

## We know what works

The United States will need to substantially increase our generation capacity by 2020, and in some areas of the country, by 2012 or earlier. These new power plants will be the most expensive in history, thanks in large part to impending federal global warming mandates. Furthermore, should the current restrictions on new coal generating plants continue, the sources for new energy to replace coal-fired generation will be limited and come at a high price to the end user.

The United States currently provides 50 percent of its generation capacity through coal-fired generating plants. Consequently, any reduction in the use of coal only will complicate matters further. West Virginians would suffer even more economically due to any loss of our biggest asset — coal.

If we expect electricity to continue being a safe, affordable and reliable resource, not a luxury for

### **Board of Directors**

Michael Cross, Dist. 7	President
Greg Robertson, Dist. 2Vice President	
Darrell Powell, Dist. 6	.SecyTreas.
C.B. Sharp	Dist. 1
Glenn Cox, Jr	Dist. 3
James Stuart	Dist. 4
Ron Watson	Dist. 5

Gary L. Jackson,	General Manager
Terry Stout	Office Manager
Alan Cox	Operations Manager
Richard L. Fox	Staking Engineer
Nada McNemar	Editor

Office Hours 7:30 a.m. to 4 p.m., Mon. - Fri. the well-to-do, we must convince policymakers to work for energy solutions that are economically, technically and politically sustainable over the long term.

Electric cooperatives have been bringing electricity to the farthest reaches of our country for more than 70 years — we know what works. What we need now is strong leadership on the part of our elected officials.

Energy efficiency must become a national priority. Adequate insulation, upgraded doors and windows, Energy Star® appliances and efficient heating and cooling systems all trim electric demand, and more importantly, lower painfully high monthly bills.

New transmission facilities must be fast-tracked connecting rural regions where sources of renewable energy, like wind, exist to the populations centers where power is needed. Renewable generation can provide an excellent supplement to conventional fuels, such as natural gas and coal, but not without adequate transmis-



### sion lines.

Technology remains the true key to solving our energy crisis, and it must be treated as such. During the next decade, \$2 billion a year must be devoted to research and development of technologies, such as carbon capture and storage, that will significantly reduce power plant emissions of gases, like carbon dioxide blamed for contributing to global warming.

While nuclear power has some ghosts in its background, it must be made a priority with a national initiative to accelerate the construction of new plants. Nuclear power is a proven, low-emission producer of base load generation and is a valuable tool in meeting growing demand.

## THANK YOU!!!

Although our members are reading this in February, we have just made it through the Christmas Season. We would like to take this opportunity to thank Connor and Janie Thompson for the cookies they left at the office for both the clerical staff and the line crew. We all enjoyed them very much. We also would like to thank Dave Lunsford of Tolley Electric for the beautiful poinsettia and Gus Kelley, owner of Line Clearance, for the cookie tray. Tom Horn, owner of our answering service, Cyber-tel, also brought by a tray of cookies. Throw in the big chocolate bar from our auditing firm, Tetrick & Bartlett, and needless to say, we eat very well around here at Christmas time. So far, none of the employees has made a resolution to drop a few pounds in 2009, but after all this holiday eating, it might not be a bad idea.

## **Be heard on Capitol Hill Our Energy, Our Future brings the message to Congress**

In the 1939 movie classic *Mr. Smith Goes to Washington*, Jimmy Stewart plays Jefferson Smith, a wholesome, idealistic Boy Ranger leader who finds himself appointed to the U.S. Senate. There he makes a stand as a true voice for the people, surrounded by others who have lost touch with the needs of their constituency.

As an electric cooperative consumer, you are part of an army of Mr. Smiths marching your needs and concerns up to Capitol Hill every day. Through the *Our Energy, Our Future*<sup>™</sup> grassroots awareness campaign, folks just like you are alerting lawmakers about the need to keep electric bills affordable, reminding them that their actions have consequences.

Sound, thoughtfully crafted energy policy can lead to great things — the electric cooperative program is a perfect example, after all. But hastily enacted energy policy could have far-reaching impacts on the electricity we use every day, doubling or even tripling its cost in the coming years and perhaps diminishing its availability.

While most parts of our economy are subject to some bureaucratic influence, whether through safety regulations or antitrust laws, the government has a say in virtually every aspect of the electric utility industry — from the type of fuel used in power plants right down to the way your house is wired. Unfortunately, if the interests of consumers aren't factored in these decisions, disaster awaits.

