

Western's monthly energy efficiency and renewable energy newsletter dedicated to customer activities and sharing information on energy services.

## NPPD incentive program invites customers to be EnergyWise

**N**ebraska Public Power District has teamed up with its wholesale utility customers to launch an ambitious and comprehensive energy-efficiency program. EnergyWise will show homeowners, businesses and agriculture how to “Use less, spend less and do more.”

NPPD Energy Efficiency Manager Ken Curry said, “In the past the business model for many utilities dictated that the more energy a customer used the better. Today, however, many utilities are asking, ‘What can we do to help our customers use less?’”

### Cost-effective

The answer is to give them a flexible menu of energy-saving options:

- Commercial and industrial lighting incentive program
- High-efficiency heat pump incentive program
- Refrigerator and freezer recycling program
- Irrigation efficiency program

- Compact fluorescent lighting (CFL) incentive program

These are not the first energy-efficiency programs NPPD has offered its customers, but past programs, such as energy audits, didn't have much impact on consumer behavior. “I guess you could call that the ‘down-side’ of having some of the lowest electric rates in the country,” Curry admitted.

But cheap, excess energy—in any form—is a thing of the past. NPPD's integrated resource planning process pointed to a growing load. “It is clear that saving energy is a good investment,” Curry explained.

So NPPD set out to build a portfolio of programs that would reduce kilowatt-hour consumption across the board. Reinventing the wheel was not necessary, Curry noted, since utilities all over the country have mature energy-efficiency programs. “They are very open about sharing their experiences – and we greatly appreciated their advice,” he said.

### Building on experience

Curry found Bonneville Power Administration (BPA) in particular to be very helpful, since, like NPPD, the northwestern power marketer has low rates and a diverse base of wholesale customers. BPA has an excellent track record of promoting energy efficiency

## ENERGYWISE

Use less. Spend less. Do more.

**NPPD's EnergyWise energy-efficiency programs offer consumers the opportunity to save energy, money and help the environment. (Artwork by Nebraska Public Power District)**

to its consumers. “We borrowed a lot of their model for EnergyWise,” said Curry, “especially the flexibility. Our program offers different incentive options for every customer category.”

NPPD provides the framework of incentives and \$2.5 million to fund them, and the wholesale customers can pick which programs to emphasize. Each of NPPD's 76 wholesale customers receives a portion of the funding based on its energy purchases to pay out incentives to their end-users. The payments are entered into a tracking system that allows NPPD to evaluate the effectiveness of each offering and helps the customers to manage their promotions. “The tracking system concept system came from BPA, too,” Curry said.

To settle on specific incentive programs for EnergyWise, NPPD commissioned a study by Summit Blue energy consultants. Using all standard cost tests, the study examined potential energy-saving opportunities that were likely to be

*See NPPD INCENTIVE PROGRAM page 2*

### What's inside

KILI-FM wind turbine .....	3
Geothermal guide updated.....	5
Technology Spotlight.....	6
'Change the World' .....	7

## NPPD incentive program

from page 1

cost-effective in the Midwest. A simple way to look at “cost-effective,” Curry explained, is spending one or two cents on an incentive that saves the amount of energy it would cost 3.5 cents to generate.

Talking to other utilities, attending seminars and using resources from the Electric Power Research Institute and E-Source also helped to shape the program. “We kept hearing the same story after a while,” said Curry. “Other utilities have been down this road, and there are just certain programs you use to start an energy-efficiency initiative.”

### Incentives meet many needs

Residential CFL giveaways and C&I lighting upgrades fall into this category. Lighting incentives offer the “biggest bang for the buck,” are easy to implement and have the added advantage of being popular with consumers.

Refrigerator recycling programs are also popular, removing big electricity guzzlers—and potential safety hazards—from homes. NPPD will conduct a recycling campaign for secondary refrigerators in northeast

Nebraska for the next two months, with plans to continue it elsewhere in the state next year. The Nebraska Department of Environmental Quality awarded NPPD a grant to support the program, which will recycle 95 percent of the materials from the recovered appliances. “This program is great for energy-efficiency, the environment and for public relations,” said Curry.

