

Energy

September 2001 Volume 5, Issue 3

EFFICIENCY

News From BPA—Your Northwest Energy Partner

Are Your Customers Up for a Challenge? *If they are, they could win a Honda Insight*

What's the challenge?

Keep the lights on. Protect Northwest jobs. Save money. Reduce energy use. It's that easy. Electricity is still in short supply. Wise use of electricity is our best protection against a volatile energy market. Smart energy choices made collectively, one-at-a-time, really add up.

Individuals do make a difference because there's power in numbers. The choice by many to do simple things like replace incandescent light bulbs with compact fluorescent lights, upgrade appliances, and turn off computer monitors reduces our energy loads and keeps costs down. So, ask your customers to sign and mail the pledge card, and they'll be entered to win a new energy-efficient Honda *Insight*.

How can a utility get involved?

- Tell about the great things your community is doing.
- Have leaders in your community who've made the choice to support energy conservation join in our regional leadership council.
- October is Energy Awareness Month. Let us know if you would like to participate in

Continued on page 4



Inside

Galaxy of Stars	2-3
Solar Photovoltaic	4
Training Opportunities	5
October: Energy Awareness Month	6
Lights in the News	7

This Honda Insight is similar to the one to be given away in the Challenge drawing in December. See it at the "Conservation or Crisis? A Northwest Choice" conference September 24-26 at the Jantzen Beach DoubleTree Hotel in Portland.





GALAXY OF STARS



Below: The City of Ellensburg recently promoted CFLs at a local Bi-Mart store. (L-R) "Zippy" kept Gary Nystedt, Geoff Talkington, and Shan Rowbotham company.



Above: Darla Kopczynski, new member at Inland Power and Light, Spokane, WA, receives a conservation brochure from Dan Villalobos of Inland. Dan will claim installed measures towards C&RD. Inland is one of 47 early C&RD implementors.

The Springfield Utility Board was the first utility to have a signed ConAug contract in place. By August, 15 utilities signed ConAug agreements. SUB went beyond what was required and delivered two compact fluorescent lights to each customer. That was followed up with two CFL coupons in with the customer's bill. The Energy and Conservation Services Department are pictured at the right. L-R: Back: Deanna Solomon, David Harris. Middle: Keith Lockhart, Jack Foster. Front: Michael Lange, Helen Duewell.



Above: Utilities participating in the CFL Program show off their "You've got the Power" T-shirts. Standing from L to R: Gary Nystedt, City of Ellensburg; Dave Barden and Dale Anderson, Big Bend Electric Cooperative; Charlie Weber, City of Cheney; Terri Richey, Modern Electric Water Company; Jane Baker, Kootenai Electric Cooperative. Bottom row: Rosalie Nourse, BPA; Jerry Tate, and Marty Robinson. Left: Tom Baggot proudly displays his t-shirt for the CFL Program being implemented at Inland Power and Light.



Left: Jean Staehr, Engineering Assistant, and John Finch, Water Operations Supervisor, at the City of Richland's Water Treatment Plant Intake facility. BPA and the Northwest Energy Efficiency Alliance, through a contract with BacGen Technologies, are jointly funding a new pilot project to obtain water and sewage facility efficiency improvements. The City of Richland is one of five participants: two drinking water and three sewage plants. The pilot project may be expanded if it is as successful as expected.

Ferry County PUD a Leader in Redeemed CFL Coupons

Ferry County PUD, Republic, Washington, has regional energy efficiency experts scratching their heads. Why is this small isolated PUD leading most of the region with the number of redeemed Compact Fluorescent Lamp (CFL) coupons? In June, 33 of 47 participating utilities reported redemption rates of less than 1,500 coupons. Ferry County's end users redeemed a whopping 6,185.

How did they do it? In a rural environment, it's not unusual for consumers to come to town to pay their utility bills in person. The PUD marketed the program in Republic's weekly paper, announc-

ing the availability of CFL coupons at the PUD office. Once the word got out, it "spread like wildfire," according to Bobbi Weller, utility manager. Consumers picked up their coupons and marched right down

the street to

Eich's Mercantile.

