BONNEVILLE POWER ADMINISTRATION

Energy EFFICIENCY Customer Newsletter

JANUARY 2008, VOLUME 12, ISSUE 2

Grays Harbor Area Hit Hard by Storm

Line Crews work to remove storm debris from East Hoquiam Road near Aberdeen, Wash. *(Photo provided by Doug Sreeter)*

Following an early December wind and rain storm that wreaked havoc across the Northwest, Grays Harbor PUD (Aberdeen, Wash.) faced the biggest challenge it has ever faced. Over ninety-percent of the PUD's customers were without power and the distribution system experienced extensive damage.

The PUD worked 24/7 to restore power, an operation that was more than the utility could

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Register for the 2008 Utility Energy Efficiency Workshop

Take advantage of reduced-rate Early Bird Registration for the 2008 Utility Energy Efficiency Workshop March 18-19 in Portland, Ore. Utility representatives and stakeholders are invited to register at www.regonline.com/EEWorkshop2008. (If clicking on the registration link does not work, copy and paste it into the Internet browser address/URL box.)

Businesses dealing in energy-efficient products and services are encouraged to register for a table at the Vendor Networking Reception from 5 until 7 p.m. on March 18.

Attendees share ideas and practical experiences in energy efficiency planning, implementation

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Reid Hart Energy Manager of the Year

On December 7, Reid Hart of Eugene Water and Electric Board (EWEB) received the 2007 Energy Manager of the Year award in the utility category from the Oregon Association of Professional Energy Managers (APEM) for his work with the Western Premium Economizer, teaching in the Lane Community College Energy Management Technician and the NEEI Energy Management Certification programs.

Oregon Governor Ted Kulongoski received the APEM President's Award. Two other Energy Manager of the Year awards were presented in the Government/Institutional category. One went to the Oregon Department of Energy State Energy

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THE BPA MISSOULA, MONT., OFFICE CLOSED at the end of December. Questions regarding energy efficiency in BPA's Western Montana service territory may be directed to Energy Efficiency Representative Tom Hannon at (509) 625-1360, or to the local utility.

News from around the region

Inside

Visit to the Farm: Agricultural Energy Efficiency

Rob Currier, an Energy Services Representative for Emerald People's Utility District (EPUD), invited BPA staff to join him in meeting November 29 and 30 with farmers in the Southern Willamette Valley who are interested in increasing the energy efficiency of their farming operations.

Between intermittent rain showers, Currier took BPA staff to two large grass seed growing operations and one organic vegetable farm to talk about ways to improve energy efficiency in pumping loads and irrigation equipment.

At the Nixon grass seed farm, the group presented the benefits of installing energy efficiency

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Northwest Trade Ally Network - Commercial and Industrial Lighting

The Northwest Trade Ally Network for Commercial and Industrial Lighting is off to a great start. The first in a series of trade ally training and recruitment events was held in Eugene, Oregon, on December 11. Eugene Water & Electric Board hosted the session, and a number of other area utilities participated as co-sponsors. Attendance was strong with over 60 individuals taking part, including lighting contractors, electrical distributors, utility program representatives, BPA staff and others. The half-day agenda included several presentations covering the latest on lighting technologies, auditing and sales tips, and utility lighting program updates.

Roger Spring, program director for the network, said, "I couldn't be more pleased with the response from trade allies . . . on the spot we received nearly 20 enrollment applications from companies wanting to become official participants in the new network."

In addition to training, participating trade allies will be supported by the Network in a number of other ways as they gear up to complete more energy efficient commercial and industrial lighting projects across the Northwest. Program resources under development include a Web site, bi-monthly electronic newsletter and a toll-free hotline.

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Grays Harbor Area Hit Hard

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tackle alone. Line crews and tree trimming crews from all over the Northwest pitched in:

Grays Harbor PUD appreciates the expertise and dedication of the individuals representing these utilities and companies.

- Okanogan PUD
- Franklin County PUD
- City of McCleary
- Michels Power
- Magnum Power
- PowerCom
- Grant County PUD
- Douglas County PUD
- Wilson Construction
- Asplundh
- Potelco

Senior Key Accounts Representative Kevin Howerton said, "The community stood together. Utilities from all over the region sent trucks to get us up and running."

