

# THE POWER FACTOR

The Newsletter for Black Hills Power Commercial & Industrial Customers



Volume 5 - Issue 1

## IN THIS ISSUE

- 🔌 First Western Gateway Goes Geothermal
- 🔌 Energy Services Team
- 🔌 Electro-Technology Expo
- 🔌 Your Electric Meter
- 🔌 Infrared Thermography

### Did You Know?

Black Hills Power offers energy efficiency rebates to our commercial and industrial clients.

To find out more visit [www.blackhillspower.com](http://www.blackhillspower.com) or call your Energy Services Team at: 721-3200.

For questions or comments contact:

**BLACK HILLS POWER  
ENERGY SERVICES  
721-3200**

or visit

[www.blackhillspower.com](http://www.blackhillspower.com)

If a power outage occurs, contact Black Hills Power at:

Rapid City area  
721-2475

Toll-Free Number  
1-800-839-8197

## First Western Gateway Goes Geothermal

Rapid City is experiencing another major construction project at the corner of West Boulevard and Omaha Street. The future home of First Western Bank, First Western Agency, and the law offices of Bangs, McCullen, Butler, Foye & Simmons is taking advantage of modern technology by installing a state-of-the-art geothermal heating and cooling system. The four-story, 53,000-square-foot building



will require 140 tons of heating and cooling, which will be provided by eighty-four vertical bore holes that average 300 feet in depth. By using a high-efficiency geothermal system, this new building will enjoy the benefits of being both environmentally friendly and cost effective.

The project is being engineered by Skyline Engineering and the General Contractor is Scull Construction. The building will also house other tenants and is scheduled to be complete by the end of this year.

**For more information about how Geothermal Heating and Cooling can benefit your commercial facility, contact us at 721-3200.**

## Black Hills Power Hosts Electro-Technology Expo

Black Hills Power would like to thank those who attended the Fifth Annual Electro-Technology Expo. The participation of customers and vendors is what continues to make this event so successful!

The Expo, held on January 13 in Rapid City, was sponsored by Black Hills Power and West River Electric Association. The Expo featured the latest in electric and energy-efficient technologies through several training sessions and vendor displays.

**We are here to offer you Energy...for a lifetime!**

## MEET YOUR ENERGY SERVICES TEAM

Black Hills Power's Energy Services Team is available to work with new and existing industrial and commercial businesses that are located in our service territory. The team can assist you with electric rate options, annual electric usage reporting, demand side management planning, energy efficient electric equipment, power factor correction, load monitoring, surge protection, and power quality assistance. The Energy Service Team also works in conjunction with

the various Black Hills Power departments and area district offices located in communities throughout the Black Hills.

This ensures that you receive the appropriate support when you have requests.

To contact the Energy Services Team, simply call your local Black Hills Power office or Energy Services Department at 721-3200.



(Left to Right) Kristy Schmitz, Tom Berry, Don Martinez, Jim Keck, Lee DeLange, Perry Klein, Christina Steele and Gene Mantei

## YOUR ELECTRIC METER

Black Hills Power meter readers frequently encounter hazardous conditions near meters. Common problems include: chemicals, stacked boxes, pallets, tools, equipment, and ground clutter.



You can help meter readers to accomplish their task safely and accurately by following these simple steps:

- Clear the path to the meter.
- Clear all potentially hazardous conditions near the meter.
- If the meter is located inside your building or a fenced yard, please make arrangements with us. Many customers use a lock box to provide easy access.

With your cooperation, we can continue to provide efficient service to your business while working safely!

## INFRARED THERMOGRAPHY SEES WHAT YOU CAN'T

Infrared Thermography is the technology of detecting heat with a sensitive electronic camera. A thermal camera can detect differences as small as 1° F. Studs in a wall, areas of missing or wet insulation, the floor cooled by a draft, and electrical wiring or connection "hot spots" become visible with infrared thermography.

Infrared thermography can help you in your preventative maintenance efforts by:

- Preventing equipment failure
- Reducing repair and maintenance costs
- Increasing energy savings
- Potentially reducing your insurance premiums.

Applications of Infrared Thermography include:

- Inspection of Electrical Systems - An infrared camera can reveal "hot spots" or poor connections, overloads, or faulty components in all types of electrical systems.
- Inspection of Mechanical Systems - An infrared camera can be used to check motor bearings, heaters, heat exchangers, radiators and cooling systems.
- Building Energy Loss Inspections - Infrared cameras can be used to detect air leaks, missing or improperly installed insulation, and wet insulation.

Black Hills Power uses infrared thermography to inspect our substations, transformers, and switchgear. There have been several cases where industrial customers were able to use thermography to detect potential problems and make repairs before outages occurred.