A high-efficiency heat pump incentive is another program with multiple beneficiaries. The HVAC technology is a big energy-saver for consumers and fits utilities’ load-shaping needs, too.

NPPD also took its wholesale customers’ needs into account in its choice of irrigation incentives. Irrigation is a massive summer-peaking load in NPPD’s territory, so increasing the efficiency of the agricultural systems would have widespread benefits. “The program focuses on testing irrigation systems, making improvements and then testing again,” said Curry.

### Spreading the word

Communication is critical to the success of an energy-efficiency program, and NPPD has a thorough and organized plan for rolling out EnergyWise. Introducing wholesale customers to the program was the first step. “Our customers heard about the plans all through the IRP process, so they weren’t surprised by the program,” Curry pointed out.

As part of the yearlong process of developing EnergyWise, wholesale utility input was critical and NPPD spent time asking what incentives made sense to their end-users. However, even with customer meetings and frequent communications, the biggest challenge—and opportunity—according to Curry,

was insuring NPPD’s 76 wholesale customers understood the programs.

Not all of its wholesale utility customers have the same resources to implement the program, he added, so NPPD is making a special effort to support the smaller utilities. “Taking the time to ask about their needs and listen to their concerns is an important part of that support,” said Curry. “We realize what we offer today does not meet every system’s needs—thus we need to continue to refine and add new programs that benefit our customers!”

In addition to the incentive tracking system and the Intranet news, wholesale customers get program brochures and a monthly EnergyWise press release on energy-efficiency topics. These materials are provided with NPPD’s logo, or are customized with the wholesale customers’ logo.”

The second phase of the communications plan was to reach out to business partners and trade allies. Educating vendors and contractors about the products that qualify for incentives is worth extra effort, said Curry, because, they are often the consumer’s main point of contact. “Trade allies have a tremendous amount of influence,” he pointed out. “You want them to be able to answer their customers’ questions. And it’s good for local business and for the local utility’s relationship with its business community.”

### Ready for consumers

NPPD is now in the process of rolling out EnergyWise to Nebraska consumers. Wholesale customers have been promoting selected incentive programs in bill stuffers and newsletters. Business partners are distributing

See *NPPD INCENTIVE PROGRAM*  
page 8

### Energy Services Bulletin

The Energy Services Bulletin is published by Western Area Power Administration for its power customers. The mailing address is Western Area Power Administration, P.O. Box 281213, Lakewood, CO 80228-8213; telephone (720) 962-7508.

The mention of any service, product, or technology does not constitute an endorsement of same and Western, the Department of Energy, or the United States Government cannot be held responsible or liable for use thereof.

**Editor:** Kevon Storie  
**Designer:** Grant Kuhn

# Wind powers ‘Voice of Lakota’ radio station

The nation’s largest Native American radio station, KILI-FM, celebrated its 25th anniversary by achieving a long-held dream—switching to clean, all-natural electricity provided by its own wind turbine.

“The Voice of the Lakota Nation” dedicated the 65-kW turbine at a gifting ceremony on July 31, Lakota Victory Day. A solar panel the station previously installed powered the celebration and underscored the message that KILI has entered a new era of “green” energy. “We see the KILI wind turbine as a flagship project, a springboard for a broad, tribal renewable energy initiative,” said Winona LaDuke, executive director of the non-profit Honor the Earth.

LaDuke was among the tribe members and state and national officials who attended the ceremony. Honor the Earth, which supports environmental activism and sustainability in Native communities, collaborated with the Intertribal Council on Utility Policy (Intertribal COUP) to develop the project. Intertribal COUP is a consortium of ten Northern Plains tribes dedicated to the sustainable development of renewable resources on tribal lands.

The Nordtank turbine is expected to generate 92 kilowatt-hours (kWh), cutting the station’s annual electric bills of about \$18,000 by as much as two thirds. “KILI is one of the biggest electricity consumers on the reservation,” noted Robert Gough, secretary of Intertribal COUP.