Community and Government Relations Director Liz Anderson said, "Our community showed amazing support during the recovery effort. We had donations of food, coffee, and supplies from businesses and individuals throughout the area. The amazing thing was many of them donated to our crews while they didn't have power. We received an avalanche of thank you cards and letters."

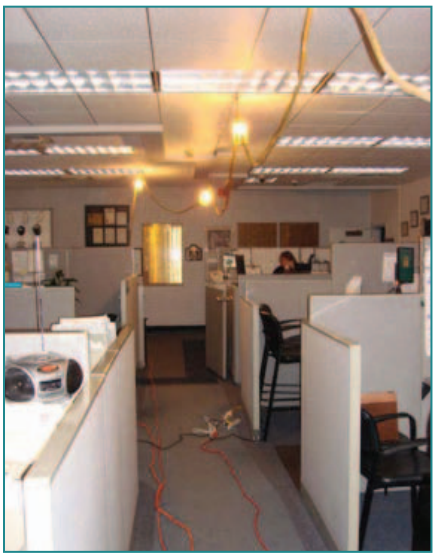
Residents of the Grays Harbor area became the worn, worried faces on the evening newscasts. It was in the darkness after the storm that the true character of the community shone through. Despite being left in the dark, the community gave the PUD support, provided food and hot coffee. Despite the devastation to their homes, the community was patient and kind.

-- Liz Anderson, Grays Harbor PUD Community and Government Relations Director
(360) 538-6232

Note from Editor: Many other Northwest utilities and communities experienced damage to their power systems, homes and businesses and pulled together to help each other. We extend our praise to them for sharing time and resources to help the region recover.

Above: The wind brought trees and power lines down all over the Northwest including this road near Aberdeen, Wash.

Right: Grays Harbor PUD suffered the same impacts from the storm as the rest of the region. Power to the main office was out. Generators were set up to provide power and help Keep the system up and running.



Businesses Benefit from Enhanced Lighting Rebate Program

Taylor Insulation of Kalispell, Mont., is Flathead Electric Cooperative's (FEC) first participant in a program that rewards businesses for installing quality, high-efficiency light fixtures in new buildings. Before BPA modified the program to include incentives for new commercial facilities, FEC's Commercial Lighting Retro-Fit Rebate program was limited to retrofits to lighting systems in existing commercial buildings.

Don Newton, Flathead Electric Cooperative's Energy Services Coordinator, discusses the new, energy efficient lighting recently installed at Taylor Insulation with Rod Taylor. (Photo by Mike Radel)

FEC and BPA provided $50 per fixture to help offset the cost of new, high-output T-5 fluorescent fixtures in Taylor Insulation's new storage facility instead of the 400-watt Metal Halide fixtures a facility such as this would likely have installed without the lighting program.

The advantages of using high-output T-5s include increased lumen output, better light quality, quiet operation and a 23 percent reduction in energy consumption. High-output T-5s also have a shorter start up time and less loss in lumen output in the long run, as compared to metal halide fixtures.

Interest in the lighting program is growing as other businesses in FEC's service territory learn about the advantages of the high-output fixtures. Projects must be approved by FEC and BPA prior to installation.

FEC serves more than 44,500 members in the Flathead Valley and Libby, along with several hundred members along the Montana-Wyoming border, and is the second largest electric utility in Montana.

-- Don Newton, FEC Energy Services Coordinator
(406) 751-4485

Energy Smart Design Commercial New Construction Opportunities

BPA sponsored Energy Smart Design in the early 1990s. That original program tapered off, but has recently been revived. Energy Smart Design™ –Office (ESD Office), launched October 1, 2007, builds a better environment by helping build new office facilities that exceed building codes regionwide, resulting in savings of 10 percent to 20 percent over a similar facility built to current code. In addition to the ESD Office, prescriptive packages are planned for small retail, schools, public assembly and warehouses, as are additional "stretch" ESD Office measures.

ESD Office is an easy way to save building owners time, energy and money. The ESD Office package is aligned with the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) "Advanced Energy Design Guide," Advanced Building Core Performance Guidelines and the LEED prescriptive path. The package also qualifies for 2005 Energy Policy Act lighting tax deductions. Several regional investor-owned utilities may offer the ESD Office package in 2008.

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Northwest Trade Ally Network - Commercial and Industrial Lighting

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Roger Spring, program director for the network, said, "I couldn't be more pleased with the response from trade allies . . . on the spot we received nearly 20 enrollment applications from companies wanting to become official participants in the new network."

