

# Why is my electric bill so high? It's not just the heat...!

Winter months generally bring colder temperatures, so you turn up the thermostat. But it also brings longer evenings and darker mornings, and families tend to spend more time indoors with the lights, television, radio, and stereo on. Often, 1500 watt space heaters and 250 watt heat lamps are used for pump houses and RV's. Your outdoor lighting is on longer than it is in the summer. You may do more cooking and baking now than during the summer months.

Maybe you enjoy long hot soaks in the tub on cold evenings - to take the chill off, or turn up the water bed or maybe even plug in the electric blanket. Hot tubs and spas use more energy to keep the water warm because it is colder outside.

Remember, the colder it is outside, the more electricity it takes to maintain a constant, even temperature inside. As the difference in the outdoor and indoor temperature increases, so does your heating needs. This difference is referred to as the delta-T or temperature difference and the rule is: the greater the delta-t, the higher the heating need and the higher the electric bill. Its not magic, its just fact.

Your entire energy usage is based on one simple formula: appliance wattage divided by 1000 (gives you kilowatts) multiplied by the number of hours you use it, multiplied times the rate per kilowatt hour equals the cost of running that item for that amount of time. Whether it is an electric clock or an electric furnace, the formula is the same.

Using the example of one 1500 watt portable heater running 6 hours (or 25%) of the day, for 30 days at a cost of \$0.0716 per kilowatt hour, here's what the formula would look like:

$$\frac{1500 \text{ watts}}{1000} = 1.5 \text{ kW} \times 6 \text{ hours/day} \times 30 \text{ days} \times \$0.0716/\text{kWh hour} = \$19.33/\text{month}$$

If you have more than one 1500 watt heater, and they all ran the same amount of time, you would multiply the total by the number of heaters you have to get a heating cost for a 30 day period. Remember, the formula works for any electric appliance - you just have to substitute the watts and run-time.

## Try this...just for fun!

1. What is your average monthly winter electric bill? \$ \_\_\_\_\_ / month
2. What is your average monthly summer electric bill? \$ \_\_\_\_\_ / month
3. Subtract your summer bill from your winter bill. (This difference can be attributed to your use of more electricity in the winter - for heat, and the extra hours of lighting, TV watching, cooking and other indoor activities) \$ \_\_\_\_\_ / month
4. Now divide that difference by 30 (avg. days / month) to get the additional amount you pay each day for those "winter-time extras", not just heat! What else can you get these days for so little? \$ \_\_\_\_\_ ÷ 30  
\$ \_\_\_\_\_ / day

# SmartSource Products

www.smartsourceproducts.com



The Storm Station has back-up battery power, as well as a 25 Watt power inverter, 12 volt recharging port, removable flashlight and a Find Me Light that automatically turns on when household power shuts off.

All of these features run off the Storm Station's integral 12V rechargeable battery, which fully recharges overnight so you are always at the ready. The built in weather band radio tunes to AM/FM/TV1/TV2/Weather frequencies to keep you up to date on the latest civil and natural emergencies for the nation and in your local area.

The 25 Watt inverter powers small appliances like your home's cordless phone. The 12 volt recharging port charges cell phones. To be prepared for a power outage, keep the Storm Station plugged into an electrical outlet to maintain 100 percent of its charge. That way when the power goes out the Storm Station will have all of its battery power to help you during a power outage.

## StormStation... another SmartSource product to help get you through the winter storm season...

Stay informed and be prepared when the next emergency hits with the new portable Storm Station, an at-the-ready weather radio, power inverter, detachable flashlight and more. When the power goes out due to power failure or a storm, the Storm Station comes on to give you what you need to weather the storm.

