Electricity industry facing many challenges

Recently, I attended a meeting in Nashville for managers and key staff members of most of the 156 distributors of electricity in the Tennessee Valley Authority system. This was not a meeting where decisions were made or even debated; it was more of an information-sharing opportunity to bring all of us up to speed on some of the issues facing our industry. But the topics discussed eventually will impact every home and business in the Valley.

Jim Coode
General Manager
Cumberland Electric Membership Corporation

I was particularly interested in hearing what Kim Greene, the new group president at TVA, had to say. According to Ms. Greene, a lot of challenges lie ahead. The reason, she says, is because the electric utility industry is in transformation. It is transforming from a traditional business model to one of innovation, from an industry heavily reliant on fossil fuels to a focus on renewable/clean energy, from reliable and inexpensive energy to reliable energy that reflects rising generation costs and from a mindset of abundant electricity to one of energy efficiency.

Challenge 1: The recession has significantly impacted electricity sales nationwide. According to the U.S. Energy Information Administration, industrial electricity sales were in decline for 20 straight months from March 2008 through October 2009. Why? Because industrial production was down. Idle factories don't consume much energy.

Challenge 2: There is a significant need for new assets. Major spending is needed to fund upgrades related to power generation, transmission and distribution.

Challenge 3: Volatile fuel prices. Look at the Fuel Cost Adjustment line on your electric bill for evidence of these fluctuations.

Challenge 4: New federal regulations could be expensive. We've talked a lot about carbon dioxide (CO_2) reduction legislation in recent years. Congress wants CO_2 levels reduced by 17 percent to 20 percent by 2020 and by 83 percent by 2050. That may not even be possible with existing technology.

Challenge 5: Climate change legislation will definitely increase the price of electricity. Ms. Greene says the expected impact of climate change legislation on electricity prices will vary by region and market, but most expect a "meaningful" increase in costs and rates.

Challenge 6: While the previous challenges have all been national issues, this one is specific to our region: Residential electricity use in the Valley remains very high. And Tennesseans are among the highest users in the nation. In fact, we're second only to Alabama in home electricity consumption. Statistics show the U.S. average residential electric use is 16.3 MMbtu (million British Thermal Units) per capita. In Tennessee, the average soars to 22.9 MMbtu. Consumption is the lowest in states where electricity is the most expensive.

I'm not pointing fingers because I'm as guilty as anyone else. But let me just throw this out there for consideration: If you really want to lower your electric bill, you have to use less electricity. No matter how much we preach "energy efficiency," the process is up to you, the consumer.

We have got to do a better job educating, informing and convincing our members that using energy wisely and efficiently is in their best interests. How do we do it? I'm not sure yet. But it's a subject you'll be hearing and reading more about in the coming months.

Information sessions held for HVAC dealers

CEMC and TVA provide updates on weatherization, *energy right*® guidelines

Cumberland Electric Membership Corporation recently hosted luncheon meetings for members of the Quality Contractor Network, the HVAC dealers authorized to install residential heat pumps according to Tennessee Valley Authority standards. At left is a photo from the Jan. 19 meeting at the Catfish House in Springfield, and at right is a photo from the Jan. 21 meeting at Logan's Roadhouse in Clarksville. Meetings are held in two different locations each year for the convenience of the contractors throughout the five counties served by CEMC. Todd Thompson from TVA updated attendees on the *energy right*® and weatherization programs, and each contractor received information that will assist him or her in preparing paperwork for jobs related to the *energy right* program and scheduling follow-up inspections by CEMC.

Member Appreciation Days coming in April

Hot dog! Member Appreciation Days are returning to the Cumberland Electric Membership Corporation service area this spring!

Members are invited to stop by their local CEMC district business offices for a free lunch of hot dogs, chips, cookies and soft drinks. Springfield members are *extra* lucky — that office has a popcorn machine! Plus, all members may register for a chance to win an electric grill. One grill will be given away in a drawing to be held at each location.