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Numerous other outreach events are being planned for locations across the region.

According to Brent Barclay, program manager for the network, "The schedule is shaping up for us to conduct four more Oregon events in January, five Washington events in February and a total of three Idaho and Montana events in March."

Utilities interested in co-sponsoring a session are encouraged to contact their BPA Energy Efficiency Representative. Utilities can also request more information by e-mailing brent.barclay@northwest-lighting.org.

-- Lisa Perigo (503) 230-3059
Submitted by Brent Barclay

Above: A banner with the Northwest Trade Ally Network - Commercial & Industrial Lighting logo hangs from the registration table at a recent vendor training and recruitment session in Eugene, Ore.

Left: Attendees listen to Roger Spring as he explains how the new Northwest Trade Ally Network works and the benefits of participation.

The BPA Energy Efficiency newsletter is published quarterly on or about the first day of the months of January, April, July, and October. Send contributions to Jean Oates, KLJB-1, Bonneville Power Administration, P.O. Box 3621, Portland, OR 97208, or e-mail your ideas/articles/photos to eenewsletter@bpa.gov.

Visit to the Farm: Agricultural Energy Efficiency

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measures. The farm owners were interested in learning about potential ways to trim their energy bill.

The Winter Green Farm, with only 55 cultivated acres of organic vegetables, is smaller than the grass seed farms, but the farmer is looking for ways to cut costs, save energy and make the farm operation more economical. As Brad Miller, BPA's Energy Efficiency Agricultural Sector Lead found, potential improvements include sprinkler upgrades, piping improvements, interior lighting changes and a cold storage refrigeration upgrade.

Following the visit to the organic farm, the group met with Dave Malpass, President of the Muddy Creek Irrigation Project and owner of Malpass Farms the other grass seed farm that was visited. Initial interest revolved around increasing the pump efficiency of the pumping operations out of the McKenzie River.

The new BPA Commercial and Agricultural Technical Service Proposal (TSP) portal is available for audits and project development on energy efficiency measures that can be installed on the large horsepower motors. The possibility of working with all 100 member farmers served by the Project was explored.

While most of BPA's agricultural sector energy efficiency activity occurs on farms east of the Cascades, because of Currier's marketing efforts real possibilities seem to exist on the west side as well, as he states, "I think Willamette Valley farmers are becoming increasingly aware of the value of saving energy on their irrigation operations. If we're successful at presenting energy efficiency as an important component within the overall resource management picture on the farm, then EPUD customers may benefit from reduced electric bills, better quality and reliability in their systems and an enhanced relationship with their utility."

-- Lloyd Meyer (503) 230-7557

Ticked Off by Energy Vampires

BPA Power Services employee Tony White has a thing about vampires, but not the kind that bite necks. Wasteful vampire electronics continue to consume electricity when not in use. Quoting a variety of other sources, White defined the term, "Insert the little fangs of your cell phone charger in the outlet and leave it there, phone attached: that's vampire electronics. Allow your computer to hide in the cloak of darkness known as standby mode rather than shutting it off: that's vampire electronics."

The latest estimates show 5 percent of electricity used in the United States goes to standby power, a phenomenon energy efficiency experts find all the more distressing as energy prices rise and the planet warms. It amounts to about $4 billion a year. The percentage could rise to 20 percent by 2010, according to the U.S. Department of Energy.

In California, lawmakers passed a proposal last year - dubbed the Vampire Slayers Act - to add vampire electronics labels to consumer products, detailing how much energy a charger, computer, DVD player, PlayStation, microwave or coffee maker uses when on, off or in standby mode.

BPA Energy Efficiency Engineer Erin Hope in the Spokane office decided to conduct his own vampire electronics test from October 30 through

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Plastic Solar Cells?

BPA Energy Efficiency engineer Craig Ciranny came across a TV show on the Science Channel last week about Plastic Solar Cells. Ciranny said, "According to the show, plastic solar cells could be manufactured for around $1.00 per watt, with mass production estimates at 10 cents per watt. If the numbers are even close to being true, this could be the biggest thing since sliced bread."

