

# BULLETIN

The energy and planning resource for Western utilities

## EQUIPMENT LOAN TOOLS EDUCATE, INSPIRE NEXT GENERATION

**E**ducational kits available from Western’s Equipment Loan Program do not diagnose equipment failures or energy losses, yet they are among our most popular loan items.

Following in the footsteps of Gunnison County Electric Association and Southeast Electric Cooperative, ALP Utilities in Alexandria, Minnesota, recently borrowed a demonstration kit to teach their future customers about the science behind electricity.

### Show and tell

Western’s fuel cell kit and infrared camera made an appearance at the first STEAM (science, technology, engineering, arts and mathematics) Expo hosted by Alexandria Area High School March 26. ALP and its power wholesaler Missouri River Energy Services (MRES) helped sponsor the event with School District 206 and other community partners. The event featured hands-on demonstrations and learning exhibits by the sponsoring partners, as well as students’ projects in STEAM subjects.



The Science, Engineering, Arts and Math Expo drew hundreds of attendees to Alexandria Area High School this spring. (Photo by ALP Utilities)

At the ALP exhibit, visitors could learn where power comes from and how it gets to their homes. Two students from the school’s science academy helped at the ALP booth and showed visitors how the fuel cell produced electricity. “They were so excited to learn about the equipment,” said ALP Energy Services Representative Vicki Gesell, who coordinated ALP’s participation. “I was really impressed with their ability to explain how fuel cells work and answer visitors’ questions.”

A working solar panel from MRES was also on display, as well as linemen gear and a length of underground cable, with a ratchet cutter so students could cut off a souvenir.

A lighting display featuring light-emitting diode, or LED, lighting showed how smart electrical energy choices save electricity, money and limited resources. Students surveyed their surroundings through the infrared camera and learned how to

find heat loss and detect potential equipment failures. Gesell noted that kids loved seeing infrared images of themselves, confirming that the powerful diagnostic tool can also be a secret weapon for public outreach.

Hundreds of students and parents attended the expo, making it a great place to meet and chat with customers. “An event like this gives us the chance to be a part of the community, to talk to our customers in person about their needs and to remind them about the programs ALP offers,” Gesell observed.

### Lots to discover

ALP offers residential customers plenty of ways to control and reduce their energy use. Customers can receive rebates on eight different Energy Star appliances and all-electric water heaters with 92-percent or greater efficiency factor. After installing a qualified water heater, ALP adds a load controller free of charge to cycle

*See EQUIPMENT LOAN TOOLS, page 2*

## WHAT’S INSIDE

Holy Cross rebate program .....3

REAP supports wind, more .....5

Around the web:

Find qualified HVAC installation ...6

Storms create outreach opportunities.....7

National Geothermal Summit .....8

## Equipment Loan tools from page 1

the unit for short durations during peak load times. The utility also has an off-peak heating program.

Through the MRES Bright Energy Solutions (BES) program, ALP provides rebates on high-efficiency electric furnaces, heat pumps, air conditioners and lighting. "Now that LED products are coming down in price, customers are interested in making the switch to these longer lasting bulbs," noted Gesell.

BES has an extensive list of rebates for commercial customers, too. Incentives are available for heating and cooling systems, manufacturing equipment, commercial food handling appliances, efficient lighting for new and existing buildings and custom measures. Another service BES offers is a New Construction Design Review to help customers build efficiency into their new facilities and get incentives to help pay for the measures.

### Building efficient future

The site of the STEAM Expo illustrates the benefits of planning for energy efficiency with the help of your power provider. Completed in 2014, Alexandria Area High School is expected to save more than \$76,000 in energy costs each year.

Last December, ALP and MRES presented school officials with a check for \$121,849 through Bright Energy Solutions. The rebate covered insulation in the school's roof and walls, windows and sunshades, efficient heating and cooling system and lighting. Also, the school district purchased several ENERGY STAR appliances for the cafeteria, culinary arts and concession areas.

Like participating in the STEAM Expo, offering incentives to improve energy efficiency in schools is more than just good customer relations—it is an investment in the future. Money

the district saves on energy costs can be used to educate students in science, technology, engineering, arts and math. More students studying those disciplines today mean a better-prepared workforce tomorrow. ALP Utilities may one day hire some of those students to provide the community with reliable electricity and help more businesses manage their energy use.

