



Tim Stewart,
CEO/Manager

PORTABLE ELECTRIC HEATERS

Understanding how they work is key to using them effectively

A number of portable and hard-wired electric heaters have been introduced to the marketplace in response to high home heating fuel costs. Don't be misled by cleverly worded ads that suggest one heater may be more efficient than a competitor's. All electric heaters, except ultra high-efficiency heat pumps, provide 100 percent efficiency, and watt for watt, cost the same to operate.

Three main heater designs

The first step is to understand that there are three main heater categories. The first category is the high-temperature radiant style (*pictured at right*). They are characterized by the glowing red heating elements and shiny mirrored reflector behind the coils. Radiant heaters don't attempt to heat the air, but rely on "beaming" their warmth directly to people or objects in the room. Just like the sun's warmth, it can be a very pleasing form of heat.



The second category is the natural convection style (*pictured left*), which transfers heat differently. Instead of using red-hot coils, these heaters distribute the same amount of heat over a wider surface of the heater. This allows the flow of air over their surface (natural convection) to transfer heat to the air. Often seen in a long, slender baseboard design, these heaters are warm to the touch but not hot enough to burn you. Other convection heaters are shaped like old-fashioned cast iron radiators, as found in historic buildings. An oil-like fluid



LOAD MANAGEMENT TEST SET FOR NOVEMBER 14

Please be advised that the Winter Preparedness Test for Interruptible Heat (Dual Fuel) Members is scheduled for Wednesday, November 14. This test is performed in advance of the winter Full Load Control season to ensure member familiarity with the control sequence and to ensure that backup heating systems have been validated for proper function.

Each year, a test of the load management system is conducted for members of the Dual Fuel program. This year, the test will take place on Wednesday, November 14. The electric heat will be turned off at 5 p.m. and will be turned back on starting at 8:30 p.m., with everyone's electric heat scheduled to be back on by 10 p.m.

If you experience any problems during this test, or if you have any questions regarding the test, contact Clark Electric Cooperative, 714-267-6188 or 800-272-6188.

inside spreads the heat around the surface. On a watt-for-watt equivalent, natural convection heaters put out just as much warmth, but you don't feel the intense heat as from a radiant design.

The third category, fan-forced heaters (*pictured right*), relies on a blower to push air over the heating coils. Designed like a "mini furnace," these heaters must warm the air in the room to increase comfort. Unlike the natural convection style, they don't rely on a large surface area to transfer their heat to the air. A quick clarification — small fans are sometimes used in radiant heaters too, as a way to circulate the air. Don't let the presence of the fan fool you; if most of the heat radiates out from visible glowing coils, it's a radiant heater.



What does it all mean?

Each of the three designs described here uses a process called "electric resistance heating." Because all electric heaters use this same process, they all have the same efficiency — 100 percent. There are no losses. Whatever the heater's shape or size, the amount of heat coming out is the same as the amount of electricity going in. Therefore, any two heaters with a rating of 1,500 watts on the nameplate will deliver the same amount of heat, no matter what they look like. To calculate the hourly cost of operating an electric heater, consider the following:

What is different about each heater is the method used to transfer the warmth from the heating elements to the person or objects that need it. Any of the three portable electric heater types can allow room-by-room variation in temperature. This zonal heating method can save energy, but only by lowering the setting on the home's central heating thermostat. Then in the occupied room, a space heater is used to boost the temperature to a comfortable level.

If you wish to utilize electric heat, we encourage you to employ our load management system to shift on-peak usage to off-peak usage. If you have an automatic backup heating source or storage heat system, you could qualify for a reduced dual fuel rate. By utilizing this approach, you not only save money, but you also help keep costs down by avoiding peak times.— *Source: National Food and Energy Council; Richard Hiatt, author*

$$A \text{ (Amps)} \times V \text{ (Volts)} = W \text{ (watts)}$$

$$W \text{ (watts)} / 1,000 \times (\text{hours of use/day}) \times (\text{number of days used}) \times (\text{electric rate})$$

Example using 12.5 amp space heater

$$12.5 \text{ amps} \times 120 \text{ volts} = 1,500 \text{ watts}$$

$$1,500 \text{ watts} / 1,000 \times 4 \text{ hours per day} \times 30 \text{ days} \times .1065 / \text{kwh} = \$19.17 / \text{month}$$



NRECA's CEO Jim Matheson, right, congratulates Clark Electric Director Jim Hager for achieving the Credentialed Cooperative Director and the Board Leadership Certifications.

JIM HAGER EARNS DIRECTOR LEADERSHIP CERTIFICATIONS

For electric cooperatives to thrive in this time of change and uncertainty, it is vital that directors have a solid understanding of the electric cooperative business model, a diverse set of knowledge and skills, up-to-date knowledge of industry changes, and a commitment to learning throughout their service on the board of directors. The National Rural Electric Cooperative Association's Director Certificate Programs are specifically designed to help electric cooperative directors understand the complexity of a very challenging industry.

Congratulations to James Hager for achieving the CCD and BLC certificates.

Credentialed Cooperative Director Certification (CCD)

The CCD is a set of five courses that focus on basic governance knowledge and the essential skills required of cooperative directors. The CCD prepares directors to fulfill their fiduciary duty as elected officials serving on behalf of their membership.

Board Leadership Certification (BLC)

After completing the CCD, and as directors continue their board service, they need to stay current on industry issues and evolving expectations for governance. The BLC courses have been grouped into eight specialty areas.