**Features:** Multi-Function Weather Radio that keeps you informed in times of an emergency, a 25 Watt Power Source that will enable operation of low wattage appliances when the power goes out, a detachable flashlight that is always charged and ready when needed. Locator Light turns on when the power goes out so the Storm Station can be easily located. PC-120 \$99.00

**LANE ELECTRIC**  
COOPERATIVE

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You Can Shop At The SmartSource Product Center On-Line At:  
[www.smartsourceproducts.com](http://www.smartsourceproducts.com)

## Lane Electric brings a Cannon to town...

### ...selects Cannon Technologies for new AMR system

Written by Kathi VanderZanden PNGC Power's Manager, Communications and Marketing

Lane Electric is closing in on the implementation of new automated meter reading (AMR) system. AMR will be implemented in stages, beginning with a month-long test around the Dexter substation. Presuming test results are positive, all meters in the cooperative's service territory will be replaced with the new AMR technology before the end of 2006.



Rick Crinklaw and Bill Simons, Director of AMR Systems for Cannon Technologies, seal the deal for Lane's new AMR system.

According to Dave D'Avanzo, Lane Electric Cooperative's Member Services Manager, "We have undergone all the due diligence. We have explored the various system types and reviewed the RFP responses from the top three vendors.

This work has been underway for the past 14 months. Lane Electric has decided to work with NRTC, who offers a portfolio of diversified services geared to electric cooperatives and Cannon Systems offers the specific meter technology.

"We've got a great internal AMR team – eight of us – drawn from each discipline at the cooperative, and have worked hard looking at this implementation from every angle. The Cannon system is a bi-directional or two-way communication system, as compared to earlier technologies which only provided communications from the meter back to the co-op." D'Avanzo explained.

"Today, we use a contract meter reading service," said D'Avanzo. When we looked at the economics of the proposed change, we considered both the hard and soft benefits of an automated meter reading system. While there will be some cost savings in moving from a manually read system to an automated system, we have also identified potential savings in other areas, as well.

"Where you read 'by hand,' there can be irregular billing periods, occasionally leading to a question in the customer's mind. Benefits from this conversion include consistent billing periods, increased billing accuracy; the devices themselves are highly accurate. The AMR system can virtually eliminate access and privacy issues. It all revolves around providing better service to the customer.

"We anticipate improved outage management and reduced outage times (due to near instantaneous feedback from every meter). Currently, we manually perform connects and discon-

nects of service. In the future, with the AMR, both actions can be performed from the office. And, in case of emergency, a fire, for example, power can be disconnected – from the office.

"We are developing and finalizing all the processes necessary for a system acceptance test (SAT) that will run in parallel with the current system for a month or so, beginning in April. The SAT is a mini 30-day trial deployment with one complete substation's worth of meters. Initially, our purpose will be to determine the performance level of the new system, to make sure that this is good for Lane Electric and good for our members. We may keep the parallel systems in place through June to familiarize ourselves with the new system.

"Previous tests have shown that AMR meters can be "talked to" and "heard from" 99 out of 100 times in every 24 hour period. We'd expect to see the same results. We'll be able to tell, on a daily basis, what level of performance we're getting.

"When the test is complete, and it performs to our liking, we'll begin deploying the new meters throughout Lane's service territory, substation by substation. Our goal is full installation and a fully functioning system by November 1. That will involve the replacement of about 12,500 meters. We anticipate realizing savings immediately and will move quickly from the old mechanical system to the new system.

"Lane Electric has also partnered with Chapman Metering, an Iowa company who specializes in metering services, to complete the meter exchange. At full tilt, we expect to change out between a hundred and fifty and two hundred meters per day throughout the process. Once completed, we look forward to having a detailed meter inventory and global positioning coordinates (GPS) at every meter. Along with the various member benefits, Lane will realize additional benefits, in the Engineering & Operations, Customer Service, Data-Processing and Member Services areas.





# Home Fire Safety... ...Your Home, Your Family, Your Responsibility!

By Heather Hill, Prevention Coordinator

Three-fourths of all structure fires in Oregon occur in places that we call home. This is where we eat, sleep, & spend time with our family. It is where we keep our family treasures that have been passed down for generations to continue to be passed on to generations to come. Our homes are important places that need to be protected from fire, and the only way that we can do that is to know what causes fire to occur.