If not quite the "Circle of Life," you could call it a Circle of Sustainability, and Western is pleased to loan our customers educational displays to keep it going. ⚡



Students Nolan Christenson (left) and Nathan Eck explain how a fuel cell makes electricity to a visitor to the ALP Utilities booth at the STEAM Expo. ALP borrowed the fuel cell kit and an infrared camera from Western's Equipment Loan Program. (Photo by ALP Utilities)

## 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.

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Nolan Christenson studies up on fuel cell operation. As a student in Alexandria High School's science academy, he is preparing for a future that may include working for ALP Utilities, or Western Area Power Administration. (Photo by ALP Utilities)

# ELECTRICITY SAVINGS BEAR RESULTS FOR HOLY CROSS CONSUMERS

Out-of-date lights at Bear Paw Lodge in Beaver Creek, Colorado, were eating up not only electricity, but also staff time to replace burned-out bulbs. To tame the lighting system's bruin-sized appetite, the managers of the luxury home and condo resort turned to Holy Cross Energy for help.

Over the last nine years, the cooperative's We Care energy-efficiency program has helped hundreds of businesses and households in the Roaring Fork Valley upgrade to more efficient systems and equipment.

## Retrofit delivers lower costs, less maintenance

The slope-side resort invested in high-efficiency LEDs for the common areas, parking garages, stairwells and ski lockers. The Bear Paw homeowners' association can expect savings on their energy bill of about \$23,000 per year. LEDs, or light-emitting diodes, also provide better light and last significantly longer than conventional lamps. Tim Schwartz, chief engineer for the lodge, said he is looking forward to working until retirement without having to change a single light bulb.

A rebate of \$31,500 from Holy Cross, plus \$2,500 from Energy Smart Colorado, made Bear Paw's total project investment a lot easier to swallow. The lower, out-of-pocket costs give the whole project a payback period of less than three years. Results like Bear Paw's prove that energy efficiency is good business sense. Member-owned Holy Cross Energy is working to help more of its business and household consumers realize similar paybacks.

## Savings pile up

Seeking deeper energy savings from its We Care program, the utility set a five-year goal in 2013 for its consumers to save 33,000 megawatt-hours (MWh) of electricity per year by 2017. That equals all the electricity used annu-



Replacing conventional lighting with efficient LED lamps not only reduced the electricity bills for Bear Paw Lodge, it also made life a little easier for Chief Engineer Tim Schwartz. (Photo by Holy Cross Energy)

ally by 2,457 homes in the Holy Cross service area, which spreads across Eagle, Pitkin and Garfield counties.

In 2014 alone, more than 1,000 energy upgrades done by 829 Holy Cross consumers will save 10,106 MWh of electricity per year, according to Mary Wiener, energy efficiency program administrator for Holy Cross.

"This is on top of 6,241 megawatt-hours of annual savings from projects done in 2013, so we are halfway to our goal in the first two years," Wiener said. "These savings will continue for years into the future," she added.

## Consumers get on board

To encourage residential and commercial consumers to make energy-saving upgrades, Holy Cross Energy provides expert help and rebates. "We understand that people appreciate getting help to make smart decisions, and the rebates show our consumers that we are their partner in energy efficiency," said Wiener.

In 2014 alone, Holy Cross paid out more than \$1.1 million in rebates to consumers to offset a portion of their investments in efficiency. Funding for

the rebates comes from a 2-percent surcharge added to electric bills.

Holy Cross energy coaches visited more than 200 homes to provide complimentary home energy assessments, and the cooperative helped pay for 68 Energy Smart Colorado home assessments. A total of 592 households made energy upgrades in 2014, said Wiener.

"LED lights and recycling old refrigerators were by far the most popular upgrades," she said. "People also replaced leaky windows, switched to programmable thermostats, swapped out their old holiday lights for LED strings and installed heat tape timers."

Holy Cross also continued its partnership with the Northwest Colorado Council of Governments (NWCCOG), which offers a home weatherization program to income-qualified households. In 2014, the NWCCOG crew used a \$46,000 contribution from Holy Cross to make upgrades for 22 households.

