

# Watts Up?

www.ravallielectric.com  
service@ravallielectric.com

Volume 25, No. 1

Ravalli Electric Co-op

Corvallis, Montana

## November 2011 Power Outage Explained

*By Ric Brown, General Manager*

The following is a brief synopsis of the power outage activity over the Thanksgiving break, November 23-28, 2011. Ravalli Electric Co-op (REC) is a transmission customer of NorthWestern Energy (NWE) just like you are members of the co-op. REC doesn't like the inconvenience of an outage any more than you do.

On Wednesday, November 23 at about 10:00 p.m., a tree fell through the 69 kV transmission line just south

of the Three-Mile Fire Station along the Eastside Highway (Eagle Watch). This caused outages on Lower Woodchuck, Stevensville (Stevi), and Corvallis Substations (Subs). Corvallis got back on in around 30 minutes, Stevi in about 2 hours, and Lower Woodchuck did not come back on for about 8 hours. NWE had several spots with wire down on the 69-B transmission line between Doyle Sub and Missoula #4

Sub located at Miller Creek, in addition to the wires down south of Three-Mile Fire Station. NWE worked to get the feed from Missoula fixed and left the feed from Stevi to Lower Woodchuck out of service with about three spans of wire lying on the ground. REC crews got most of the Lower Woodchuck members on in around 4 hours feeding them from Stevi, but were unable to get the upper Eight-Mile Creek Road members back on. As soon as Lower Woodchuck was back online, REC had all our members in the Lower Woodchuck area back on.

At the same time, REC had a primary underground fault on Little Joe Lane in Grantsdale. REC was able to get all of the members on utilizing our loop feed. REC decided to repair the fault so that we'd have

(Continued on page 2)



NorthWestern Energy transmission line south of the Three-Mile Fire Station on Eastside Highway showing the downed wires.

1751951 A Touchstone Energy® Partner



Ravalli Electric Co-op

(Continued from page 1)

the system whole in the case of any additional problems in the area.

On Friday, November 25 at about 8:30 a.m., Lower Woodchuck Sub went out again. According to reports, the wire on the 69-B transmission line between Doyle and Missoula #4 had become annealed (melted & stretched) and the center phase was very loose in sag.

Whenever there was any wind, the center phase slapped into another phase causing an outage. The power was out for about 2½ hours. REC moved regulators from Frost Lane to Teddy Bear Lane at that time in case we had needed to switch back to the Stevi Sub to supply the Lower Woodchuck area.

On Sunday, November 27 at about 8:00 p.m., Lower

Woodchuck Sub went out again. This was caused by the wind associated with the front that moved in that night. The line was turned on several times, would hold for a while, and then would lock out. This went on until around 11:00 p.m. Due to the fact that the power kept coming back on, REC determined not to switch Lower Woodchuck

On Monday, November 28, I emailed Bob Rowe, CEO of NWE, information on the weekend outage in Stevensville and our concerns about the ongoing problems. At 10:15 a.m. I received a call from Gary Palm, NWE engineering manager out of Missoula. Gary couldn't say with any certainty that the Lower Woodchuck Sub power could



NorthWestern Energy transmission line showing the broken and burnt insulators located south of the Three Mile Fire Station.

be maintained due to the downed wire between Stevi Sub and Lower Woodchuck, as well as the bad wire between Lower Woodchuck and Miller Creek. REC switched all members in that area to the Stevi Sub and reconfigured our regulators to handle the addi-

load to the Stevi Sub. Additionally, we had concerns about voltage in upper Eight-Mile using the Stevi feed.

142690

REC began working out contingencies for switching Lower Woodchuck off on Monday should there be any more outage activity. NWE still had the wire on the ground by Three-Mile Fire Station and we didn't know what their plans were regarding either transmission feed.

tional loads. We were down to single contingency on the north end for the next few days because of switching the loads. NWE put an article in the *Missoulian* and *Ravalli Republic* explaining that the outages were problems on their transmission system and not REC's distribution system.

We are currently scheduling a meeting between NWE and Ravalli to discuss short and long range solutions on the B-line. Thank you for your patience.