Most fires are preventable. In the fire service, this is a historical fact. As a result, fire codes have been developed to help prevent another tragedy from occurring. Unfortunately, these codes are only enforced in commercial occupancies and institutions. A homeowner is responsible for taking care of their space, where fire can be most deadly.

So, how does one prevent fire? By being proactive and aware of the dangers around them. The Oregon Life Safety Team has just unveiled a fire prevention program to educate people about the dangers in their home called Home Fire Safety is Up to You! Whether you live in a single-family dwelling or in an apartment, where the behavior of one can affect many, there are simple changes in behavior that will save your home:



**Kitchen Fires:** Keep the cooking area clear of grease and other combustibles. Never leave what you are cooking unattended. Don't wear loose clothing when cooking.



**Housekeeping:** Clean appliances that build up combustible material- chimneys, dryer lint traps, stove hood filters, refrigerator & bathroom fan vents, & air ventilation filters.



**Electrical Fires:** Replace cords that show signs of wear. Never cover an electrical cord with rugs, carpet, or other materials where it may get damaged. Avoid overloading circuits and call an electrician if you have any problems or concerns.

**Candle Safety:** Never leave a candle burning unattended. Keep them out of the reach of children and away from areas that might be accidentally bumped. The candle holder should be made of a material that will not burn and should be large enough to hold any melted wax that may flow over the side. A space of air should be kept between candle holders and combustible surfaces to reduce the risk of heat transfer.

**Kids:** Teach your children that matches and lighters are tools for adults, not toys for them. Keep matches and lighters out of reach of children. If your child shows fascination with fire, call your fire department for help with interventions.



**Cigarettes:** Never smoke when you are drowsy. Dispose of ashes in a fire-resistant container. Always keep matches and lighters away from children.



**Combustibles Too Close:** Make sure that combustible materials are at least 3 feet away from heat sources such as heaters, candles, and wood stoves.

Please contact your local fire department if you would like more information on preventing fires in the home. Remember: Home Fire Safety- Your Home, Your Family, Your Responsibility.

# Down The Line



Dear Member:

This month, I want to share a couple of thoughts with you. Specifically, the wet weather patterns we've seen and the effects they've had on you and Lane Electric, and secondly, Automated Meter Reading or AMR.

Regarding the weather, we've seen a lot of moisture in the past few months - rain in the valley and snow in the mountains. Good news, when it comes to electric utilities and power supply.

While there have been high winds and some flooding in areas, our electric system, with few exceptions, is steadfast and in good shape thanks to the hard work of all our employees. Hopefully,

through this time, you fared as well.

Regarding AMR, I wanted to share my thoughts with you on a topic that was discussed at each of our district meetings last fall.

For about the last 15 months, your board and staff, with assistance from the National Rural Electric Cooperative Association's (NRECA's) Consulting Group, have gone through a process to evaluate whether or not Lane Electric should, move into the Automated Meter Reading (AMR) arena.

Throughout the process, questions like, "What benefits will an AMR system like this provide for our members?", and "Will AMR improve reliability and service to our members?", were continually asked. Ultimately, the answers to these questions were critical - the corner-stone of our focus and decision.

After much study by the board and staff, I am please to announce that we have entered into a partnership with Cannon Technologies with a goal to convert our existing, manually read meter reading process to a fully automated system by the end of this year.

The conversion process will begin in early March beginning with a System Acceptance Test (SAT), one of the final milestones for the board to consider before agreeing to fully deploying the system.

Based on specific testing requirements, our Dexter substation, serving almost 1500 meters in the Dexter-Lowell area, has been selected for the SAT.

Once the month-long testing period is complete, the system's performance will be evaluated by the board and staff to insure that it has, and will continue to perform to our level of expectation.

For the next few months, page 8 of the *Ruralite* will provide you with information and updates that will help keep you informed as we move through the process.

Rick Crinklaw,  
General Manager



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## BOARD MEETINGS

4th Monday of each month  
(Unless otherwise noted)  
Lane Electric's Office at 11 a.m.

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