase large amounts of wholesale power.

It's timely that the Yantis substation be renamed for

Walker during the construction of the Dallas Water Utility project at the Lake Fork Reservoir. New dual-purpose transmission lines that will serve the pumping station at Lake Fork will add reliability to the section of WCEC's system that feeds the Yantis area and sections surrounding Alba and Pilgrim's Rest. This project completed a transmission tie that had been in WCEC's long-range plan and was accelerated in tandem with the construction of the Dallas project. The cost for installation of much of the supporting equipment was paid for by the City of Dallas, but many members of WCEC will also reap benefits.

Of the decision to honor Walker, Debbie Robinson, CEO and General Manager of WCEC, said, "It is so very fitting to have this substation named after J.G. His leadership was marked by the highest integrity and professionalism, and he was dedicated to the ideals of the cooperative spirit. I'm convinced he would have been especially proud of this project, which brings stronger reliability to the district he served so well. And, I know he would have especially embraced the great cost savings we were able to achieve by making the improvements to our system in conjunction with the Dallas project."

Wood County Electric To Use High-Tech Markers To Combat Copper Theft

Wood County Electric Cooperative (WCEC) is using a new antitheft tactic to reduce instances of harmful and expensive copper theft from its electric distribution system. Over the past 18 months, WCEC has incurred more than \$1.5 million in damage caused by thieves stealing copper for resale at scrap metal facilities.

WCEC's goal in using a product called DataDot is to add unique markers to its property throughout WCEC's distribution system, which will allow the property to be identified as the cooperative's. DataDots are microdots no larger than a piece of glitter. These dots have been laser-etched with codes registered to the cooperative. While the dots are very hard to see with the naked eye, their presence can be detected with a special kit in a matter of seconds.

WCEC has bought and distributed a quantity of these DataDot detection kits to the region's law enforcement offices, as well as to area metals dealers. Dealers will now be able to quickly check any suspect metal, while law enforcement will use these kits in the field. Also, with the detailed information provided by the DataDots, prosecution of offenders will be much easier, as the origin of the stolen property will be specific.

Laws such as SB 1766, which have made it a state jail felony to steal wire cable that consists of 50 percent copper, aluminum or bronze, make it more likely that convicted perpetrators will be sentenced to long-term incarceration.

These kits were given out at a special event held to roll out WCEC's program. More than 40 representatives of law enforcement agencies throughout East Texas, including those from Smith, Wood, Van Zandt and Rains counties, along with a number of scrap metal dealers came together to participate. WCEC CEO and General Manager Debbie Robinson welcomed the group



WCEC will mark copper with almost-invisible microdots, which can easily be detected with a specialized kit that locates the presence of the dots and then allows the reading of ownership information etched on each one.

and announced the cooperative's plans, while Dave Barnes, Rick Busick and Joann Busick, representatives of DataDot, described the technology.

"We believe this product will offer WCEC a technological advantage and we hope it makes anyone think twice before vandalizing our system," Robinson said. "Their actions are causing dangerous conditions for the public, which cannot be tolerated. And, they are costing electricity consumers millions. With the marking of our equipment, stolen items will act as a beacon for seizure, enable arrests, and ease prosecution. I can't think of a better deterrent."

The cost to replace the material and repair the damage is always many times more than the actual value of the stolen property. In addition to driving service costs up, there are concerns regarding public safety. In many instances these thieves climb directly onto power poles and clip miles of ground wire, creating dangerous situations for innocent passers-by or utility workers who must repair the damage. Thieves have also broken into substations, causing damage to them as well as to transformers. They have also caused prolonged outages in several instances.

All co-op members should be aware of the signs of copper theft, including dangling power lines and suspicious activity around power lines and substations. Quick-acting members who

have noticed suspicious activity and called local law enforcement agencies have thwarted some of these crimes. We ask all members to continue to be vigilant and to alert authorities of any suspicious activity.

NEW TECHNOLOGY AT WCEC

Our engineering department has added a tool for our members so they can access outage information via the internet, almost real time. With the advent of this technology, this new tool can be useful for those with laptops and other mobile devices, as well as for those who have access to a computer by going to another location where there is power.

Updated every 10 minutes, this data can be useful almost any time an outage occurs. But, in instances of prolonged outages, as are seen when large-scale natural disasters occur and evacuations take place, this technology will be especially valuable to those affected. Visit www.wcec.org to access; and if you have suggestions, please send them to info@wcec.org. We'd like to hear from you.