## LED lighting is project of choice

Bringing the benefits of efficiency to businesses and multi-family housing properties is a challenge for all utilities.

*See HOLY CROSS CONSUMERS, page 4*

Holy Cross partnered with Energy Smart Colorado to offer free building walk-throughs and energy coaching to this hard-to-reach market. Locally administered by the Community Office for Resource Efficiency, Clean Energy Economy for the Region and Walking Mountains Science Center, Energy Smart Colorado provides program services to help utilities and municipalities meet energy-efficiency and carbon reduction goals.

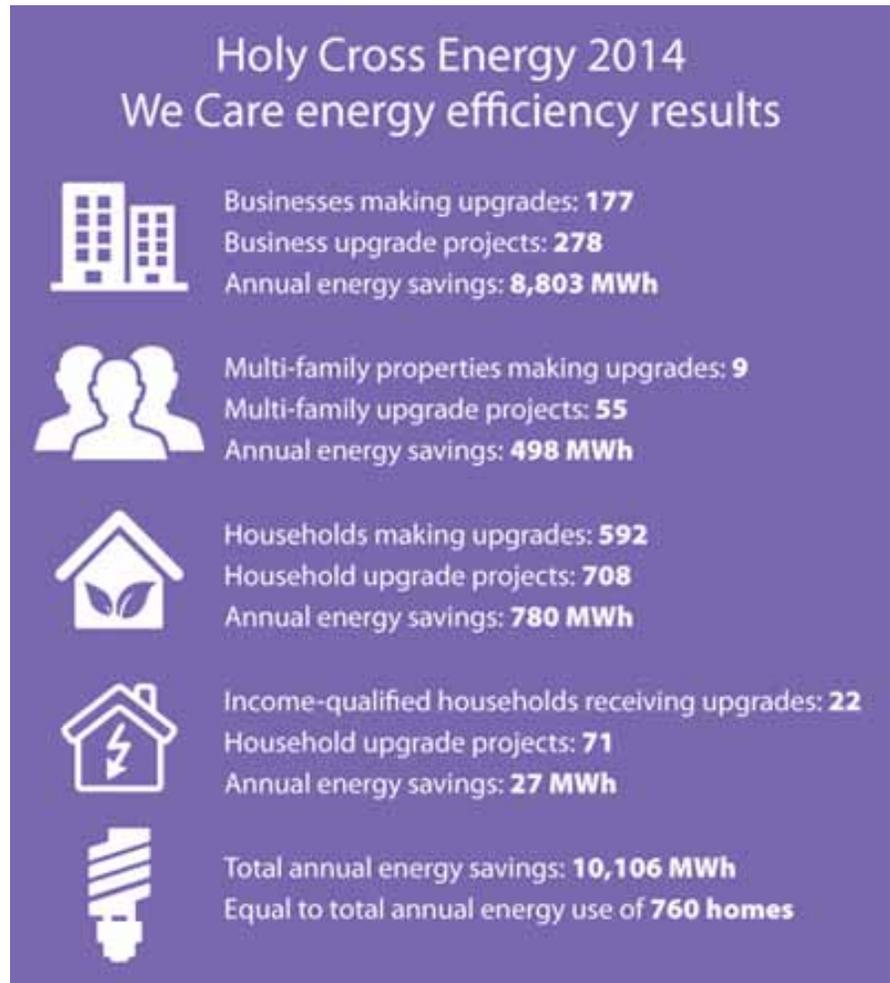
Because businesses and lodging use so much more electricity than individual homes, projects at 177 businesses and 51 multi-family properties delivered 93 percent of the total electric savings from 2014 projects.

LED lighting was the project of choice—not surprising, given the added benefit of reduced maintenance. “LED lighting is the hot ticket for businesses, lodges and condos,” said Wiener. “These projects deliver immediate energy savings and rapid payback on your investment. We expect to see a lot more lighting upgrades in 2015 as people see the superior quality of these new LED fixtures and bulbs.