Both the PUD and the Mercantile had CFL displays. One thousand CFL bulbs sold out in a day. Later, when new shipments came in, the Mercantile reader board only had to say "Bulbs Are In" and they too would be gone in a matter of hours. Bobbi

Weller commented, "This is a great example of a community in a

depressed economic area coming together to conserve energy and save money on power bills." Six area retailers now participate in the CFL program. The PUD plans to focus on its own Torchieri Turn In Program next. Look for more record-breaking results from an area that believes in the value of its accomplishments.

- Rosalie Nourse



The Mercantile in Republic, WA, is proud to help Ferry County PUD promote CFL's.



Michael Mathis of Quantum Lighting and Mike Baker, Manager of Modern Electric Water Company, Spokane, WA, discuss a Limited Standard Offer Commercial Lighting audit. Within two months after the LSO program came out, 41 utilities had signed up.



September 24-26
DoubleTree Hotel
Jantzen Beach
Portland, OR

Contact Jennifer
Wood at
(509) 527-6230
for more
information

A Northwest Choice

Conservation Challenge Continued from page 1

introducing energy conservation curricula into schools.

- Tell us about your on-going energy conservation campaign, if you have one. Maybe we can support your efforts.

- - Wendy Maitlen

Contact your Account Executive for more information about the Community Conservation Challenge.

Check the boxes and tell us what you'll do.
Cut along the dotted line, check the boxes, fill in the entry form, then send your entry in an envelope to: Community Conservation Challenge, c/o 2300 SW First Ave., Suite 300, Portland, OR 97201. You'll be entered to Win a New Energy-Efficient Car.

I will install ___ (number) new compact fluorescent lights in my home.

I will encourage household members to turn appliances off when they aren't being used:
 TV Stereo Lights
 PC Monitor PC

I will regularly use the air dry or energy saving feature on my dishwasher.

I have to replace an appliance soon. I will get an ENERGY STAR® label.

I will keep the temperature on my air conditioner no lower than 76° F.

I will keep the temperature of my thermostat no higher than 65° F.

Outside, I will install motion detectors or outdoor compact fluorescent lights.

In our household, we have decided to: _____

Win a new CAR!
Yes! I'll do my part to save electricity by completing these three or more new conservation activities starting today. Enter my name to win an energy-efficient car.

(Please Print)
Name _____
Address _____
City _____ Zip _____
State _____
Phone _____

COMMUNITY CONSERVATION CHALLENGE

Seminar On Pump System Efficiency

On Thursday, September 27, Daryl Cox of Oakridge National Labs will provide training for up to 40 people on the Pumping System Assessment Tool (PSAT) at the "**Conservation or Crisis? A Northwest Choice**" conference. The PSAT was developed for the Department of Energy's (DOE) BestPractices Program, and is designed to assist engineers and facility operators in preliminary assessments of pumping system operating efficiency. PSAT is also well suited for performing plant energy usage surveys by consultants or plant engineers. Users will find PSAT easy to use since it requires only the minimum essential operational data to perform its analysis.

Sign up Now: First Come First Served

Conservation or Crisis? A Northwest Choice

September 24-26, 2001

DoubleTree Hotel, Jantzen Beach,
909 North Hayden Island Drive
Portland, Oregon

Sponsored by BPA Energy Efficiency & DOE Industries of the Future. Call Cheri Benson at (503)230-3325 for more information.

- Terry Oliver

Solar Photovoltaic in Schools

At the October 2000 Solar Summit 3 in Winthrop, Washington, BPA and the Western Solar Utility Network (Western Sun) agreed to work together to develop a school solar photovoltaic program initiative. BPA's Energy Efficiency (EE) group moved forward to develop a list of participating utilities. The offer was simple: EE would "buy down" the cost of the PV to \$2,500 per system. The utility and school would provide the remainder of the funding for a 600-watt, 8-panel microcrystalline PV array with a pole-mount top and a 1000 watt line tie inverter. Western Sun would sell the system at a discount to participating utilities and would help with technical services and develop solar study aids.