This will be the fourth year for Member Appreciation Days at CEMC. New for 2010 is a cookbook filled with hundreds of recipes from CEMC employees and retirees. The cookbooks will be offered for sale, with all proceeds going to Project Help. Donations to Project Help are used to pay the utility bills of people meeting certain qualifications as determined by charitable organizations in each community.

Here is the schedule for this year's Member Appreciation Days (10 a.m.-1 p.m. at each location):

Monday, April 12 — Clarksville (Headquarters)
Wednesday, April 14 — Dover
Monday, April 19 — Ashland City
Wednesday, April 21 — Springfield
Monday, April 26 —Gallatin
Wednesday, April 28 — Portland
Friday, April 30 — White House

CEMC members are the best in the world, and we hope you'll make time to come and let us express our appreciation for the privilege of serving you. We *relish* the opportunity to see and visit with you!

Free food plus an opportunity to win an electric grill are two reasons to attend CEMC's Member Appreciation Days. The above scene from last year's event in Ashland City will be repeated next month at each of CEMC's seven district business offices. Oh yes — there will be free balloons for the kids!

Orlinda couple represents CEMC at statewide leadership conference

At this year's Tennessee Young Leaders Conference, Cumberland Electric Membership Corporation was represented by a family with deep ties to the dairy industry, although they are presiding over a brand new start-up venture.

Steven and Shonda Gammon are proprietors of Gammon Family Dairy Inc. Processing Plant, located in Orlinda in northeast Robertson County. After four years of research, the business was begun with 130 milking cows in mid-2009 and started bottling milk the day after Christmas.

"My great-grandfather and his sister started our family's dairy business in Hendersonville in the early 1940s," Gammon says, adding that his grandfather and father moved the operation to Orlinda years later. After growing up "in the business" in one capacity or another, Gammon says he only got into it full time when he got out of school in 1995.

In the processing room of their family's dairy are Chase, Shonda and Steven Gammon. Their additive-free, Grade-A "real milk" is pasteurized and homogenized on site.

"The dairy farmer is very optimistic. We look at any gain in a positive way, rather than think it's not enough or it won't last."

Steven Gammon

Now, at age 32, Gammon is part of one of only 495 permitted dairy farms in Tennessee.

"There were more than 1,000 just five years ago," he says.

Judging from the numbers, Gammon knows the risks of sustaining a new business in today's economy.

"The dairy industry is hurting and has been for several years," he says. "But the dairy farmer is very optimistic. We look at any gain in a positive way, rather than think it's not enough or it won't last."

Futures (commodities bought or sold upon agreement of delivery in time to come) are a primary concern of Gammon and other dairy farmers.

"This past year has been the worst year ever, and the five previous years were not a whole lot better because of the rising costs of fuel, land rent and feed," Gammon says.

"For instance, the milk price we had last year got down close to $10 per hundredweight. In the late '70s and early '80s, the milk price was $11-$12," he says.

If the industry is to thrive like it did in past years, Gammon feels changes in federal legislation are necessary because dairy farms throughout the country are in peril.

"And some monopolies will have to be busted," he says.

Shonda Gammon left a stable career as a bank loan administrator to help her husband "get this thing off the ground and growing," which she believes was the right thing to do.

"The phone is ringing off the hook, and people are walking in to buy milk. We even have grocery stores calling, wanting to stock our milk. People in the community have been very supportive," she says.

With Steven being the fourth generation of Gammon men to be involved in the dairy industry, is there a chance the couple's 2-year-old son, Chase, will be the fifth?

"I would like for him to be," Steven says. "I'm not going to force it on him, but I would like to present him with the opportunity. He already knows the process!"

Sponsored by Tennessee Young Farmers and Ranchers and the Tennessee Council of Cooperatives, the Young Leaders Conference was held Feb. 12-13 at the Music City Sheraton in Nashville.

