

Cape Hatteras EC electric system improvements and maintenance

Jim Kinghorn, Executive Vice President & General Manager

Several important electric system improvement and maintenance projects are underway this spring at Cape Hatteras Electric Cooperative:

Waves Substation

The two existing circuits that feed out of Waves Substation have been fully loaded for several summers. Several steps have been taken to avoid overloads until the upgrade of these circuits are completed. In addition, the aluminum wire on these circuits is aged and in need of replacement. Lee Electric Construction of Aberdeen, N.C., won the bid on the project. The work involves replacement of the distribution circuit conductor (wire) and adding two additional circuits to the

substation. A number of large poles along Highway 12 must also be replaced in order to accommodate the weight and wind forces produced by the larger conductor.

Additional work inside the Waves substation is underway to provide circuit breakers and voltage regulators for the new circuits. CHEC employees are doing the substation work.

Buxton Substations

Work is also underway on two substations at Buxton. The first involves replacing the Buxton transmission step-down transformer. This transformer changes the 115,000-volt transmission voltage to 34,500 volts for use on the 34 KV system

from Buxton to Hatteras. The load on this transformer has been above the rating of the transformer for the past five years. To avoid overloading the transformer, the Buxton generating plant has been operated for increasingly longer periods each summer. A higher-capacity transformer is scheduled to arrive in April. Replacement of this transformer will allow deferral of several expensive system improvement projects on the 34.5 KV system for many years.

The second Buxton substation will convert the 115,000 volts used on the transmission system to 12,500 volts to distribute power in Buxton Village and part of Frisco Village.

Until last year, the 34.5 KV system fed the Buxton Distribution Substation. Prior to the summer peak electrical load last summer, the cooperative built a temporary 115 to 12.5 KV substation to reduce loading on the transmission transformer described in the paragraph above. The temporary substation also allowed the aging 34.5 KV substation to be taken out of service.

The cooperative received competitive bids on the Buxton substation construction in January. In spite of the current economic situation, utility substation and transmission line construction contractors continue to be in high demand around the country.

In response to high bids received, the cooperative made the decision to complete the work with cooperative employees rather than contractors.

Transmission Maintenance

During March, April and May CHEC carries out transmission line maintenance. Electrical load on the system during these months is at a level that permits using the capacity of the Buxton generating plant to carry the south end of the island to avoid extended outages. Switching outages of approximately five minutes will be necessary when the plant is put on line and switched back. These planned switching outages will be posted at Post Offices and sent in e-mails several days prior to the maintenance.



Top: CHEC Lineman Kerry Hooper wires new regulators for new circuits out of the Waves substation.

Bottom: CHEC Linemen Richard Augustson and Donnie Farrow install a cable trough for the Waves substation upgrade.

Official Notice: Annual Meeting of Members

Please note updated location of this year's annual meeting

The Cape Hatteras Electric Cooperative Annual Meeting of Members will be held at:

Cape Hatteras Secondary School Cafeteria
48576 NC Hwy 12,
Buxton, N.C. 27920
Monday, May 11, 2009, 7:00 PM
(Registration begins at 6:00 PM)

Dinner will be served
from 6:00-6:45 p.m (no carryouts).

Items to be discussed:

1. The reports of officers, directors and committees;
2. The announcement of elected directors;
3. The transaction of other business brought before the meeting, or any adjournment thereof.

Director Elections

The election ballots will arrive by mail the first week of April. The biographies for the nominees will appear on an additional sheet enclosed with the

ballots. Official ballots must be returned to CHEC, Credentials and Elections Committee, PO Box 281, Avon, NC 27915 by Friday, April 24, 2009.



CFL bulbs offered to all CHEC customers

CHEC will send two CFL bulbs to each residential customer in April. All customers with a North Carolina mailing address will receive their bulbs through the U.S. Post Office. For customers living outside of North Carolina and owning rental property on Hatteras Island, CHEC will deliver the bulbs to their respective realty company, who will in turn distribute the bulbs to the property owners. Customers who own vacation property on Hatteras Island, but do not live here and are not active in a rental program, should come by the CHEC Buxton office at 47109 Light Plant Road to receive their bulbs. For all residential customers with multiple accounts, you will receive a set of bulbs for each active account. Benefits of this distribution include:

- ✓ CFLs use less electricity than conventional incandescent lamps
- ✓ To those customers who are not currently using CFLs, this package of bulbs will provide them the opportunity to take advantage of the benefits of this energy-saving bulb
- ✓ For the customers who currently use CFLs, this package provides additional means for reducing energy usage
- ✓ Using these bulbs daily in fixtures that are on during the longest time span will provide the greatest amount of energy savings
- ✓ By sending these bulbs to our valued customers, CHEC is complying with a state-approved energy efficiency program in the Renewable Energy Portfolio Standards (REPS) legislation enacted by the N.C. General Assembly in 2007.



Please use caution when installing and removing CFLs. Like all electric bulbs, they are made of fragile glass. When disposing of CFLs, be careful to prevent breakage as the bulbs contain a small amount of toxic mercury. Dispose of broken bulbs by double-bagging the bulb in clear plastic bags with zip closures. Dare County provides a local, proper disposal for all fluorescent lamps at the trash transfer station, 47027 Buxton Back Road.

To view the Home Energy Efficiency tabloid, "Your Guide to Home Energy Savings," go to www.chec.coop and click on the Energy Tips selection.



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