

April 2011

## Energizing The Future

By Rick Nelson, General Manager

Custer Public Power District's electricity is generated by Nebraska Public Power District (NPPD) using several sources, including nuclear power. NPPD owns and operates the Cooper Nuclear Station near Brownville in southeastern Nebraska.



a comprehensive plant inspection. That preventive shutdown level is below the level that the plant's equipment and structures are designed to withstand.

In Japan things were made worse by the loss of power to operate the safety systems, such

as pumps to keep water cooling the active and spent fuel rods. In Cooper's case, a diesel generator with enough fuel for 20 days of operation will automatically start and provide the necessary electrical power to operate the safety systems.

Given the events in Japan, I thought it would be a good idea to share some information about that.

All nuclear power plants in the USA, including Cooper, are designed for earthquake or seismic events. Our nuclear plants are built with a "defense-in-depth" philosophy that uses multiple safety barriers, sophisticated earthquake detection systems, and redundant safety systems. Every U.S. nuclear power plant is designed to withstand the maximum projected earthquake in the site location's geographic area, and reactor operators are trained to safely shut down the plant.

Cooper is designed to withstand earthquakes based on the risk for southeastern Nebraska, and as required by the Nuclear Regulatory Commission. Cooper is designed to a 6.0 level (Richter scale) earthquake for safe shutdown of the reactor. The strongest earthquakes in the state measured 5.1 on the Richter scale and occurred in 1877 and 1964. Cooper also has a "beyond-design-basis" strategy to mitigate against events like those in Japan.

Cooper's foundations, structures, and equipment are designed and built to withstand ground motion in accordance with national codes and Nuclear Regulatory Commission (NRC) requirements. In the event of an earthquake that exceeds a predetermined level, Cooper plant operators shut down the reactor and perform

In fact, Cooper has two such diesel generators in place and a third one is being added. It also has additional batteries and portable generators that could also be used to provide emergency power if the diesel generators are unable to operate.

In that Japanese plant, electricity is needed to operate the coolant pumps. Cooper uses steam driven coolant pumps that operate independently of AC power.

The hydrogen explosions that happened in Japan would be handled differently at Cooper. Cooper's emergency venting system is designed to "scrub" the gas through water to remove radioactive components.

Training programs for plant operators routinely cover procedures for handling events similar to those confronting the operators at the affected plant in Japan. Our nuclear plant operators go through an intense training program to become licensed and must receive ongoing training to continue to hold their licenses.

*Continued 12-B*



Cooper adheres to an emergency response plan that includes periodic drills and role-plays of mock scenarios to practice that emergency response plan. Natural phenomenon such as earthquakes, floods, or tornados are frequently part of drill scenarios.

These exercises occur throughout the year and often involve Missouri and Nebraska state and local emergency management agencies. More than 300 employees at Cooper are members of its emergency preparedness organization. The federal Nuclear Regulatory Commission periodically evaluates Cooper's performance during these exercises.

Cooper provides 21% of NPPD's power needs and does it without any carbon emission. Cooper consumes just six pounds of uranium oxide in a day. It would take 20 million pounds of coal or one million gallons of fuel oil to generate that much power in a single day.

You may be certain that NPPD will be monitoring events in Japan to make certain that the lessons learned there are taken to heart here. That's just the culture of the way we operate: safety is now and has always been our top priority.

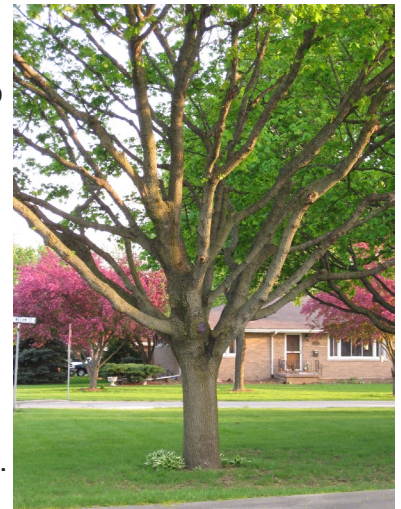
## Right Tree Right Place

Whether you are the Johnny Appleseed type or just landscaping your backyard, preplanning is the best insurance for your future tree and shrub planting effort. Ensure the oak or maple tree you planted for future generations does not have to be removed by utility tree trimming crews before its benefits are realized. Careful placement of trees and taller shrubs is necessary to avoid interference with overhead and underground electric utility lines.

Arbor Day on April 29 is a perfect time to teach the younger generation the benefits of tree planting, selection of the proper species for your location, and how to correctly plant a tree and foster its growth. However, one element of the lesson should be to teach youngsters that trees can interfere with overhead electric lines and safety can be compromised when limbs contact the wires. The same lesson can be taught about roots which may be cut, if buried electric lines have to be repaired or replaced.

Many times trees and shrubs planted near power lines suffer either in appearance or vitality, but safety is the overriding issue. Trees conduct elec-

tricity and can create a safety hazard if limbs grow too close to electric lines. Power outages or momentary interruptions can occur when trees and branches come into contact with overhead lines. Electrical arcing and sparking from a wire to a nearby branch can cause fires.



