

A newsletter from the Arrowhead Electric Cooperative, Inc.

# The High Line

By Line

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A Touchstone Energy® Cooperative 

## Waste not, want not

### Efforts under way to manage and reprocess nuclear waste

Nuclear energy, first generated in the 1950s, supplies power to one out of five homes and businesses nationally. With climate change policy dominating congressional debate, nuclear power—largely dormant for the past 25 years—may be poised for a comeback.

Unlike fossil fuels like coal and natural gas, nuclear generation does not emit carbon dioxide, a greenhouse gas blamed as the principal contributor to global warming. In addition, nuclear reactors produce electricity in much larger quantities and more reliably than other non-carbon emitting generation sources like wind and solar.

“As a zero-carbon energy source, nuclear power must be part of our energy mix as we work toward energy independence and meeting the challenge of global warming,” predicts U.S. Department of Energy (DOE) Secretary Stephen Chu.

Nuclear power plants use fission, the process of splitting atoms apart to produce electricity. When a uranium atom splits, heat is released. The heat turns water into steam, which spins turbines to generate electricity.

The main drawback to nuclear power has always been what to do with the waste. Currently, spent fuel rods are stored at nuclear power plants in one of two ways: in special cooling pools (similar to swimming pools) where water removes heat from the rods and shields the area from the radiation, and in dry cask containers stored in air-conditioned concrete or steel buildings. Both measures, however, were only meant as temporary steps.

For the last quarter-century, the federal government has pursued a policy of developing a permanent, central repository for storing the waste—an effort that has been hampered by political and legal resistance and now appears to have been abandoned.

### Back to the Future

According to the Electric Power Research Institute, a Palo Alto, Calif.-based utility research consortium

that includes electric co-ops, almost 100 times more energy remains available in spent fuel rods than is produced during the first cycle of use. To fully realize the potential of nuclear power as an essential part of America’s energy mix, scientists are researching how to effectively and safely recycle used nuclear fuel and affordably reprocess it to generate electricity again.

With this capability, nuclear power plants could operate with a closed fuel cycle; the same material being used many times, leaving limited waste to store. The World Nuclear Association estimates materials potentially available for recycling spent fuel rods could keep American nuclear reactors running for the next 30 years.

“Like it or not, the nuclear fuel cycle needs to be addressed,” explains John Holt, senior principal for generation & fuels at the National Rural Electric Cooperative Association. “Even if we don’t build any new nuclear power plants—although we will—we’re creating more nuclear waste just by operating existing plants. If we start reprocessing, the waste currently sitting at plants can be used as a second round of fuel. You’re still going to have waste, but there will be a lot less of it.”

To learn more about America’s evolving nuclear power program, visit [www.ne.doe.gov](http://www.ne.doe.gov).

### Right of way clearing has begun in the Devil Track Lake area.

Please mark survey pins and septic systems within the right-of-way and remove any personal items that may be damaged due to flying debris. AECL will not accept liability for any damage if not notified of the above mentioned. If you are not at your property, please call and let us know the proximity of the items mentioned previously to avoid any damage.

# The basics of dual fuel space heating

As the mercury begins to fall, it's good to refresh your memory on the fundamentals of dual fuel space heating.

The dual fuel space heating program allows Arrowhead Electric Cooperative's wholesale electric provider, Great River Energy, to avoid purchasing power at peak times when demand – and electricity prices – are highest.

This allows Great River Energy to better manage its wholesale energy costs – the price that Arrowhead Electric Cooperative pays for its energy – which, in turn, allows Arrowhead Electric Cooperative to better manage the rate it charges members.

Dual fuel space heating allows Great River Energy to control the electric heating systems of those enrolled in the program for up to 400 hours over the course of a

winter heating season; however, most winters the control has totaled between 150 and 250 hours. The hours can be any time of the day, but typically are in the early evening and occasionally in the morning. Control of electric heating systems will not exceed 12 hours on a single day.

Program participants should expect 25-35 control days this winter, with most occurring in December, January and February.

## It's not freezing. Why are you controlling?

Great River Energy purchases electricity from a market that serves much of the Midwest and parts of Canada. Temperature swings that can drive up energy prices and cause heat to be controlled could be hundreds of miles from Arrowhead Electric Cooperative's service area.

## How do I know when you'll control?

The dual fuel program is used to reduce market energy purchases during times of high demand and high market prices. There isn't a predefined market price or temperature that will indicate when the program will be controlled. Several factors, including historical electricity use, time of day and weather patterns, influence the decision to control. You can, however, get an idea of the likelihood of control by visiting [GreatRiverEnergy.com](http://GreatRiverEnergy.com) and selecting "Load Management Guide" at the lower left hand part of the screen. The dual fuel program control expectations and scheduled control times can be found under "Residential." If you would like to view last years control hours to gain a better understanding of how the program is operated select "Residential History."