For more information, visit the following Web sites:

http://www.berkeley.edu/news/media/releases/2002/03/28_solar.html

http://www.sciencedaily.com/releases/2006/12/061211221036.htm

http://www.wfu.edu/news/release/2007.04.18.n.php

Inland Power and Light Offers Highly Successful Showerhead Program

At a recent BPA utility roundtable meeting in Richland, Wash., Dan Villalobos, Marketing Manager at Inland Power & Light described the residential shower head program Inland offers its customers. "The showerhead program we run in partnership with Niagara Conservation (New Jersey) is the easiest program we've ever operated. It's especially great for other utilities wanting to spend their CRC."

Utility customers with an electric water heater may request one or two free showerheads per household. The showerheads have a 2 gallon per minute flow rate and are valued at $20 each. Inland launched this program in September. So far, 5,008 showerheads have been distributed, already exceeding Inland's goal of 5,000.

Inland's customer newsletter, *Light Reading*, is an effective tool to market the showerhead program in a bill stuffer to all 35,000 accounts Inland uses *Light Reading* to market the showerhead program.

- For customers who receive their Inland bill via e-mail, there's a Web link to Light Reading. Customers can fill out the online form and click to submit the form to Inland.
- Those who receive their bill in the mail receive a hard copy of Light Reading. They can fill out the coupon and return it with their payment.

The submitted forms are received by an Inland staff person who creates an Excel mail list to send to Niagara.

Inland pays Niagara Conservation $7 (including postage) to send a single showerhead to the homeowner or two showerheads for $12. BPA's willingness-to-pay is $12 per showerhead. BPA requires Inland to keep in their files a copy of the vendor invoice that shows the number of showerheads purchased, as well as, documentation showing the number of showerheads distributed and the method of distribution. Niagara will place the utility logo on the showerhead box, if desired, charging an extra dollar or two.

Niagara Conservation deals mostly with water products but also carries light bulbs. Inland also orders conservation kits from Niagara. The kit contains one kitchen aerator, three light bulbs (13 W CFL/60W incandescent equivalent), a wall plate gasket and night light for $13 per kit. The kits are free to Inland customers. Inland claims $2.50 per bulb towards its Conservation Rate Credit (CRC) or $7.50 per kit.

Inland keeps an extra 100 showerheads at its office for walk-ins who haven't previously filled out a coupon and for new electric customers.

The contact person at Niagara is Sheena at 1-800-831-8383, extension 114. (http://www.niagaraconservation.com)

-- Rosalie Nourse (509) 625-1368

New WPUDA Building Receives LEED Platinum Certification

The new Washington PUD Association's (WPUDA) office building dedicated on October 17 in Olympia received LEED Platinum certification, the highest LEED rating available. LEED is a voluntary, national standard developed by the United States Green Building Council (USGBC).

The USGBC Web site states, "LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality." (http://www.usgbc.org/)

A Special Fall 2007 Edition of Connections, a WPUDA publication, contains an article about the new office building on page 22. The article gives insight into the LEED process and how to achieve points in the various categories. http://www.wpuda.org/PDF_files/Connections/Connections_Fall07.pdf.

WPUDA represents 28 utilities that provide electricity, water, wastewater service and wholesale telecommunications to more than 1.7 million people in Washington.

-- Tom Hannon (509) 625-1360

Washington State University Energy Program

Cris Love, Project Manager at the WSU Energy Program in Olympia, reminds Washington utilities of services available through the WSU Industrial Services technical staff:

Technical assistance and project support through WSU staff, the EnergyIdeas Clearinghouse, and DOE's EERE Information Center is available to help improve industrial energy efficiency in plants throughout Washington State.

- Experienced energy engineers will work with plant staff (and their serving utilities) by phone or onsite to help identify and analyze energy efficiency improvement measures that, when implemented, can help save energy and money.
- Once projects are identified, the next important step is to "sell" the project to management. WSU can help with visuals or presentations for plant staff to use when meeting with upper management to request capital support.
- Staff can also help with identifying combined heat and power (CHP) opportunities at plants, and providing technical expertise and project support as needed.

Plant assessments (system and end-use specific) Assessments are conducted by experienced WSU staff for Washington State plants, ranging from an informal walk-through to identify low-hanging fruit opportunities, to an in-depth plant assessment focused on steam, process heating, pumps, fans, motors, compressed air, lighting, or refrigeration.

- A recent steam assessment conducted for a food processing company in Eastern Washington identified efficiency opportunities that if implemented are estimated to cut the plant's annual natural gas costs by almost $300,000.
- In other Northwest states, WSU coordinates assessments through DOE's Save Energy Now program, as well as regional Industrial Assessment Centers.