Another concern is the safety risk when children climb trees near power lines. Accidental contact of electric wires with a tree limb or person playing or trimming around the tree could be fatal. Also trees growing near power lines must be pruned to maintain a safe distance from the wires. If you have trees that appear to be growing into power lines, contact Custer Public Power. Never try to prune them yourself.



**DIGGERS HOTLINE  
OF  
NEBRASKA**

Statewide  
**1-800-331-5666**

Metro Omaha  
**344-3565**

**IT'S  
FREE...EASY...LAW**

# Tune up your cooling system for peak performance.

When was the last time the cooling system in your home had a check-up? A heating and cooling contractor can inspect, service and clean it, which may help improve the efficiency of the unit.

As part of the EnergyWise Program, Custer PPD is offering a \$30 incentive for your cooling system tune-up. Contact your heating and cooling contractor to set up an appointment and bring the receipt to us. There is a short form to fill out and Custer will mail you the incentive check. Window air conditioners are not eligible and other restrictions do apply.



## What is Fun, Free, and Friendly?

Going to Youth Energy Camp. If you are currently a sophomore or junior in high school and want something fun and interesting to do this summer, why not give some thought to attending Energy Camp. The camp is held in the beautiful Halsey National Forest. The date of the camp this year is July 11-15. Custer Public Power



District will sponsor high school-aged men and women whose rural homes get their electricity from CPPD. In addition to doing away with boredom, you might be one of three campers to win an all-expense paid trip to Washington, D.C. To find out more about this opportunity just complete this form and mail to: Carol Fritzler, Custer Public Power District, P.O. Box 10, Broken Bow, Nebraska 68822.



**Please send me 2011 Energy Camp Information.**

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone # \_\_\_\_\_ Age \_\_\_\_\_ Custer Power Customer # \_\_\_\_\_

School \_\_\_\_\_ Grade \_\_\_\_\_

Parent's or Guardian's Name \_\_\_\_\_

By May 1, mail to: Carol Fritzler

Custer Public Power, P.O. Box 10, Broken Bow, NE 68822

# Simple Salsa Chicken Recipe

**Prep Time:** 10 min.  
**Bake Time:** 25 min  
**Makes:** 2 Servings

## What You Need

2 boneless skinless chicken breast halves (5 ounces each)  
1/8 teaspoon salt  
1/3 cup salsa  
2 tablespoons taco sauce  
1/3 cup shredded Mexican cheese blend



Recipe by: Taste of Home

## Make It

- Place chicken in a shallow 2-qt. baking dish coated with cooking spray. Sprinkle with salt. Combine salsa and taco sauce; drizzle over chicken. Sprinkle with cheese.
- Cover and bake at 350° for 25-30 minutes or until chicken juices run clear.

## Nutrition Facts

1 chicken breast half (prepared with reduced-fat cheese) equals 226 calories, 7 g fat (3 g saturated fat), 92 mg cholesterol, 628 mg sodium, 3 g carbohydrate, trace fiber, 34 g protein. Diabetic Exchanges: 5 lean meat, 1 fat.

Note: Cheryl gave this a taste test and said it is simple, fast, and very good!

## **OOPS! Too Many Calories!**

All of our proofreading didn't catch the obvious. Thanks to Andy Johnson who was reading our Kielbasa Chili recipe for March on line and noticed that one cup was 2319 calories. If that were true we wouldn't have very many calories left for the remainder of the day. We apologize and hope you will try the chili because it is really, really, good. The nutritional information should have been: 1 cup equals 319 calories



# CUSTER CURRENTS

Newsletter of the  
**CUSTER PUBLIC POWER  
DISTRICT**

Broken Bow, NE - Phone 872-2451  
[www.custerpower.com](http://www.custerpower.com)

Serving Custer, Loup, Blaine, Thomas, Hooker, McPherson, Logan and parts of Sherman, Garfield, Brown, Cherry, Lincoln, and Dawson Counties

## *Officers & Directors*

Wayne V. Licking, Thedford.....	President
Brad Bartak, Merna.....	Vice President
Margaret Bradley, Brewster.....	Secretary
Brad Howard, Litchfield.....	Treasurer
John Blakeman, Merna.....	Asst. Treasurer
Lloyd Ramsey, Broken Bow.....	Director
Greg Smith, Milburn.....	Director

## *Staff*

Rick Nelson.....	General Manager
Tom Knott.....	Director of Operations and Loss Control
Cheryl Taylor.....	Director of Finance and Administration

## *Board Meetings*

The regular monthly meeting of the Custer Public Power District Board of Directors is on the last Thursday of each month, beginning at 10:00 a.m. in the main office in Broken Bow on Hwy. 2.

An agenda for each regular meeting of the board is available for public inspection during business hours.

In the event of matters of an emergency nature or conflicts with other meeting dates, the Board of Directors will set changes. Any change in the monthly meeting date will be posted in the legal notice at the main headquarters building at Broken Bow and at each of the District's area service centers located in Callaway, Sargent, Stapleton and Thedford, Nebraska.