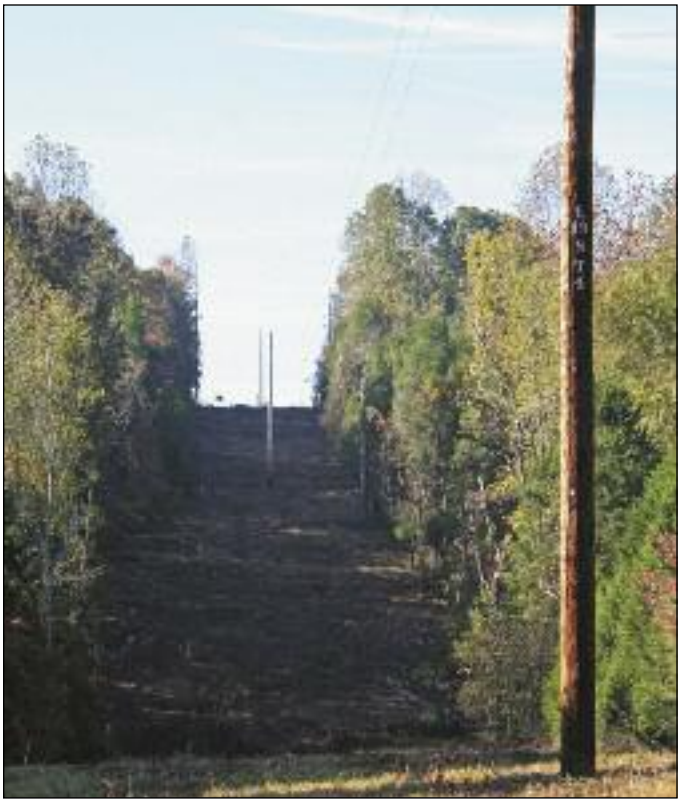
Designed to bring young leaders together, the conference focused on "Communicating Leadership Cooperatively" and offered a variety of topics affecting rural Tennesseans.

The conference gave the Gammons an opportunity to attend workshops addressing areas of interest to young farmers and cooperative members.

"We feel honored to have been chosen to represent CEMC at this," Gammon says.

For more information about Gammon Family Dairy Inc. Processing Plant, check out its Web site at www.tnrealmilk.com.

Revealed: The secret to fewer power outages



Above is a good example of proper right-of-way clearance found in the Southside community of Montgomery County. Notice that all tree limbs and undergrowth have been cleared approximately 20 feet on either side of the poles and power lines. This precision cutting is accomplished with the use of a Sky Trim, which can extend to a height of 75 feet. The business end of the Sky Trim's telescoping saw is shown in the close-up photo below.
To clear the area under the lines, workmen use a bushhog, which chops up vines, scrub brush and small saplings to prevent vegetation from growing up into the lines. CEMC spends approximately $3 million annually for right-of-way maintenance to prevent power outages.

Whether or not Punxsutawney Phil saw his shadow on Groundhog Day, Feb. 2, doesn't really matter. All that matters now is that spring *officially* arrives on March 20, and the frigid temperatures of winter will soon give way to longer, warmer days.

Hallelujah!

If you plan to welcome spring by planting new trees around your home, please be aware that in many cases, the integrity of Cumberland Electric Membership Corporation's electric system depends on where you plant them.

"There's definitely a right way and a wrong way to plant trees, and from our perspective, the wrong way is close to power lines," says Gerry Hester, right-of-way supervisor.

"You need to look up and be aware of where the power lines are and where those tree limbs will be when your trees mature. The right place to plant trees is away from power lines," Hester says.

According to Hester, 31 percent of all power outages on the CEMC system are attributable to tree limbs that either grow into or fall onto power lines. That number could be significantly reduced, he says, if people would observe what he calls "the 20-foot rule."

"We ask people not to plant trees and shrubs within 20 feet on either side of a power line. If they do, chances are a few years down the road we're going to have to come and trim their trees back and risk upsetting some people, which we do not want to do," Hester says.

It's also a matter of economics. Right-of-way maintenance accounts for a sizeable chunk of CEMC's annual budget. This year, the co-op has allocated $3 million for its "vegetation management" program. Four full-time employees and 15 contract crews are responsible for maintaining CEMC's 7,600 miles of power lines.

"Whenever we find a situation where a tree needs to be trimmed away from the lines, we try to contact the owner to let him or her know what needs to be done," Hester says. "Our goal is to keep the lights on and give every one of our members reliable electric service. That's what they're paying for."