CLOSING 2018'S INCENTIVE PROGRAM

Deadline Dates

Member deadline to submit 2018 incentives to the cooperative:

- Members must submit incentive application **within three months of purchase date** for measures that do not take a significant amount of time to install (appliance, conservation, and lighting measures).
- Members must submit incentive application **within three months of install date** for measures that take a more significant amount of time to install (water heaters, HVAC, C&I, and agricultural measures).
- Purchases and installs during the last three months of 2017:
 - o The three-month deadline described above also applies to year-end purchases and/or installs. For example, a measure purchased or installed on December 31, 2018, would qualify for an incentive until March 31, 2019. However, 2018 incentives submitted in 2019 will be treated as 2019 incentives:
 - Measures will not qualify for an incentive if the incentive is dropped in 2019.
 - Measures will qualify for the 2019 incentive amount if the incentive amount changes in 2019.
 - Measures will be reported as 2019 incentives.

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Happy Thanksgiving!

Clark Electric Cooperative's office will be closed Thursday, November 22, and Friday, November 23, for Thanksgiving.

MEMBER APPRECIATION DAY

Cooperative members gathered the morning of Saturday, September 22, for the annual Member Appreciation Day Pancake Breakfast/Kick Off to Co-op Month event. The pancake, eggs, and sausage breakfast was just the beginning of the many activities that were available for members of all ages.

The kids enjoyed giant inflatables, pumpkins, and picture frame crafting (including their own pictures to put in it). Memorial Medical Center participated with safety information, which included door prizes for the kids. They also provided health-screening information for the adults.

Greenwood EMS and Fire Department were on hand with their equipment on display and performed blood-pressure checks. The Greenwood Police Department was present to do a “Drug Take Back” event which was very successful.

For the sixth year, a Food Drive for

Kick Off to Co-op Month Celebration

the local food pantry was included in the events, providing a great way to include the 7th Cooperative Principle, Concern for Community, into this cooperative event.

This year’s food pantry donations of 197 pounds were donated to the Owen-Withee food pantry at Alliance Church. The donations are rotated to a different community each year in hopes of reaching as many as possible in our service area.

We also conduct a School Supply Drive and the donations received go to the same community as the Food Pantry donations. This year we collected 20 pounds of school supplies and \$101 for T-shirts and sweat pants that were requested. The school supplies went to the

Owen-Withee School District.

CEO Tim Stewart and several directors were on hand to answer questions regarding the Community Solar Garden located just south of the cooperative’s facility and visit with members.

Clark Electric Appliance and Satellite was there with HVAC information as well as information on other products offered through their department.

Congratulations to the Door Prize Winners!

Kids 12 and under were asked to guess the weight of a huge pumpkin. The actual weight was 130 pounds. William Waldhauser from Loyal and Alexis Wetzel from West Bend each received a gift card as winners of the kid’s door prize for having the closest guess.

Thank you to everyone who joined us for this year’s event, and we hope to see you again next year!



MY CO-OP



According to EnergySavers.gov, heating and cooling account for about 56 percent of the energy use in a typical U.S. home, making it the largest energy expense for most homes. There are some simple steps, such as sealing air leaks to keep cold air out, which can help you save on your energy use and energy bills:

- Use caulk to seal gaps in the walls of your home or apartment. Wherever different building materials meet, or wiring comes out of a wall, there are gaps that may contribute to the loss of heat in your home.
- Weather stripping is relatively easy and available at your local home improvement store. Stop drafts from coming in and heat from leaking out of your home through drafty doors and windows.
- If you have older or leaky windows, consider temporary fixes, such as plastic film kits that create the effect of an interior storm window.
- Open curtains to the sun to help warm a room with radiant energy. Close them at night and on gloomy days to keep heat in.
- Lower the temperature setting when you leave the home and at night when you go to sleep. A programmable thermostat can automatically make these adjustments for you.
- Replace your furnace filter monthly to save energy and improve heat circulation.
- Set the water heater thermostat to 120 degrees and if it is an older unit, install an inexpensive insulating blanket to prevent heat loss.
- If you have a fireplace, be sure to close the damper when it is not in use. This prevents heat from escaping and cold from entering through your chimney.
- Doors and vents of unused rooms can also be closed if there is a cold air return in the room; otherwise, closing them off will put inefficient stress on your air handling system.

Clark Electric Cooperative GIFT CERTIFICATES AVAILABLE

Need ideas about what to get that special someone for the holidays?




We all have someone on our shopping list who seems to have everything. How about giving them the gift of energy with a gift certificate from Clark Electric Cooperative? If they receive electric service from Clark Electric Cooperative, contact our Billing Department at 715-267-6188 or 1-800-272-6188 to obtain a gift certificate.

DAYLIGHT SAVING TIME ENDS NOVEMBER 4

If you are on our Time-of-Day Rate, you probably have a time clock controlling devices. Remember to switch the time clock on these devices back one hour as Daylight Savings Time ends on Sunday, November 4. It is important that your time clocks are reset to avoid using electricity during peak times, resulting in a higher-than-normal electric bill. Clark Electric Cooperative's Time-of-Day Rate can save you money on your electric bill; however, you must be willing and able to shift your electric usage around so you can utilize the lower cost of electricity. For more information, contact our office or visit our website at www.cecoop.com.


GEO THERMAL

When COMFORT Matters





Looking for an efficient, cost-effective and environmentally friendly heating and cooling system? A geothermal heat pump is the greenest system available. Geothermal systems don't emit carbon dioxide, carbon monoxide, or other greenhouse gases that can be harmful to the environment or, more importantly, your family. Save money and rest easy knowing your family will be comfortable and safe.

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