Regardless of the assessment requested, WSU will coordinate efforts through the plant's serving utility, as well as other resource providers in the region (e.g. Industrial Efficiency Alliance, State Energy Offices, etc.) to ensure clear communication and avoid duplication of efforts.

Industrial BestPractices Training

- Courses are mainly DOE-based such as compressed air, steam, pumps, process heating, motors, and fans, and can include lighting and refrigeration trainings if interest is there.
- Trainings usually take around 2-3 months to coordinate and conduct, with costs generally ranging between $100 to $300 per participant.
- WSU coordinates closely with IEA and supports their trainings by offering Continuing Education Units, as well as co-marketing the events.
- Information on trainings by WSU and IEA is available on the Northwest Regional Training calendar at http://www.industrialefficiencyalliance.org/training.html, or the DOE BestPractices Training Calendar at http://www1.eere.energy.gov/industry/bestpractices/events_calendar.asp.

In 2007, WSU conducted eight training sessions throughout Washington and Idaho. Planning for 2008 training is underway, and while WSU will focus most of those sessions on steam and process heat in Washington State, events throughout Northwest will be considered on a case-by-case basis.

Project incentive funds

- Through State Restitution funds, the Energy Program can offer a small amount of incentive funds towards eligible industrial energy efficiency projects in Washington State.
- Because the amount available per project is limited, the ideal candidates are projects that have some utility incentive $, and just need a little extra help to tip the scales into implementation.
- Funding is for either electric or natural gas savings, or both, and the utility keeps any conservation credits available; WSU's aim is to help get projects implemented through 2009.

WSU funds have helped two manufacturing companies in the Puget Sound area, and has funds for around ten projects per year through 2009, at around $5-$10k per project. The funds are to help small to medium sized plants with projects that would otherwise not be implemented without assistance. For more information about any of these resources, please contact Cris Love at 360-956-2172 or lovec@energy.wsu.edu.

2008 Utility Workshop

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and reporting. Speakers will discuss recent laws, initiatives and keen public interest that impact conservation today. A series of panel discussions will cover energy efficiency in the commercial, industrial, residential and agricultural sectors.

The Doubletree Hotel & Executive Meeting Center - Lloyd Center is the workshop site. A block of rooms is reserved at a special 100 workshop special rate -- first come, first served.

Those who fly into Portland can take the 25-minute ride on the light rail (MAX) from the airport terminal to the Lloyd Center stop at the DoubleTree. The AMTRAK station is a four block walk and four MAX stops and from the DoubleTree. I-5 and I-84 are nearby.

For more details, see the boxed announcement to the right of this article.

-- Becky Clark (503) 230-3158

Northwest Public Power Association
2007-2008 Education & Conference Schedule

http://www.nwppa.org/html/web/2007-08_NWPPA_Education_Schedule.pdf

HarvestinG CLEAN ENERGY 8

JANUARY 27-29, 2008
Portland, Oregon

www.harvestcleanenergy.org/conference

Third Annual

Utility Energy Efficiency Workshop

March 18-19

DoubleTree Hotel Executive Meeting Center
Lloyd Center
1000 NE Multnomah, Portland, Ore.
Phone: 503-281-6111

Register at:
http://www.regonline.com/EEWorkshop2008
or copy and paste the link into yourInternet browser address/URL box.)

Vendor Networking Reception

March 18, 5-7 p.m. $75 per table

Contact Jennifer Wood, (509) 527-6230.

Principles of Demand Side Management Training

The Association of Energy Service Providers (AESP) is offering three training sessions on the "Principles of Demand Side Management" to address a regional need.

Topics covered at the sessions will include: DSM economics; program planning; program implementation; program marketing; demand response; technologies for residential and large commercial and industrial customers; program monitoring and evaluation; and program tracking.

Sessions are scheduled for Ore. and Wash.

The focus of the sessions in Washington is [Initiative] I-937.

- January 14-16 & February 4-6
  Session I (Bellevue area)
- January 16-18 & February 6-8
  Session II (Bellevue area)
- February 25-29, 2008
  Portland

Cost of the training is $750. Register at http://www.aesp.org/calendar.cfm, or call (480) 704-5900 for additional information.