By this fall, 14 utilities and their participating schools will each have the PV system installed and will begin incorporating solar-electric learning into the educational program. This should provide a hands-on experience to encourage kids to have an interest in technology and energy issues. Students will be able to see via a PC the solar energy being generated by the solar panels, then be able to relate that to the teaching materials.

This pilot program may be developed into a regionwide effort as funding is secured.

- Steve Fucile

From Acting BPA Administrator Steve Wright's July 27 speech to the Portland City Club: "We cannot turn to generation alone. We must refocus on using energy efficiently. Energy efficiency has tended to ebb and flow depending on the price of market power. We need to create sustainable energy efficiency programs that are maintained through high and low market periods. These programs must reflect the realities of an evolving electricity market where consumers will no longer be captive to a single power supplier. We need to dispel the notion that conservation only means doing without. True energy efficiency means maintaining the same amenity levels but using less energy to do so."

TRAINING OPPORTUNITIES

NWPPA Classes

The Northwest Public Power Association offers classes in Residential Energy Auditor Certification, Residential Inspector Certification, and PTCS-Residential Air Distribution Systems. For information on these classes and other class offerings, contact NWPPA at (360) 254-0109 or visit their website at www.nwppa.org.

C&RD Training

Starting in September, there will be several opportunities to attend 1-day training sessions on the Conservation & Renewables Discount reporting software. If you are interested in the training, contact your Energy Efficiency Representative for more information. *(See the list of EER's and their telephone numbers on page 8.)*

- Mark Johnson

DOE Grants for Industrial Facility Assessments

Do your industrial customers know that each year the U.S. Department of Energy co-funds well-planned industrial facility assessments? Grants of up to \$100,000 are available for plant-wide energy efficiency and waste reduction assessments. Applicants must fund at least 50 percent of the assessment cost. In the last two years, 23 grants have been awarded. Awards are based on the likelihood that the assessment will result in substantial plant-wide energy efficiency or waste reduction improvements.

Oregon offers a business tax credit for offsetting the cost of a consumers' investment in energy efficient technology. The 35 percent Oregon Business Energy Tax Credit can offset the cost of an industrial energy use assessment when it leads to a capital investment in energy efficient technology. Montana, Washington, and Idaho do not have such a credit.

The Request For Proposals closes on October 15, 2001. Questions about the RFP can be routed by e-mail to the following contact:

Mr. Shannon E. Bridges, Subcontract Administrator
Oak Ridge National Laboratory
Phone (865) 576-1426; Fax 241-2426
E-mail: ebs@ornl.gov



Recommended Website

For a home energy audit on-line, check out our recommended website: <http://www.homeenergysaver.lbl.gov/>. The site lets you plug in information on appliances, insulation, lighting, and other energy-related features of your home. Your estimated energy consumption is then compared with the average home in your area. The site suggests ways that you might save, and can express the consumption in terms of either carbon dioxide emissions or energy consumption. Many tips for all consuming sectors are also given on the website at <http://www.energy.gov>.

RoadMaps to Energy Efficiency

RoadMaps to Energy Efficiency is a great website that offers on-line information about commercial energy efficiency and audits.

The site presents three approaches to having a high performance, energy efficient building, with a primary focus on tenant-occupied office buildings.

Check the website out at <http://energyroadmaps.org/road/>

- Terry Oliver

Visit Energy Efficiency's website at:
<http://www.bpa.gov/Energy/N/index.shtml>

OCTOBER: ENERGY AWARENESS MONTH

“Be Energy Smart” is this year’s theme for October Energy Awareness Month.

The U.S. Department of Energy (DOE) established National Energy Awareness Month to increase understanding about energy issues across the country, and to encourage citizens to get the most efficiency possible from the energy they use on a daily basis.

For example, the DOE suggests that a household could save as much as 10 percent a year on heating and cooling bills simply by turning the thermostat back 10 to 15 percent for eight hours per day. Or, by replacing the most frequently used lights in a home with fluorescent lamps, a household can save 50 percent of the lighting portion of an energy bill.