Located just south of the radio station on Porcupine Butte, the 72-foot tower is interconnected to the LaCreek Rural Electric Cooperative.

South Dakota has no net-metering rules, so the station will use the electricity and sell any surplus power to the co-op.

## Support from many

Although the idea of powering the station with renewable energy dates back to its founding, the first step toward development happened six years ago. Western and the National Renewable Energy Laboratory (NREL) loaned an anemometer to Intertribal COUP through Wind Powering America’s Anemometer Loan Program. The anemometer was placed just below Porcupine Butte where data showed a monthly mean wind speed of 13 miles per hour, or class four.

With the promising data in hand, the next step was to secure funding for the \$120,000 cost of the project. Honor The Earth and Intertribal COUP coordinated fundraising efforts from a variety of donors, including NativeEnergy, which supplied critical financing for construction and insurance, and to help with long-term operation and maintenance. Midwest Renewable Energy Association, Oglala Lakota College and Lakota Action Network also contributed funding, technical assistance and in-kind donations to the project.

Two significant grants came from the Office of Indian Energy and Economic Development (IEED) — \$43,000 toward hardware and installation, and another \$50,000 for training. Established by the Department of the Interior, IEED aims to create jobs, Indian-owned businesses and a trained workforce by developing Indian energy and mineral resources. South Dakota, rich in wind resources and home to the



**A crane places blades atop the KILI wind turbine. The station will use the electricity and sell the excess generation to its utility, LaCreek Rural Electric Cooperative. (Photo by Intertribal Council on Utility Policy)**

Rosebud wind turbine, serves as sort of an incubator for the IEED, Gough said. KILI’s wind project fits perfectly with IEED goals, especially given that the station is an economic hub for both the Pine Ridge and neighboring Rosebud Sioux reservations.

## Training, jobs

The IEED training grant funded an intensive technical workshop presented by Intertribal COUP in cooperation with Sinte Gleska University on the Pine Ridge Reservation. Members from the Rosebud, Pine Ridge, Lower Brule, Cheyenne River, Flandreau and other tribes signed up to learn wind basics. “We planned to offer the program to only 35 to 40 people,” recalled Gough. “But there was so much interest, we got extra funding from the Bureau of Indian Affairs.

*See RADIO STATION, page 4*

## Radio station

from page 3

About 60 or 70 people ended up attending training.”

The training covered site selection, the development process, construction and interconnection, with a particular focus on foundation building. “Foundation building is a good entry level job for which the skills already exist on the reservation,” said Gough.

In Indian country, where unemployment runs 50 percent or higher, the jobs renewable energy projects generate are almost as important as the electricity. The European Union estimates that every megawatt of wind production creates 2.77 jobs. Solar generation provides 7.24 jobs per MW, and geothermal 5.67 jobs. With an estimated wind energy potential of more than 300 MW on Great Plains reservations, it is no wonder tribes are taking such an interest in development.

Trainees got hands-on experience working with the developers of the Rosebud turbine, and with the sub-contractors on the KILI project. The Rosebud Sioux plan to leverage their experience with the turbine—the nation’s first tribal-owned and operated project—to develop a 30- to 60-MW wind project, said Gough. The IEED training offered a good opportunity to acquaint tribal members with the skills and job requirements needed to build and maintain such a facility.

## Single turbine challenges

The single KILI-FM turbine will provide only two jobs initially, one of several drawbacks that accompany small-scale wind development. “You don’t get the economy of scale that comes with a large wind farm,” explained Gough. “But we still had to go through all the tribal development issues—permitting, land leases, taxes and ordinances. It’s not just digging a hole and setting a machine.”

Every wind development, large or small, must navigate obstacles in the form of money and logistics, and the KILI project was no different. Budgetary wrangling in Washington held up the DOI grants for a time. The South Dakota contractor that had worked on the Rosebud project didn’t have a turbine available, so Intertribal COUP found a contractor in Montana. Bringing in the out-of-state construction crew meant paying for travel expenses and juggling schedules. When the first transformer malfunctioned, commissioning had to be postponed while the contractor ordered a new one and the crew returned to the reservation.