This is where the voice of the people comes in, and where you, as an electric co-op consumer, can make a difference. By contacting your representatives today and engaging them on the importance of developing economically sustainable energy solutions, you can greatly influence the national energy debate.

Elected officials need to hear a constant drumbeat about how energy costs are affecting you. Through *Our Energy, Our Future*, you can make your opinions heard via e-mail, a letter or even video. It's amazing how quickly members of Congress respond when hearing from voters back home!

To date, tens of thousands of co-op members from across the nation have sent more than 1.5 million messages as part of the "Our Energy, Our Future" effort. Let's keep that ball rolling to ensure that when U.S. representatives and senators vote on legislation that will affect electric bills, your concerns are paramount in their mind. Just like Jefferson Smith.

Please visit <u>www.ourenergy.coop</u> today to learn about the many ways you can be heard as a modern-day Jefferson Smith in Washington, D.C.

## Heating and cooling efficiently with heat pumps

### by SCOTT GATES

Managing the temperature in a home or business has the hands-down biggest impact on energy costs. In trying to keep warm in winter and cool during summer, the average U.S. homeowner spends \$1,400 annually, accounting for 56 percent of all home energy expenses.

While this outlay can be trimmed by tweaking efficiency, some folks have taken it a step further and installed heat pumps, highly efficient devices that can provide both heating and cooling comfort.

As the name implies, heat pumps simply move heat from one place to another. During winter months, they collect and consolidate heat from outside sources and move it inside; during summer months, they reverse the flow and send warm, indoor air out.

The most common type is an air-source heat pump that resembles an air-conditioning unit and uses the air around it to transfer heat. Geothermal heat pumps, also known as ground-source heat pumps, use the earth itself or groundwater as a means of transferring heat.

When replacing an electric heating system, air-

source heat pumps can trim the amount of electricity needed for heating by as much as 30 percent to 40 percent. Although a typical high-efficiency, ENERGY STAR-qualified air-source heat pump comes with a substantial \$6,000 price tag, it's estimated that energy savings will offset the purchase price within five years.

Geothermal heat pumps come in two types: a groundwater (open-loop) system uses well water; an earth-coupled (closed-loop) model moves a water and antifreeze solution through underground pipes. They can cost anywhere from \$15,000 to \$40,000 for an average home — excavation, installation of underground pipes and (with a groundwater heat pump) well drilling accounts for much of the price tag. But annual geothermal energy savings average between 30 percent and 71 percent, according to the Geo-Heat Center, a part of the Oregon Institute of Technology, and provide fairly rapid payback. Even better, ENERGY STAR versions use up to 60 percent less energy than their standard air-source counterparts.

### (Continued on page 24)

# llaminator Illuminator laminator luminator

# Winter storm safety

### by CHRIS GRAMMES

Snow and ice storms are an inevitable part of the winter season. However, they can lead to downed

power lines and outages. Remember the following tips to stay safe and warm should you find yourself in the dark after a severe winter event:

Never touch a fallen power line, and assume all wires on the ground are electrically charged. Call your electric co-op at 304-624-6365 to report it immediately. Avoid contact with overhead lines during cleanup and other activities.

In the event of an outage, an alternate heating source — such as a fireplace, propane space heater or wood stove — may be used. Extreme caution should be taken.

Plan to stay in an area of the home where the alternate heat source is located.

Fuel- and wood-burning heating sources should be vented. Be sure to follow manufacturer's directions.

Make sure carbon monoxide detectors and smoke detectors are working properly.

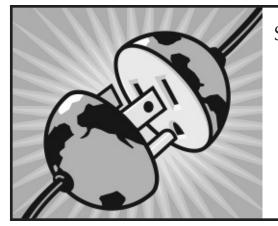
Do not use a gas-powered oven for heating. A gas oven may go out or burn inefficiently, leading to carbon monoxide poisoning.

Do not use a gas or charcoal grill inside the home. Do not use charcoal briquettes in the fireplace.

If you use a portable generator to power a heating

### HAPPY ANNIVERSARY!

Bookkeeper Debbie Yerkey and Lineman Ronnie Yerkey celebrate their 24th year of wedded bliss on Valentine's Day. The couple has two children, Kayla and Justin. Ronnie has worked for HREA for 28 years, and Debbie has been in the accounting department here for 25 years. Congratulations Ron and Debbie.



source, be sure the generator is located outside your house for proper ventilation. Do not use a generator in an attached garage. Follow manufacturer's direc-

tions for operating the generator.