For information on how to save energy costs, or for details on energy issues, your customers can log on to the following Web sites in addition to your company website: www.bpa.gov/Energy/N/index.shtml; www.homeenergysaver.lbl.gov; www.energystar.gov

Vampires on the Prowl

Halloween and vampires are just around the corner. The vampires in your neighborhood will disappear again on November 1, but other vampires lurk inside your house and business every hour of every day. Sound scary?

Energy vampires account for about 4 percent of energy use. What’s an energy vampire? It’s that appliance that sits silently *draining* vital electricity from your local utility as it *sucks* the bucks from your bank account. It’s your stereo, TV, VCR, garage door opener or other device that hums along in stand-by mode to gratify your need for instant entertainment or service.

A representative of Lawrence Berkeley Labs stated, “We think we’re consuming anywhere from five to eight very large



power plants in the United States for stand-by power consumption.” So, what’s the solution? A new power supply controlled by a microchip that knows when power is needed. The new device costs only 25-50 cents more than the energy vampire device and has the potential to cut stand-by energy use by 90 percent.. President Bush recommended that a one-watt standard be required for appliances to earn the **ENERGY STAR**[®] endorsement. What can you do about it? Look for the **ENERGY STAR**[®] label when purchasing electronic goods from TVs to answering machines. The **ENERGY STAR**[®] may be your best garlic against vampires.

For more information, log on to **ENERGY STAR**[®] at <http://www.energystar.gov/estarprogramupdate.shtml#response>.

VendingMi\$er Participation

In May, BPA launched a region-wide program to reduce the amount of energy consumed by cold drink vending machines. The small electronic device known as the VendingMi\$er can reduce consumption by an average of 46 percent. The device powers down all electrical components of a machine during inactive periods, and turns them back on when needed. Several major soft drink companies tested the VendingMi\$er and are satisfied with the temperature of the beverages. A motion sensor on the machine detects the presence of people and turns it on. This is a proven technology and promises to deliver immediate, near-term and long-term energy savings. This is good news for the Pacific Northwest, utilities, and consumers who pay for the electricity to run the machines. So far, 91 utilities have signed up to participate in the program. More are expected. If your utility wants to participate, and you haven’t signed up yet, please be sure to fill out your participation form and return it to your Energy Efficiency Representative.

- Rick Miller/Doug Untalan

Performing Walk-Through Energy Audits of Industrial Facilities

A guide book for performing walk-through energy audits is available in the Technology section on the EE website (www.bpa.gov/Energy/N/index.shtml). The guidebook introduces users to common opportunities to reduce industrial electrical energy consumption. The guide has *not* been developed as a sole reference for analysis; rather it is an aid in the first step of performing an audit. Touring the facility and identifying energy savings opportunities is the next step.

For the technical user, this guide helps determine where to focus the effort for a detailed energy audit. For the non-technical user this guide assists in developing a list of energy saving opportunities. The guide may also be used as a checklist when conducting a phone survey with a facility to determine whether or not a detailed energy audit is necessary.

- Chris Milan

LIGHTS IN THE NEWS

\$15 COUPON FOR ENERGY STAR® Torchiere

The third round of the **ENERGY STAR®** Compact Fluorescent Lamp (CFL) coupon program begins October 1 and runs through December 31, 2001. This differs from previous rounds in that it features a \$15 coupon toward the purchase of an **ENERGY STAR®**-labeled torchiere floor lamp (TFL).

Participating utilities can still order up to two \$6-CFL coupons per account during this round for a total of three coupons for CFLs and one \$15 TFL coupon per account. Users will notice a change in the coupon design which will tie in with the **ENERGY STAR®** national lighting promotion, "**Change a light . . . Change the world.**"

Portland, Oregon, has been chosen by the Environmental Protection Agency and the Department of Energy as the official West Coast kickoff site for this promotion. Kickoff events will take place on Friday, October 5. **ENERGY STAR®** Partners and CFL program participants will be invited to participate in this event. For more information, call Sheila Gardner at (503) 230-5991.