Wind developers learn to be flexible—not only to deal with setbacks, but to seize opportunities, too. During the testing phase, the anemometer couldn’t be placed exactly on the planned site for the turbine because there wasn’t room for the guide wires to support the tower. The turbine didn’t need guide wires, however, so

it was built 20 meters higher up the butte. “In effect, it gave us a 40-meter tower,” said Gough.

In that spot, with a full and open exposure to the east, south, west and northwest, Gough anticipates higher wind speeds. “Based on the direction of the resources the anemometer measured, we’ll probably get three to four miles per hour more,” he said. “It’s important for people to realize that even one or two miles per hour more can make a big difference in generation.”

That extra generation will help to deliver a vital source of information to the reservation community. In a region where cable television and internet connections are rare, listeners rely on KILI-FM for entertainment, updates from the local health clinic and high schools, tribal council meetings and public hearings with Lakota interpreters. The station also broadcasts a national call-in show on Native issues. And now sponsored by clean, renewable energy. ⚡

### 2nd Annual Colorado Utility Efficiency Exchange

Aspen, Colo.  
Oct. 15-17



[www.utilityexchange.org/  
colorado/](http://www.utilityexchange.org/colorado/)

Want to know more?

Visit [www.wapa.gov/es/pubs/esb/2008/oct/oct082.htm](http://www.wapa.gov/es/pubs/esb/2008/oct/oct082.htm)

# Western updates geothermal heat pump marketing guide

Some call it a renewable energy technology; others, the most energy-efficient heating, ventilation and air conditioning (HVAC) system available. Either way, more and more consumers are calling their utilities about geothermal heat pumps (GHPs), and Western wants to make sure our customers have the latest information about this heating-and-cooling product.

Last year, Western teamed up with partners American Public Power Association and DOE's Geothermal Technologies Program to release the third edition of *Geo Heat Pumps: Leading Energy Utility Marketing Programs*. The report explains the benefits GHPs offer customers and power providers, describes the equipment's market potential and appeal, and looks at marketing strategies that have been successful for some utilities.

Since the report's release, new utility programs promoting GHPs have popped up all over the country, and installations are on the rise. Although GHPs have been around for decades, the industry has learned a thing or two over the past year that will help utilities increase customer satisfaction with the technology.

## Adjusted for rising costs

Katherine Johnson of Market Development Group has incorporated those lessons into the latest version of the marketing guide. "Changes in the market make it necessary to update the book periodically to keep the tools relevant," said Johnson, who authored the first report in 1996.

Equipment and power costs, perhaps the biggest change since 1996, are reflected in the table entitled Average Capital and Operating Costs

for Geothermal Heat Pumps in 2008 Dollars. Using a house in Connecticut as the example, the table compares installation and operating costs of a conventional air conditioner and fuel-oil boiler with those of a GHP.

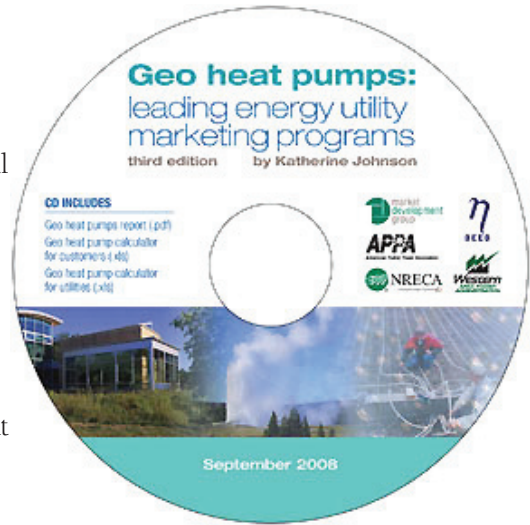
"Obviously, everything is more expensive than it was 12 years ago," noted Johnson. "But the story the table tells is that GHPs can be an even better investment now than they were in 1996."