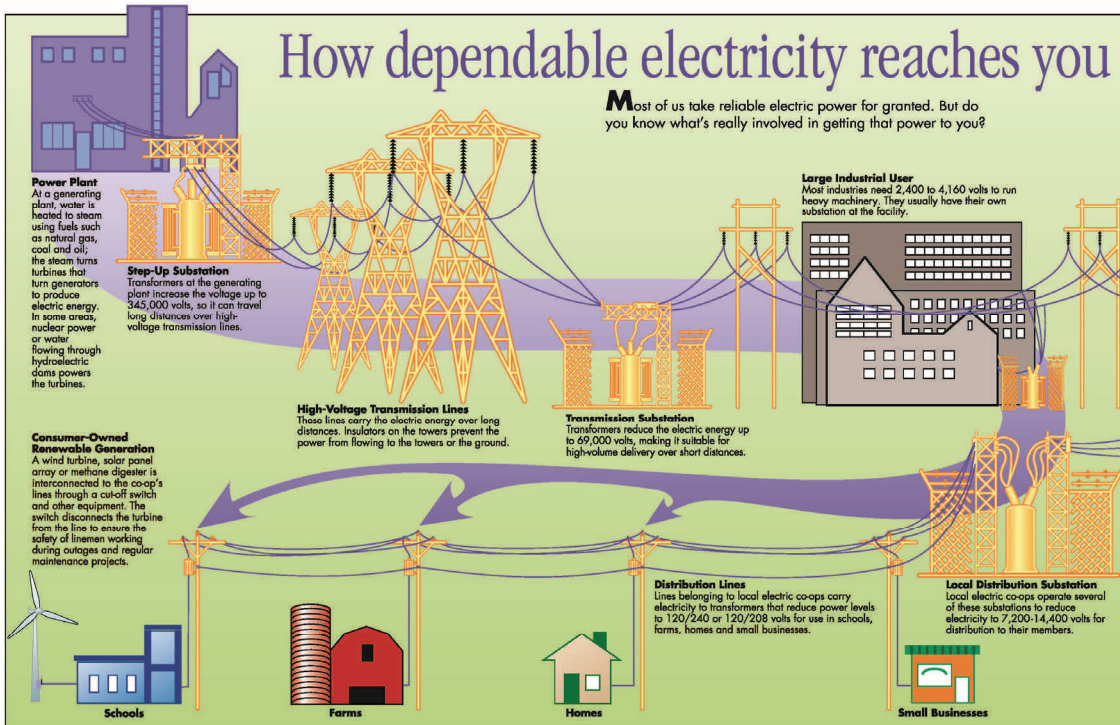
**HAPPY NEW YEAR!**

**Ravalli Electric Co-op  
will be CLOSED  
Monday,  
January 2, 2012  
for the  
New Year's Holiday.**

39860

# Maunder Meanderings

by Jim Maunder



By the time you read this article we hope the 2011 Thanksgiving power outage in the Florence area is a faint memory. We wanted to provide you an illustration of how electricity gets from a dam or power plant to your home. Ravalli Electric Co-op (REC) receives its power from the Dams along the Columbia River via the Bonneville Power Administration's high voltage transmission lines to Missoula. At Missoula, our power comes to the Bitterroot Valley via NorthWestern Energy (NWE) from their Miller Creek Sub #4 to our Lower Woodchuck Substation (located east of Florence). With the transmission line out, there was no power to feed our Lower Woodchuck Sub and members in that area were without electricity.

At the lower right hand corner of the picture a local distribution substation is shown (we'll call it our Lower Woodchuck Sub). The transmission lines that would serve that substation come in from the right and we'll say those are owned by NWE. The high winds on November 25 caused those lines coming from the right to contact each other and a piece of safety equipment in the NWE Miller Creek Sub #4 shut the power off to our Lower Woodchuck Substation.

As our line crews and members waited for NWE to restore power from Miller Creek #4 to the Lower Woodchuck Sub, our crews were busy preparing contingency measures in case the transmission line could not be fixed in a timely manner. And when NWE restored power and notified us that they could not ensure their transmission line was 100% operational, those contingency measures were implemented quickly without a member noticing a blink or blip. In fact, when our distribution system was switched back to normal operation on December 2, 2011, no member lost power!!