### More rebates for 2015 projects

So why would a utility want its consumers to use less electricity? “Because it actually saves Holy Cross money,” explained Del Worley, Holy Cross CEO. “In fact, we expect the savings from this year’s efforts to save Holy Cross \$1.8 million dollars in power costs over the next five years.” “Energy conservation means we don’t need to invest in costly new power plants, and it reduces the peak demand charges we pay our supplier. Conservation is the most cost-effective investment we can make,” he said.

Holy Cross Energy members agree, and have expressed support for these programs. They can expect more rebate funding from Holy Cross this year to help them invest in energy efficiency and renewable energy. ⚡



Installing LEDs in public spaces, like the parking garage at Bear Paw Lodge, offers businesses a quick return on investment. (Photo by Holy Cross Energy)

# USDA RURAL ENERGY FOR AMERICA PROGRAM SUPPORTS WIND ENERGY, MUCH MORE

*Award recognizes program's contribution to community wind development*

**W**industry's Community Wind Distinguished Service Award for 2015 went to a champion of energy efficiency and renewable energy development in small towns and farming communities.

The Department of Agriculture's (USDA) Rural Energy for America Program (REAP) received the award for its exemplary efforts to break new ground in making community and distributed wind accessible to all. The Windustry board of directors and a group of wind professionals presented the award to John Beeler of the USDA on March 26 at the advocacy group's headquarters in Minneapolis, Minnesota.

## Funding for renewables, efficiency

REAP has done outstanding work for rural communities since 2002, providing guaranteed loan financing and grant funding for a wide variety of renewable energy systems and energy-efficiency improvements.

In addition to wind generation, agricultural producers and rural small businesses may use REAP funds to buy, install or build:

- Biomass (e.g. biodiesel and ethanol, anaerobic digesters, and solid fuels)
- Geothermal for electric generation or direct use
- Hydrogen
- Small and large solar generation

The 2008 Farm Bill added tidal, wave, ocean thermal and hydroelectric systems below 30 megawatts to the list of eligible technologies.

REAP grants also fund projects that save energy (electricity, propane or natural gas or diesel fuel). Dairy pumps and cooling systems, weatherization of poultry houses, efficient lighting and ventilation, irrigation equipment, industrial motors and supermarket refrigeration systems are eligible.

Energy-efficiency grants cannot be used to expand facilities, or to support agricultural equipment or other vehicles. For renewable energy systems, only proven, commercially available and pre-commercial technology is eligible. Residential renewable energy systems do not qualify for grants, unless a small business, such as a rural electric cooperative, owns the system. Also, grants cannot fund research and development activities.

## Still time to apply for 2015

Funding for Fiscal Year 2014 and FY2015 were combined this year for a total of \$101 million, most of which has been allocated. However, the application deadline for the final round of REAP funding in 2015 is June 30.

Applicants should contact their USDA state energy coordinator early. State energy coordinators can help review applications and offer guidance, but they generally have less time to assist closer to the deadline. FarmEnergy.org, a website that provides information on the Energy Title programs of the Federal Farm Bill, is another source of assistance to newcomers to the application process.

Utilities also benefit from this often-overlooked source of funding for projects that support their efficiency and renewable energy goals and requirements. Contact your local REAP office to learn more about the application process, and then share that knowledge with eligible customers. You will not only increase customer loyalty, you may be helping REAP to win its next award. ⚡



Left to right - Larry Flowers, Wind Consulting, Colorado; John Beeler, USDA; Venus Welch-White, PhD, Management and Program Analyst; Sam Ridders, Deputy Administrator; Lisa Daniels, Windustry, Minnesota; Heather Rhoads-Weaver, eFormative Options, Washington; Tom Wind, Wind Utility Associates, Iowa (Photo by Windustry)



### FIND QUALIFIED HVAC INSTALLATION

An energy-efficient heating and cooling system can yield significant energy savings for home and business owners, as long as it is installed properly and that is the rub. HVAC contractor

Installation can make or break the system's performance. Unfortunately, finding the right contractor—one experienced with today's sophisticated, high-efficiency heating, ventilation and air conditioning (HVAC) equipment—is not easy, even in a big metropolitan area. Some utilities solve this problem by creating a trusted contractor pool to support their HVAC efficiency programs. You may not have the time or budget to do that, but you can introduce your customers to online resources to help them select the right person for their job.