## Congratulations Summer Quarter "Watt Savers"!

Name	Saved	Saved	Earned
Steven Carlson	1438	64%	\$30.00
Warren Anderson	1039	52%	\$30.00
Richard/Rachel Drake	1252	40%	\$30.00
Leslie Wilson	655	40%	\$30.00
Eleanor Waha	383	35%	\$30.00
Tim Nickolay	792	34%	\$30.00
Rick/Jennifer Schubert	682	33%	\$30.00
Richard Swanson	623	33%	\$30.00
Park Johnson	660	27%	\$30.00
Larry McNeally	530	26%	\$30.00
Mike/Val Littfin	233	24%	\$30.00
David/Virginia Hahn	416	23%	\$30.00
John/Andrea Westphall	801	23%	\$30.00
Virginia Danfelt	374	21%	\$30.00
Cliff/Michelle Kuck	580	21%	\$30.00
Ben Petz	536	21%	\$30.00
Annette Dunsmoor	316	20%	\$30.00
Dick Betz	422	15%	\$30.00
Larry/Liz Martinez	190	15%	\$30.00
Fred/Fran Smith	358	13%	\$30.00
Eleanor Hattery	284	11%	\$20.00
Robert/Carol Murray	199	11%	\$20.00
Stanley/Diane Pelto	165	11%	\$20.00
Larry/Susan Schei	310	8%	\$20.00
Walter/Irene Thompson	100	7%	\$12.00
Tim/Rose Thoreson	111	5%	\$12.00

13,450 = kWh's SAVED

Five additional members were able to save:

341 kWh 8%

**Grand Total Saved 13,791 = kWh's SAVED**

## Save with E-Billing!

Save time, money and paper by signing up for Bill4U and receive your bill by e-mail.

It's easy with Bill4U - To sign up to receive your bill by e-mail or to pay your bill online, go to [www.aecimn.com](http://www.aecimn.com) and click on the Bill4U logo. You will need to choose a Personal ID and Password and next month when your statement is ready, you will receive an e-mail with a link to our secure website. You will then simply enter your personal ID and Password to view your current bill. You now have the convenience of viewing and paying on-line from your savings, checking or credit card account. This is a FREE service!

You can also read the High Line By Line newsletter on line. Simply go to our website at [www.aecimn.com](http://www.aecimn.com) and click on the News tab at the top.



# Be wary of electric space heaters that claim to save money



Many electric space heaters advertise that they can slash your electric bill, but what they don't advertise is that they can also cause that bill to increase significantly.

Whether it's a standard electric space heater you see at a hardware store or a "ruby quartz" or "infrared" model advertised in a newspaper flyer, the thing you need to be concerned about is how much power the unit consumes. This is most commonly given in watts. If you can't find this information on the package or heater itself, be sure to ask the retailer before making a purchase.

Many electric space heaters are rated at 1,500 watts. This rating is how much power the space heater uses. You are billed for each kilowatt hour of electricity you consume. A thousand watts is equal to one kilowatt, so 1,500 watts is equal to 1.5 kilowatts.

This means for each hour the space heater is running it consumes 1.5 kilowatt hours of electricity, which costs about 15cents. Doesn't sound like much, does it? But running that heater nonstop is a surefire way to increase your bill.

If you ran one 1,500 watt space heater for 24 hours a day for a single month it would cost about \$104. That's on top of your normal bill.

So where are the savings that are often touted on such items?

An electric space heater can save money, but only if you reduce the running time of your electric furnace or other primary heating system.

A space heater could reduce your electric bill, for instance, if you lowered the thermostat on your electric furnace from 72 F to 66 F and used the space heater to heat

a single occupied room up to a comfortable temperature.

If, however, you're using the space heater to heat an area of your home normally not heated such as an enclosed deck, then the space heater is simply an additional cost.

Also, keep in mind that if you're using an electric space heater to supplement a propane furnace, then you may see a drop in the amount of propane you use, but your electric bill will still increase.

Electric space heaters can provide an effective and simple means of heating that cold, unconditioned tool shed, bedroom or other relatively small space, but they should never be allowed to run 24 hours a day and you should always keep in mind the cost of operating such a piece of equipment.

## Utility Payment Scams

It seems that some utilities, including electric co-ops are getting more reports from consumer-members or customers about aggressive collection calls being made by unknown individuals demanding immediate credit card payments to avoid loss of service. The callers are not affiliated with the utilities and are attempting to talk victims out of their credit card information.

Co-ops receiving calls from concerned members are warning their consumer-members to avoid giving account information to anyone calling them at home or on the telephone. They are also advising members to contact co-op member services offices if they have any concerns.

Consumer protection agencies are warning that such scams are on the increase due to the condition of the economy, and they caution that the elderly are among the potential victims.

It is a potential identity theft problem because it involves obtaining credit card information for unauthorized or misleading purposes.

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## "Watt Savings" Tip of the Month

Windows provide great views of the outdoors, light, ventilation, and solar heating in the winter. Unfortunately, they also account for 10 percent to 25 percent of your heating bill. High-performance ENERGY STAR-labeled windows can cut your heating and cooling costs by as much as 30 percent.

*Sources: U.S. Department of Energy, Alliance to Save Energy*