She is quick to add that savings will differ throughout the country, depending on electricity rates, available incentives and the type of HVAC equipment the GHP is replacing. However, Johnson said, "The cost of energy really only goes in one direction over time, so the figures are likely to improve for GHPs across the board."

## Building integration

Other changes were driven in part by input Johnson received at workshops like the Geothermal Technologies workshop Western co-sponsored earlier this year. HVAC, she explained, is not just a stand-alone piece of equipment, but one component of the integrated system that is the building. "As more utilities launched GHP marketing programs, we discovered key factors that cost calculator tools didn't take into account," Johnson said.

Johnson gave a presentation on GHP Analytical Tools at the workshop highlighting the calculators that are included with the report. The calculators are MS Excel worksheets from the residential and the utility perspectives that compute the summary of benefits



**Geo Heat Pumps: Leading Energy Utility Marketing Programs is available on CD to Western customers considering offering a GHP program to their consumers. (Artwork by Market Development Group)**

from information the user provides. The assumptions can be changed to match different scenarios.

Ductwork is a factor that the previous calculators assumed, but electric resistance heating systems, for example, don't require ducts to distribute heat. A homeowner replacing that system with a GHP would have the added cost of installing ductwork to distribute the conditioned air. The new Residential Geothermal Heat Pump Calculator now includes scenarios for installing new ductwork and for tuning up existing ductwork. "The good news is that, even with ductwork, the GHP is still cost-effective," said Johnson. "Ductwork could add four to five years to the payback, but that's on a system with 25-year lifespan."

Including calculations for a ductwork tune-up is also part of the report's greater focus on building envelopes. "You can't understate the importance of the building envelope

*See CD UPDATE page 8*

## Technology Spotlight: Induction lamps

**W**hat lamp has excellent white light, a lamp life of 100,000 hours and is commercially available now? No, it's not an LED (light emitting diode). It's an induction lamp—also known as electrodeless—a proven, available technology that risks being overshadowed by the media focus on the emerging technology of white LEDs.

### Light quality, performance

Induction lamps generate high-quality, white light (similar to fluorescent lamps), with an excellent color-rendering index (CRI) of 80-82. They come in color temperatures of warm (2700K and 3000K), neutral (3500K), and cool (4100K)—measured in Kelvins (K). Some products are also available in the very cool 5000K.

A high-frequency generator (similar to a ballast) provides energy to a power coupler in the lamp, which excites the phosphors and produces light. The power system has a rated life of 60,000 hours.

Induction lamps perform well in very cold temperatures (most will start at -40 degrees F). Their life is rated at 100,000 hours (twice as long as almost any other lamp on the market), so they may last 12 to 25 years under average-use conditions. With their long life and good lumen maintenance (the rate at which light output declines), relamping can be infrequent—saving the relamping costs of labor, materials, equipment and disposal. Extra fixtures are not needed to counter lumen depreciation.

### Applications

Good applications include areas that can be disruptive, dangerous or expensive to access, such as roadway tunnels, bridges and industrial high bays (although high-bay fluorescents may be more cost-effective there). Refrigerated warehouses may be another good application. Induction lamps are good where white light is desired after dark, such as outdoor retail and pedestrian areas. Color stability is not an issue (as it is with metal halide), and their long life and range of thermal environments surpasses metal halide and most fluorescent systems. Induction systems are much more compact than fluorescent ones.

### Some drawbacks

Unfortunately, induction lamps may cost \$200 more per fixture more than conventional metal halide lamps. They require special fixtures, making it difficult to use them for a retrofit.

Induction lamps are not dimmable at this time and could be incompatible with nearby dimming or occupancy-sensor controls. The signal used to produce the light may also interfere with some electronics and radio gear (including but not limited to, pacemakers, computers, radios and cordless phones). It is important to confirm with the manufacturer that these will not be problems in your specific application.