#### Ask questions, look for credentials

Energy Star's 10 Tips for Hiring a Heating and Cooling Contractor is a good place to start for basic common-sense advice. It includes a link to the Energy Star Guide to Energy Efficient Cooling and Heating, also available in Spanish. While your customers are on the website, they can research Energy Star-qualified heating and cooling equipment.

Air Conditioner Contractors of America (ACCA) has an outstanding page for homeowners that discusses system maintenance, interviewing contractors, and even talks about Manual J, the industry standard for determining the size of an HVAC system. There are short, informative videos about the value of licensed contractors, questions to ask before hiring one and what to expect from a professional installation.

ACCA strongly recommends hiring a licensed contractor with technicians certified by North American Technician Excellence (NATE). The nationally recognized, industry-supported certification organization has its own website with helpful Tips and Resources covering everything from safety to HVAC terminology. However, visitors should use the ACCA contractor locator to find local credentialed technicians as it is more up to date than the NATE database.

Building Performance Institute is another organization that certifies contractors and provides a searchable database. The results include not only company location, but technician core certifications as well.

Visitors will find BPI's contractor comparison form useful when getting estimates. The form lists 10 questions and space for the answers from three different contractors for easy comparison. It also lists the steps homeowners should expect during the installation process.

#### Be proactive

Homeowners generally don't think about HVAC purchases and repairs—not exactly the stuff of daydreams, after all—until something goes wrong. Utilities can think ahead for their customers by creating a bill stuffer with contractor questions and links to online contractor finders. Make sure



your customer service representatives have hard copies and electronic copies they can share with anyone who asks.

If you offer an incentive program for high-efficiency HVAC systems, place links to selected online resources on your program Web page. Make sure equipment vendors have copies of the contractor questions on hand to pass out with sales.

Educating customers about the value of hiring certified HVAC installers can create a ripple effect that motivates contractors in your service territory to seek certification. Utilities can be ready with information about credentialing organizations in case contractors call with questions. In a business where much of the training is passed from generation to generation, technicians in small towns and rural areas may not be aware of certification opportunities. If enough customers are asking about contractors' credentials over time, you may find that your trusted contractor pool builds itself. ⚡

# STORMS ATTRACT NEW SOCIAL MEDIA FOLLOWERS, ENGAGEMENT KEEPS THEM COMING BACK

**T**here is nothing like an extreme weather event to build up your social media program. According to a recent story in Intelligent Utility, customers turn to their utility's website, Facebook page and Twitter feed during emergencies to get updates about power outages and restoration times. Once the lights are back on, however, you run the risk of losing your new followers if you do not figure out how to keep them engaged.

The article offers four steps for engaging social media users when the lights are on and the sky is blue—you know, most of the year. The best part is that these suggestions apply to any customer outreach program, high-tech or otherwise.

## Choose your themes

Start by identifying message themes that are relevant to your customers' daily lives—safety, energy efficiency and preparedness, for example. Then find experts inside your utility to provide information on those topics. Your communication with customers starts by keeping the lines open in your own organization. You should also reach out to partners in the community who do work related to your themes, such as police and fire departments, non-profits and the media. Cross promotion with their social media outlets will add variety to your message and strengthen your communications network in times of emergency.

Once you have a good flow of content, you need to organize it so that your followers get useful information in real time, in a way that makes sense to them. The article recommends building a content calendar that organizes messages by theme, date, time and platform. You can schedule "evergreen" items like seasonal efficiency tips and storm readiness in a regular rotation and reuse them with a little updating. A calendar will also give you the flexibility to respond to current events,

such as accidents, with items that address your customers' concerns.

Always look for the simplest way to communicate your message, especially in social media. Using pictures, videos, graphics and diagrams can help you break down your message to easy-to-understand pieces. And don't think that "platform" refers only to electronic communications. Ask yourself if that newsletter story could be summed up in a few bullet points on a bill stuffer or in a well-written public service announcement on your local radio station.