Take special care not to overload a generator. Use appropriately sized extension cords to carry the electric load. Make sure the cords have a grounded, three-pronged plug and are in good condition.

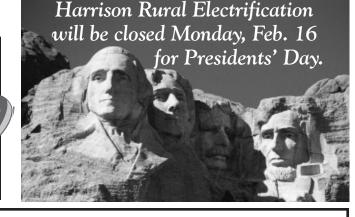
Never run cords under rugs or carpets.

Never connect generators to power lines. The reverse flow of electricity can electrocute an unsuspecting utility worker.

Ideally, your family will stay warm until the power comes back on. But keep an eye on family members for

signs of hypothermia, which include shivering, drowsiness, and mental and physical slowness. The elderly and young children are particularly vulnerable to hypothermia. Call 911 immediately if you notice these symptoms. At least one telephone in the house that does not depend on electricity should be available in the case of a power outage.

Sources: Consumer Product Safety Commission; Centers for Disease Control and Prevention; National Ag Safety Database)



Stay plugged in to what's happening with your electric cooperative at your annual meeting.

Harrison Cooperative will hold its 72nd Annual Meeting at 6 p.m. on April 16, at Liberty High School

Take part in the business meeting and enjoy a pasta dinner.



# High-tech thermostats offer potential savings

Keeping your home hot or cold — depending on the season — accounts for a big chunk of your annual budget. In fact, the average U.S. homeowner spends \$2,500 a year on home energy, with 56 percent — or \$1,400 — going toward heating and cooling costs.

Not surprisingly, savings can add up in a hurry when heating and cooling systems are tweaked for maximum efficiency. You easily can trim your energy bills in winter by setting the thermostat at 68°F while you're awake and back a few degrees when you go to sleep or are away from home.

Even better, turning your thermostat back 10° to 15° for eight hours can save about 5 percent to 15 percent a year on

your heating bill — about 1 percent for each degree. Savings may even be greater for homes in milder climates.

The location of your thermostat can greatly affect its performance and efficiency. Place thermostats away from direct sunlight, drafts, doorways, skylights and windows.

Read the manufacturer's instructions to prevent "ghost readings" or unnecessary furnace or air conditioner cycling.

Installing a programmable thermostat can take the thought out of saving energy. Your heating and cooling system will ramp up or switch off according to a preset time of day or even day of the week. Most models let you manually override the schedule without affecting the rest of the daily or weekly program.

> Programmable thermostats generally are not recommended for heat pumps. In cooling mode, a heat pump operates like an air conditioner, so turning up the thermostat will save energy and money. But when a heat pump works in its heating mode, setting back the thermostat can cause the unit to operate inefficiently, thereby canceling out any savings achieved by lowering the temperature. Maintaining a moderate setting is the most

cost-effective practice.

To automatically manage electric resistance systems, such as electric baseboard heating, steam heating or radiant floor heating, you will need to purchase a programmable thermostat specifically designed for the task. Of course, when shopping for a programmable thermostat, always look for the ENERGY STAR<sup>®</sup> label.

More information on what may be right for your home can be found at energystar.gov.

Source: U.S. Department of Energy Office of Energy Efficiency and Renewable Energy

## Heating and cooling efficiently

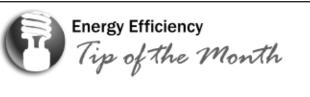
"Heat pumps — whether they're geothermal or air-source — can be tricky to put in," explains Brian Sloboda, senior adviser with the Cooperative Research Network, an arm of the National Rural Electric Cooperative Association. "A good rule of thumb is to get a North American Technician Excellence (NATE)-certified installer. They've passed a comprehensive test and will know what they're doing."

Sloboda adds that air-source heat pumps work at maximum efficiency in moderate climates where the outside temperature rarely drops below 30 degrees Fahrenheit. "Although cold-climate heat pumps are under development, if you live anywhere in the U.S. north of St. Louis, you might want to consider other options. A Dual Fuel system could do the trick, for example, where an oil, natural gas or propane furnace supplements the heat pump during the coldest months."

### (—continued from page 22)

It is important to learn the ins and outs of available technology. State and federal rebates may be available for some systems.

Sources: National Rural Electric Cooperative Association; Cooperative Research Network; OIT Geo-Heat Center; U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy



Keep your fireplace damper closed unless you built a fire. An open damper allows as much warm air to escape as a fully open window. If you never use your fireplace, plug and seal the chimney flue.

Source: U.S. Department of Energy