### Selecting technology

Lighting system selection must be based on more than just energy efficiency. Many customers focus

only on getting the most “bang for the buck” while satisfying applicable codes. Energy codes restrict how much power is used, and lighting design guidelines specify how much light occupants need to see, leaving customers to hunt for lighting systems with high color quality and light output (measured in lumens), low maintenance and energy requirements and an affordable cost.

Recent studies indicate that perceived light levels are higher with very cool light (5000K+). This could mean that fewer fixtures (or lower-wattage lamps) are required for a given space, reducing first cost, energy and maintenance. Customers who look beyond first costs to life-cycle costs get a clearer picture of what a lighting system will really cost in the long run. Energy use and maintenance account for about 85 percent of the costs accrued, so a higher first cost may be an excellent investment if operation costs decline appreciably.

Ask your local vendor for data comparing the life-cycle cost of induction lamps with other alternatives. Most lamp types come in quite a range of performance characteristics, and lighting costs vary widely from supplier to supplier. Quantity purchases generally reduce the unit cost. If you need white light in a space with difficult access or cold temperatures, or for those who own their own building and hire lighting maintenance services, the induction lamp may be a very attractive choice. ⚡

Want to know more?  
Visit [www.wapa.gov/es/pubs/2008/oct/oct084.htm](http://www.wapa.gov/es/pubs/2008/oct/oct084.htm)

# 'Change the World' offers tools to fight global warming

[www.energystar.gov/changetheworld](http://www.energystar.gov/changetheworld)

Protecting the environment seems like such a tall order that global warming risks becoming, like the weather in Mark Twain's day, the thing about which everyone complains but no one ever does anything. "Change the World, Start with Energy Star" wants to change that, too, by giving individuals practical ways to fight against global warming.

The national campaign builds on the successful "Change a Light, Change the World" pledge drive, which inspired more than a million Americans to save energy and money by replacing a conventional light with a compact fluorescent light (CFL). Energy Star is now asking Americans to protect the environment by pledging to try new actions at home and work, and then share their story to inspire others. Western has joined "Change the World" to encourage employees to reduce energy use in their home, and is also encouraging our hydropower customers to spread the word to their consumers.

"Western customers know that energy efficiency is one of the most cost-effective resources," said Energy Services Manager Ron Horstman. "The 'Change the World' pledge drive is an opportunity to remind individuals that we can all make a difference by taking energy-saving steps at home and in the workplace. Best of all, Energy Star is providing resources utilities can use to communicate that message to customers whether they participate in the campaign or not."

## Take the pledge

The cornerstone of "Change the

World" is the Energy Star pledge that challenges people to "do more" to help fight global warming by making energy-efficient choices at home and at work.

Every product or practice changed is a step in the right direction, from changing a light to setting computers to sleep when not in use. Installing and correctly using a programmable thermostat at home or choosing ENERGY STAR qualified products when making a new purchase are some of the simple, everyday actions that visitors can pledge to take on the form.

Since Energy Star launched the campaign in 2005, almost two million individuals have taken the pledge resulting in a savings of about 2.1 billion kWh and offsetting more than 3.3 billion lbs of greenhouse gases (GHGs). A detailed list of pledge drivers, including other power providers, gives the number of pledges and replaced lights; and energy, cost and GHG savings for each participating organization.

Utilities that want to join the 119 businesses and agencies campaigning to "Change the World" can register online and find answers to frequently-asked questions about the campaign.

## Ready-made support

One of the hardest parts of consumer outreach—especially for smaller utilities—is finding the time, money and staff hours to create promotional literature. "Change the World" makes it easy for pledge



Any utility that participates in the "Change the World" campaign can download banners and artwork like this to use in newsletter and on Web sites. (Artwork by Energy Star)

drivers with a whole library of graphics and messages. Pledge drivers will find print and Web artwork, sample e-mail and Web copy, key messages, a press release and a newsletter story.

