

Making electricity clean, and affordable

The ability of the United States to meet the electricity needs of American consumers reliably and at an affordable cost is seriously at risk. In the Southeast, we are facing a steady growth in demand for electricity while at the same time it is becoming more difficult and expensive to produce and transmit that power.

For decades, we have relied primarily on abundant and affordable fossil fuels and nuclear energy-fueled power plants to meet growing demand, but federal regulations may change that.

Congress has haggled over details of legislation meant to curb carbon dioxide emissions from sources like cars, factories, and power plants. The inner-workings of the plan are complex, but one thing comes through clear: trimming carbon dioxide emissions will be challenging and expensive.

Developing these policies will alter the way we think about electricity, plain and simple. Electric co-ops are working to make sure these new policies are fair to everyone, while minimizing the impact on your electric bill. And we're already making investments in energy

efficiency and renewable, "clean and green" generation as a part of these efforts.

Electric cooperatives are no strangers to renewable energy. Across the nation, co-ops are developing innovative ways to generate electricity from renewable sources, and developing technology to reduce carbon dioxide emissions from traditional fossil fuels like coal and natural gas.

In North Dakota, Basin Electric Power Cooperative, a wholesale power supplier to co-ops in nine states, plans to separate carbon dioxide gas from smoke-stack emissions at a coal-fired power plant, pump it into underground cavities, and in theory keep it there forever. When the carbon capture and storage facility goes online in 2012, 1 million tons of carbon dioxide will be removed in this fashion.

In Indiana, Wabash Valley Power Association, a wholesale power supplier for 28 electric co-ops in five states, converts coal into a clean-burning synthetic gas stripped of polluting sulfur compounds and mercury, which it then

burns to generate electricity. Carbon dioxide emissions from the process are 20 percent lower than those produced by a traditional coal-fired power plant.

And renewable sources of power, which account for 11 percent of all co-op electricity, are as unique and varied as the co-ops using them. In the Southeast, biomass generation—using everything from peanut shells to chicken waste to make electricity—shows great potential. The Northwest remains awash in hydro and wave power; the Midwest boasts lots of wind; and the Southwest sees so few cloudy days that solar power becomes an easy sell.

Of course, the cheapest and cleanest power remains the power that's never generated. As a result, energy efficiency education remains at the forefront of CHEC's efforts to help consumer control costs.

By offering appliance rebates, a secondary refrigerator and freezer turn-in program, low interest loans for energy efficient appliances and home energy assessments, CHEC strives to make the transition for members easy and affordable. The vast majority of all electric co-ops, a full 92 percent, sponsor energy efficiency education programs, and 77 percent offer residential energy audits to their members.

Electric co-ops are hard at work keeping electricity reliable, safe, and affordable—and we can produce it cleaner, too. But we need Congress to make sure electric bills stay affordable. Through the Our Energy, Our Future grassroots campaign, you can help out in this effort by asking your U.S. representative and senators to work with co-ops on affordability concerns as they hash out energy legislation. Please join the conversation today by visiting www.ourenergy.coop.

Sales tax holiday for Energy Star products

North Carolina will have an Energy Star, tax-free weekend from Friday, November 4, through Sunday, November 6. This tax holiday weekend is a result of state law created by the N.C. General Assembly in 2008.

An Energy Star-qualified product is a product that meets the energy efficient guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy and is authorized to carry the Energy Star label. Clothes washers, freezers, refrigerators, central air conditioners, room air conditioners, air-source heat pumps, geothermal heat pumps, ceiling fans, and dehumidifiers, will be exempt from state and local sales and use tax when purchased during the sale tax holiday period.

Items purchased for use in a trade or business and rentals are not covered by the exemption and will be subject to the applicable tax.

Also, remember to save your receipts and send them into CHEC along with your Energy Star Application Rebate Application to collect \$25 bill credits for each appliance purchased for your Hatteras Island home. Questions? Call 252-995-7083.



Hurricane recovery continues...

On September 5, 2011, while the rest of the country was celebrating a national holiday in honor of laborers, CHEC and contracted personnel were working feverishly to restore the 115kV transmission line that was severely damaged by Hurricane Irene just over a week earlier.

Finally, after days of Hatteras Island residents relying on emergency generator power, the single source of mainland power to all of Hatteras and Ocracoke Island was temporarily restored. While this was a major victory, CHEC staff and crews knew that it was just the beginning.

Later that week, Hurricane Katia passed by offshore, creating rough surf, high seas and causing further erosion to the inlet over which CHEC's temporarily restored transmission line spanned 440 feet.

Lonnie Moore, manager of engineering and operations, immediately turned his attention and efforts towards the permanent restoration of the cooperative's transmission line. Working with N.C. Department of Transportation, CHEC learned that a temporary bridge, approximately 660 feet long, would span the inlet, in lieu of filling and paving that section of Hwy. 12. In addition, CHEC was informed that no measures would be taken to stabilize the ever-widening inlet. With few options, it was deter-

mined that structures comprised of 95-foot poles placed in concrete foundations jettied 24 feet down would be necessary to support the 700-foot span required to benefit from the protection that N.C. DOT would install at each end of the new bridge.

Back in the office, management coordinated with FEMA and state emergency management officials to begin the process of requesting reimbursement for the emergency and permanent repairs. The State of North Carolina had already committed to fund its 25 percent share of the disaster reimbursements, however, because damages from Hurricane Irene and the tornadoes earlier in the year were so extensive, federal funding for permanent utility repairs remains uncertain.

At press time for this November issue, CHEC was finalizing plans for the permanent restoration of the 115kV transmission lines. CHEC staff had ordered the materials and solicited bids from three electrical contractors. Due to the high-voltage nature of the transmission lines, they must be de-energized to complete the work and will require extended runs of the Buxton & Ocracoke diesel plants as well as the rented CAT generators in the tri-villages. The permanent restoration is expected to be complete by November.



CHEC closed for holiday

The CHEC office will be closed Thursday, November 24, and Friday, November 25, for Thanksgiving.



Happy Thanksgiving



If you plan to entertain during the holidays with family and friends, be sure to use your Co-op Connections Card and SAVE! Visit www.connections.coop to view participating businesses.



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