



## Cold temps affecting power cost adjustment on this bill

The power cost adjustment line item on your NAEC bill usually does not get much attention, except during times of extreme weather conditions, such as the winter weather that Arkansas experienced in December and January.

When the amount paid by NAEC to our wholesale electric supplier for the energy we purchase differs from the amount that is built into our base electric rates, an adjustment is

See **POWER COST** on back.



## Dial 811 for utilities to be marked

Outdoors projects often require digging. Before shoveling begins, be sure to call 811 so that buried utilities may be marked.

The operator will need the location of where you want to dig. Within a few days, a technician will mark any nearby electric, water and other utility lines with spray paint or flags.

Using this free service could prevent serious injury or save a life.



Geothermal systems rely on the ground's relatively constant temperature of 50 to 60 degrees to provide winter heating and summer cooling.

## Tax incentives available again for geothermal heat pumps

Geothermal heat pump systems harness energy found in the ground and can cut heating and cooling costs by up to 70 percent.

The geothermal systems are incredibly energy efficient, but they are more expensive up front than air-source heat pumps. They can cost anywhere from \$15,000 to \$40,000 for an average home depending on excavation and installation needs.

The two-year budget deal signed by President Donald Trump on Feb. 9 will help make them more affordable. It extends energy tax incentives for geothermal systems through 2021. Those who install a qualified system can receive a tax credit equal to 30 percent of the equipment and installation cost.

In addition, NAEC's Energy Efficiency and Conservation Loan Program allows members with approved credit to borrow money to install geothermal heat pumps and other energy efficiency measures. The fixed interest rate currently is set at 3 percent. A printed EECLP loan application is available at NAEC offices in Salem, Mountain Home or Ash Flat. An online application is available at [www.naeci.com/credit-application](http://www.naeci.com/credit-application).

See **GEOTHERMAL** on back.

## ENERGY EFFICIENCY TIP OF THE MONTH



In spring and summer months, set ceiling fans to turn in the counterclockwise direction to create a cool breeze. Remember: Ceiling fans cool people, not rooms. Turn them off when you leave.

— [energystar.gov](http://energystar.gov)

### How Geothermal Heat Pumps Work

Outside temperatures vary, but the top 10 feet of earth remains a relatively constant 50 to 60 degrees Fahrenheit temperature year-round. Geothermal heat pumps rely on energy of the ground to move heat into and out of a building. This provides winter heating and summer cooling.

Also called ground-source heat pumps, there are two types of geothermal units: a groundwater (open-loop) system uses well or pond water, and an earth-coupled (closed-loop) model uses a water and antifreeze solution. Systems can be installed horizontally or vertically, depending on available space and budget.

Geothermal efficiency depends on climate, soil, water conditions and landscaping. For example, soil that transfers heat easily requires less piping. Rocky terrain may require a vertical loop system instead of a more economical horizontal loop system.

When buying a geothermal system, compare two elements: coefficient of performance for heating, and the energy efficiency ratio for cooling.

NAEC’s energy advisers can provide guidance on the best geothermal system for a member’s home or business. To speak with an energy adviser or find out more information on an EECLP loan, please call the co-op at 870-895-3221 or visit one of our offices from 8 a.m. to 4:30 p.m. Monday through Friday.

applied to each member’s bill. This adjustment factor is multiplied by kilowatt hours used in the current month. It can either be a charge or a credit.

NAEC purchases its energy from Arkansas Electric Cooperative Corporation. In 2017, AECC’s electricity was generated by coal (54 percent); natural gas (18 percent); hydro, wind and solar (18 percent); and regional energy markets. The power cost adjustment is usually small, and there is no profit added. It is a direct pass-through from AECC to members.

### Why has the power cost adjustment risen?

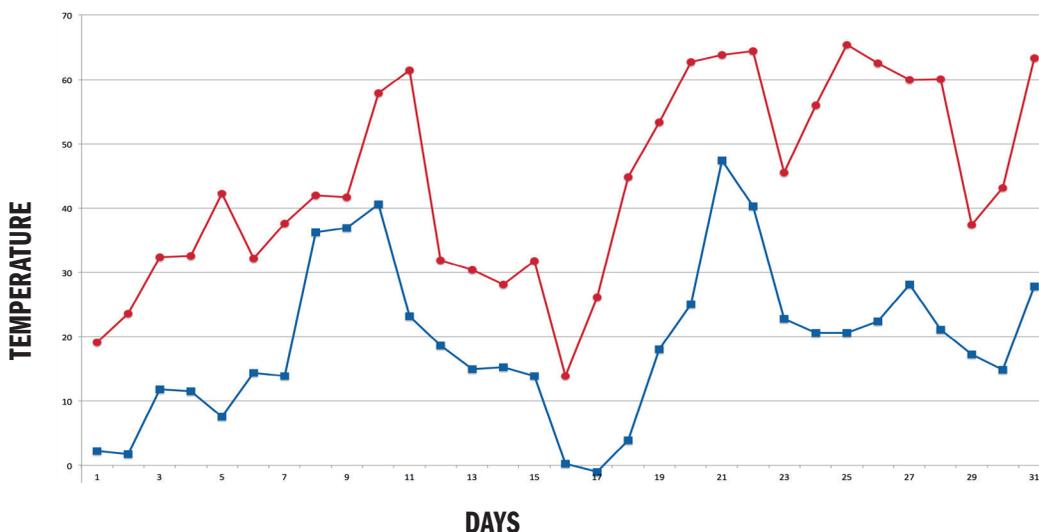
During December and January, Arkansas and large portions of the country experienced significant “polar vortex” events that brought extremely cold air from the Arctic polar region of the globe into the United States. During such events, natural gas is used more for heating, so there’s a great increase in demand. Electric utilities use natural gas to generate electricity, and gas utilities provide gas directly to industries, businesses and homes. That competition raises the price of gas.

AECC has a diverse portfolio of different types of generation that fortunately reduces the cost impact of severe weather events. However, the unusually cold weather like Arkansas experienced in December and January resulted in much higher than normal demand for natural gas, and therefore much higher wholesale fuel costs. The fuel cost adjustment only includes the actual cost of fuel that the utility had to purchase during the month. Sometimes, there is a lag between when the cold weather event occurred and when the member receives the bill. That is the case for NAEC members this month.

AECC intentionally owns a variety of generation plants with different types of fuels, so extreme weather events have a lower impact on members’ bills. The primary goal is to provide the most reliable power at affordable prices.

**Personal Emergency Response System Program** – NAEC no longer will install new PERS units in homes. Members who already have PERS units in their homes will continue to receive the same service. NAEC will notify those members in advance in the event of additional changes to the program.

## DAILY HIGHS & LOWS – JANUARY 2018



**Average Daily High:**  
44.11 compared to 50.5 in 2017

**Average Daily Low:**  
19.1 compared to 29.8 in 2017

**Total Rainfall Amount:**  
2.37" compared to 1.6" in 2017

**Warmest Day:**  
Jan. 25, 65.4 degrees at 2:30 p.m.

**Coolest Day:**  
Jan. 17, -1 degrees at 7:30 a.m.

#### CONTACT NAEC

870-895-3221  
info@naeci.com  
naeci.com

#### RIGHT-OF-WAY

West tree-trimming crews will be working in the Horseshoe Bend area through March.

#### ON THE FRONT

NAEC energized the new Clarkridge Substation on Feb. 14. It now serves 700 members.