The sample Mayoral Proclamation may help municipal utilities to enlist City Hall in community-wide campaigns. The Campaign Creative Guide provides step-by-step guidelines in PowerPoint format for conducting a pledge drive. The Campaign Overview is a comprehensive summary of the products and measures available to individuals who wonder where to start making changes. It also includes a brief explanation about mercury in CFLs.

Utilities can download these resources just to get ideas for their own consumer outreach programs. However, participating in "Change the World" gives consumers a place to record their efforts, to see their organization's progress and to compare it to other groups. A little competition is a great tool to get—and keep—people involved.

## Sharing success

Any campaign creates a community of its own, one where people enjoy talking about their related activities and learning what others are doing. Energy Star gives "Change the

*See 'CHANGE THE WORLD' page 8*

## **NPPD incentive program** *from page 2*

information about eligible products, and NPPD had a booth at the annual Husker Harvest Days Expo. “The festival is a great opportunity to meet people and spread the energy-efficiency message,” said Curry.

The competitive spirit seems to have gripped some of NPPD’s

member systems. Curry said one customer was determined to be the first to pay an incentive for a heat pump, and another was already scheduling refrigerator pick-ups. A large manufacturing facility has expressed interest in upgrading lighting, and a local utility was giving its line technicians CFLs to hand out to consumers.

It is too soon to tell how big an

impact EnergyWise will have on consumer behavior and on NPPD’s load, but Curry has a simple way to judge the program’s success. Instead of setting a kWh savings goal, as Missouri River Energy Services did for its Bright Energy Ideas program, “We’ll know EnergyWise is working when our wholesale customers call to ask for more funding,” declared Curry. ⚡

**Want to know more?**

Visit [www.wapa.gov/es/pubs/esb/2008/oct/oct081.htm](http://www.wapa.gov/es/pubs/esb/2008/oct/oct081.htm)

## **CD update**

*from page 5*

in an energy-efficiency plan,” said Johnson. “It doesn’t matter how efficient your HVAC system is, if the building is leaky and poorly insulated, it’s going to waste energy.”

### **New energy future**

Utilities and municipalities coping with load growth and tougher regulations for powerplants are increasingly embracing the GHP as a conservation tool. The Colorado Governor’s Energy Office (GEO) recently contracted with Market Development Group to create a database of GHP installations and

case studies throughout the state.

The GHP database is intended to give GEO a detailed picture of how many systems are operating in the state, and in what kind of facilities. “The goal is to determine how GHPs fit into the state’s overall renewable energy strategy,” said Johnson. “The database will also be a resource for utilities and vendors.”

Joanie Matranga of GEO plans to provide an update on the database during her presentation at the Colorado Utility Efficiency Exchange, Oct. 15-17, in Aspen Colo. Her presentation will cover GEO’s efforts to engage state utilities in achieving the goals of the

Governor’s New Energy Economy. Those efforts include programs promoting demand-side management measures, such as widespread deployment of GHPs, as a means to contain rising wholesale power costs.

Utilities can request a copy of the updated Geo Heat Pumps: Leading Energy Utility Marketing Programs and calculators from Randy Manion, Western’s Renewable Energy Manager. “GHPs offer utilities an excellent opportunity to shape and control their loads, while strengthening customer relations,” said Manion. “And the report is a great resource for starting a GHP marketing program.” ⚡

**Want to know more?**

Visit [www.wapa.gov/es/pubs/esb/2008/oct/oct083.htm](http://www.wapa.gov/es/pubs/esb/2008/oct/oct083.htm)

## **‘Change the world’**

*from page 7*

World” participants a place to tell how they save, and features some of those stories on the Energy Star @ home Web site.

Western is a community, too—of power providers and their consumers—and we share our customers’ success stories through Energy Service Bulletin. Let us know if your utility is holding a “Change the World, Start with Energy Star”

pledge drive. Contact the editor with your campaign and individual success stories, and we will be happy to tell others in our community about what you are doing to change the world. ⚡

**Want to know more?**

Visit [www.wapa.gov/es/pubs/esb/2008/oct/oct085.htm](http://www.wapa.gov/es/pubs/esb/2008/oct/oct085.htm)