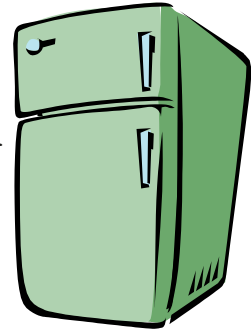
While we strive to provide electricity at the lowest possible price, we can't guarantee uninterrupted power. When the power is out our expenses increase and our revenues decrease. REC is proud to provide our members with exceptional service and we're responsible for the decisions we make and the actions we take. But sometimes Mother Nature still likes to show us who is Boss. We've been here for 76 years and you – our member owners – are still priority one!

## Keep Food Safe During a Power Outage

By Scott Gates

We've all been there: a storm rolls through, toppling trees and damaging power lines. The lights go out. And although it may only be a matter of minutes or hours before your electric co-op gets things up and running again, thawing food in the refrigerator and freezer can make that relatively short time seem like an eternity.

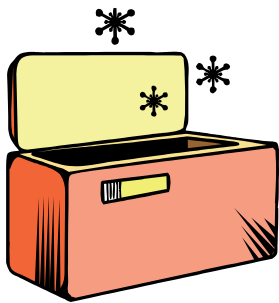
It's important to keep cold food safe during a power outage, and a little advanced preparation and know-how can keep your family safe from food-borne bacteria. First and foremost, **keep your refrigerator and freezer doors closed** as much as possible to maintain the cold temperature: if unopened, a refrigerator will keep food safely cold for about four hours; a full freezer will do so for about 48 hours (24 hours if it's half-full).



A sure-fire way to know if food is safe is to monitor its temperature. Meat, poultry, fish, and eggs should be refrigerated at or below 40 degrees Fahrenheit and frozen food at or below 0 degrees Fahrenheit. If the power goes out, a digital, dial, or instant-read food thermometer and appliance thermometers will help you know if the food remains at safe temperatures.

If the power stays out for a prolonged period, there are a few ways to aid your refrigerator and freezer in the fight to keep things cold. The simplest tip is to keep your freezer full. If it's not full, group items close together to preserve the cold.

Dry ice can help keep freezers chilly: find it by scanning for "ice" or "carbon dioxide" in the phone book. It will take 25 pounds or so to keep a full, 10-cubic foot freezer safe for three to four days. Fifty pounds of dry ice should hold an 18-cubic foot full freezer for two days. Wear heavy-duty gloves or use tongs when handling dry ice—the temperature of dry ice is -216 degrees Fahrenheit—and separate it from food with cardboard to prevent freezer burn.



During cold months, it may be tempting to store food outside. Although this may work for cold drinks, food can spoil in direct sunlight. Curious animals may also take advantage of an outside stash.

Rather than putting the food outside, consider taking advantage of the cold temperatures by making ice. Fill buckets, empty milk cartons, or cans with water and leave them outside to freeze. Then transfer the homemade ice to your refrigerator, freezer, or coolers.

Power back on? Make sure your food is still safe by either checking its temperature or looking for ice crystals. If frozen food is 40 degrees Fahrenheit or below or ice crystals are visible, it's safe to refreeze. Discard any perishable refrigerated food (meat, poultry, fish, eggs, and leftovers) that have been above 40 degrees for 2 hours.

*Source: U.S. Department of Agriculture, U.S. Food Safety and Inspection Service*

*Scott Gates writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the Arlington, VA-based service arm of the nation's 900-plus consumer-owned, not-for-profit electric cooperatives.*

### Find the Hidden Number



We will hide three account numbers this month in our "Watts Up?" pages. If you find your account number, call the office at 961-3001 by the 20th of the magazine month and you get a **\$30 credit** on your electric bill. Good luck!

### Ravalli County Electric Cooperative, Inc.

P.O. Box 190  
Corvallis, MT 59828  
Phone (406) 961-3001  
Fax (406) 961-3230

Richard J. Brown  
General Manager

#### Board of Directors

Wayne Olson, President  
Larry Trexler, Vice Pres.  
Kevin Frost, Sec./Treas.  
Stacy Bartlett, Trustee  
Bob Bailey, Trustee  
Bob Popham, Trustee  
Rex Griffin, Trustee