- *Sheila Gardner*

Streetlight Demonstration Project

BPA plans to conduct a pilot project involving about 500 streetlights. The objective is to demonstrate to utilities the benefits of using the Smart Pack TI™, distributed by STI Streetlight Technology Inc. The Smart Pack is an energy-, material-, and labor-saving device that is installed inside each streetlight fixture.

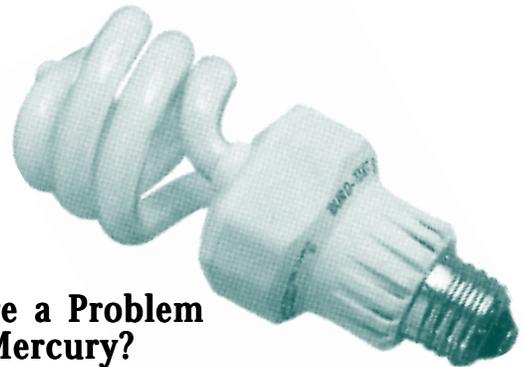
Besides saving energy through the control unit's (real) time clock, each unit reduces or eliminates damage to the ballast and igniter of each individual high pressure sodium (HPS) streetlight fixture by cutting power to the lamp when lamp cycling (failure) occurs. This results in reduced labor and material costs. Cutting lamp power during cycling also eliminates radio frequency interference. Maintenance costs are further reduced because a trouble-indicating LED on each light fixture alerts maintenance personnel to a faulty fixture during daylight hours. The Smart Pack unit is contained inside the light fixture, away from exposure to the elements as is the day/night sensor, thus lengthening its life cycle. The setting for each control unit can be changed through a remote control. Each unit is guaranteed for 10 years.

BPA's Account Executives and Energy Efficiency Representatives are currently asking load-following utilities to participate in this pilot project. BPA will provide the materials, while utilities will be responsible for installation.

Tillamook PUD is a project participant, and BPA would like to have two to four other utilities from different climate zones participate in this pilot project.

Please contact your Account Executive or Energy Efficiency Representative for more information regarding this pilot or to take part in an expanded pilot program.

- *Jan Stoffels*



Is there a Problem with Mercury?

As energy prices have risen, consumer demand for compact fluorescent lamps (CFLs) has mushroomed. Along with this increased demand comes an increase in consumers' fears about the mercury levels in CFLs.

A mercury thermometer contains approximately 1000 milligrams of mercury. CFLs contain less than 10 milligrams of mercury. The mercury from one liquid thermometer could supply over 100 CFLs. The mercury in a CFL is in vapor, not liquid, form. No individual health risks associated with this vapor have ever been documented; however, one should take reasonable care and not inhale the vapor. The vapor cannot be handled as can the mercury liquid from a thermometer. Additionally, the miniscule amount of mercury inside a CFL slowly bonds with the phosphor coating on the lamp interior as the lamp ages, preventing it from being released into the air. This means burned-out (spent) lamps pose very little individual health risk. Encapsulated CFLs pose no individual health risk.

Household waste of this type is exempt from EPA and state regulations, but responsible citizens should recycle all household items when possible. Commercial users should follow EPA's disposal regulations which can be found on www.epa.gov

The bottom line . . . Conservation benefits of installing a CFL are tremendous while the environmental hazards are minimal.

- *Craig Ciranny*

Energy Efficiency Newsletter
Bonneville Power Administration
Mail Stop: PND-1
P.O. Box 3621
Portland, OR 97208-3621



BPA's Energy Efficiency Representatives

Elly Adelman	(503) 230-5052
Frank Brown	(206) 220-6774
Shannon Greene	(206) 220-6775
Tom Hannon	(509) 358-7450
Margaret Lewis	(503) 230-7552
Rick Miller	(509) 358-7464
Rosalie Nourse	(509) 358-7463
Mike Rose	(503) 230-3601
Chris Tash	(509) 527-6217

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Editor: Becky Clark (503) 230-3158
rlclark@bpa.gov

Associate Editor:

Jean Oates (503) 230-5861
jaoates@bpa.gov