And that's why effective right-of-way maintenance is a joint effort between the cooperative and its members. The cooperative's job is to take the necessary steps to keep the lights on for its members. The members have a responsibility to support those efforts, with the knowledge that action that impacts their household potentially affects many other households down the line. In other words, your tree may cause an outage not only at your house but at your neighbor's house, too.

By the way, in Tennessee, Arbor Day is the first Friday in March. National Arbor Day is the last Friday in April, but many states observe the occasion according to their best tree-planting times.

Happy planting!

Short circuits: Old wiring could be hazardous

Residential electrical wiring changed during the 20th century as new appliances appeared on the scene and electricity evolved from a luxury to a mainstay. More appliances at home led to safety improvements and an increased number of room outlets, leaving older home wiring to play catch-up.

Electric capacity is a major concern with older wiring systems. Homeowners in the 1930s didn't use a lot of electrical appliances, except for a refrigerator, a few lights and a radio. An explosion of appliance purchases followed in the late 1940s and early '50s. But the arrival of air conditioning during the 1960s soon rendered many mid-century home electrical systems obsolete. More recently, residences built as little as 20 years ago might be insufficient for handling entertainment systems and personal computers.

Each year, household wiring and lighting cause an estimated 32,000 home fires. On average, these fires result in 950 injuries, 220 deaths and nearly $674 million in property damage, according to the National Fire Protection Association.

"Residential electrical systems are seldom inspected after they are installed and tend to be destroyed in house fires," explains John Drengenberg, consumer affairs manager for Underwriters Laboratories Inc. (UL), an independent product safety testing and certification organization based in Chicago. "Homeowners should not assume all is well simply because fuses aren't blowing, circuit breakers aren't tripping or they're not receiving shocks or smelling burnt plastic. Inside the walls, wire insulation could be cracking. The wood frame above plaster ceilings could also become charred by lightbulbs that are too close to the ceiling or higher in wattage than its fixture's rating."

To avoid such hazards, consumers should understand the limits of home wiring systems. Often, this depends on when a home was built or if the electrical system was upgraded. In other cases, though, telltale signs may indicate a problem.

"Anytime you receive a shock from an electrical appliance outlet or wall switch in your home, it's a warning that you should talk with a qualified electrician," Drengenberg cautions. "If a fuse blows or a circuit breaker trips right after you replace or reset it, you have trouble somewhere. Flickering lights could mean loose connections, overloaded circuits, improper wiring or arcing and sparking inside walls.

"If your receptacles or plugs are hot to the touch — you can't keep your hand on them for more than five seconds — you may have an overload."

When too much current gets drawn, wires heat up, baking and eventually weakening the insulation. Wires with damaged, decayed or brittle insulation can lead to shocks and fires.

Another issue associated with older home wiring systems is the number of receptacles in each room. Today's electrical code requires outlets be placed every 12 feet of running wall space, about one per wall in the average 10-by-12-foot room. Houses built before 1956 were required to have outlets placed every 20 feet, while homes built before 1935 weren't required to have wall outlets at all.

"Relying on extension cords is not the answer," says Drengenberg. "Extension cords are meant for temporary use only and should not be a substitute for permanent wiring."

Proper grounding, meanwhile, prevents painful or even deadly electrical shocks when electricity flows through an improper path. Every home electrical system should have some type of grounding.

Newer homes are wired with cables that include a ground wire. The ground wire allows for use of three-pronged receptacles needed to power certain appliances, particularly ones with metal shells such as refrigerators and washing machines.

Many wiring systems installed in the 1950s and earlier used nonmetallic wiring, which lacked a ground wire. Homes from this era boast only two-pronged outlets, unsuitable for many modern conveniences. Simply replacing two-pronged receptacles with three-pronged receptacles violates the National Electrical Safety Code if no ground path exists.

In some cases, older homes may feature newer wiring systems. But the era when the wiring was upgraded impacts electrical limitations. Before buying a home, have someone certified in electrical work inspect the system to be safe. Visit www.inspectorseek.com for referrals.