## Listen, listen some more

Because utility customers need electricity and can only get it from their utility—so far—it can be easy to forget that communication is a two-way street. Social media offers businesses a way to find out what their followers are saying and to engage them in dialogue. A customer may be more comfortable complaining on Facebook or tweeting his dissatisfaction than calling in a complaint. You can use that opening to start a conversation that ultimately resolves the issue and turns the follower into a loyal supporter.

The ability to engage with customers on a more personal level is a good argument for launching a social media program, but the old-fashioned way works, too. Place representatives at community events where they can meet customers face to face, and promote your annual customer meeting. Work with partner agencies to create fun, informative demonstrations to present at utility and partner events. Never pass up an opportunity to talk with your ratepayers and to look at your utility through their eyes.



## Analyze, refine, repeat

A communicator's work is never done, and every outreach plan is a work in progress. This is where social media makes its value known. You will be able to track trends, see which posts are getting attention and which are being ignored, and adjust your messaging accordingly.

In the pre-social media days, measuring the results of public outreach was notoriously difficult, but the old indicators can still tell you a thing or two. Train your representatives to pay attention to the questions customers ask at events or when they call your service desk, and to ask follow-up questions. What sounds like routine complaining about high utility bills may be a cry for more efficiency programs. Watch program participation figures—Do you get an uptick in interest in a particular program after promoting it? Without promoting it? Are customers dropping out of programs? Are they asking for something you are not offering?

Social media provides utilities with excellent new tools for improving customer communications, but the philosophy underlying the strategies is old-school. Figure out what the customer wants, deliver it to them in a timely and useful manner, follow up and use the feedback to improve the service. That is the proven formula for turning foul-weather followers into loyal and satisfied customers. ⚡

# REGISTER FOR NATIONAL GEOTHERMAL SUMMIT

*Early-bird discount ends April 17*

**June 3-4, 2015**  
**Grand Sierra Resort and Casino**  
**Reno, Nevada**

**T**he only thing better than attending the fifth annual National Geothermal Summit is getting a discount on your registration for the premier forum of the geothermal industry. Get in on that great deal by registering before April 17 to receive the early-bird discount for Geothermal Policies as Stimulus for Economic Growth and Environmental Quality.

## Issues abound

The Geothermal Energy Association (GEA) sponsors the summit, this year taking place June 3-4 at the Grand Sierra Resort and Casino in Reno, Nevada. Expect a packed agenda covering such timely topics as:

- The potential role of geothermal energy in state initiatives and plans for addressing climate change
- The ability of geothermal resources to tackle tomorrow's power needs
- Local economic benefits of geothermal
- The importance of geothermal for reliability of the grid
- Valuing geothermal for power contracts
- The future outlook for the geothermal industry in the US

Confirmed speakers include representatives from Western customers Los Angeles Department of Water and Power, Imperial

Irrigation District and Sacramento Municipal Utility District. All three utilities have extensive experience with blending geothermal generation into their portfolios.

## Recognizing excellence

In addition to informative workshops, the summit offers many opportunities to network with colleagues and industry leaders, including coffee breaks, luncheon and kick-off and closing receptions. As part of the opening reception on June 3, GEA and Gold sponsor Ormat will award the 2015 GEA Honors.

The awards recognize contributions made in the past year that have advanced technology, business and environmental sustainability through geothermal energy. Geothermal business leaders may nominate individuals or companies in the following categories:

- **Technological Advancement:** For pioneering new ideas or innovative technology in geothermal energy.
- **Economic Development:** For contributing to the development of local, regional or national markets through geothermal systems.
- **Environmental Stewardship:** For promoting environmental sustainability through geothermal systems.
- **Special Recognition:** For outstanding achievements in the geothermal energy industry.



Anyone may submit a nomination. GEA board members will evaluate submissions and select the awards based on:

- Involvement in the industry
- Contributions to the development and promotion of the industry
- Leadership and success
- Innovative use or furthering of industry resources
- Positive overall environmental footprint (air/water/land protection)
- Community engagement and education
- Job creation

The deadline for GEA Honors submissions is May 15. Download and complete the online application and submit it to Yasmin Romitti by May 15. You may also contact Romitti at 202-454-5263 to learn about sponsorship opportunities or to request press credentials. ⚡