-- Mira Vowles (503) 230-4796

Impacts of the Energy Independence and Security Act

As public interest in climate change and greenhouse gas grows, and as federal, state and local governments enact more stringent environmental standards, utilities must change some of their energy practices and programs, as well.

President Bush on December 19 signed the Energy Independence and Security Act (EISA) of 2007. The Act amends the Energy Policy and Conservation Act (EPCA) to prescribe or revise standards affecting regional energy efficiency.

According to a White House press release, ". . . the Act represents a major step forward in expanding the production of renewable fuels, reducing dependence on oil, and confronting global climate change. It will increase energy security, expand the production of renewable fuels, and help make America stronger, safer, and cleaner for future generations."

Pacific Power Corporate Account Manager Alan Meyer said, "Provisions of the Act displace crude oil imports by requiring the use of 36 billion gallons of ethanol and other renewable fuels by 2022. It creates new electricity conservation measures and energy efficiency standards for appliances, lighting and buildings, including phasing out incandescent light bulbs within the next six years."

-- Becky Clark (503) 230-3158

Online Advice Leads to a More Energy Efficient Home

Consumers can receive customized recommendations for improving energy efficiency and comfort at home by using EPA's new online ENERGY STAR Home Advisor: http://www.energystar.gov/homeadvisor.

By entering their ZIP code and some basic information about the type(s) of fuel used to heat and cool their home, homeowners can see recommendations for improving energy efficiency and comfort.

The Advisor also displays the average energy savings for these improvements and the associated greenhouse gas reductions. Common recommendations include sealing air leaks and ducts; adding insulation; installing a programmable thermostat; replacing older heating, cooling, and water heating equipment with more efficient units; as well as replacing inefficient lighting, appliances and windows with ENERGY STAR qualified models.

The interactive ENERGY STAR @ Home tool takes homeowners on a room-by-room tour of a house to teach them ways to be energy-efficient in their homes so they can save money, protect the environment and enjoy year-round comfort in their homes. This seasonal tool currently features heating tips for the fall/winter. ENERGY STAR @ Home: http://www.energystar.gov/index.cfm?c=products.es_at_home.

-- Mark Johnson (503) 230-7669

Super Bargains on Specialty CFLs

The article above describes some changes that will occur in the lighting market due to the Energy Idependence and Security Act, including the phase-out of incandescent light bulbs in the next few years.

It's time for utilities to act!

Take advantage of the *Change a Light, Change the World* lighting promo currently running in big box stores (i.e., Home Depot, Lowes, WalMart, Fred Meyers, and CostCo).

Change a Light will run through May 2008, and features super bargains on specialty lights. The specialty lights include high reflectors for recessed cans lights, globe lamps, three-way dimmable CFLs, and others.

-- Lisa Perigo (503) 230-3059

Energy Smart Design Commercial New Construction Opportunities

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All of the items in the table below must be included in the new office building in order to qualify for an incentive. Code takes precedence if it exceeds any of these components.
The project needs to be a new office building, an office addition or a major renovation for office use. A renovation requires multiple changes in end-uses, and must incorporate all seven of the ESD features. The building can be mixed use, but the incentive will only apply to the office area. Banks, libraries, dentist and medical offices qualify for office incentives. Project permitting must be after October 1, 2007.
For additional information, please visit the ESD Office Web site at http://www.bpa.gov/Energy/N/projects/ESD
-- Mira Vowles (503) 230-4796

Description	Requirement
1) Cooling System minimum efficiency level	CEE Tier 2
2) Effective Window U-Value	Fixed 0.35 Maximum Curtain wall 0.40 Maximum
3) Window solar heat gain coefficient	0.30 Maximum
4) Enhanced economizer, including dedicated thermostat stage, differential changeover with both a return and outside air dry-bulb sensors, and low ambient outside air compressor lock-out	Required
5) Integrated Design of HVAC System, including Fan Power reduction	Required
6) Lighting Budget (whole building)	0.75 Watts/SF Maximum, while providing illuminance levels as recommended by the Illuminating Engineering Society of North America (IESNA)
7) Lighting Controls	Occupancy Sensors - install where lighting loads are over 150 watts and sensors are not required by code

Special Interest Group for Green Roofs

Green roofs may not save a lot of energy, but they are good for the environment.

Washington County Master Gardener Diane Cooper is forming a green roofs special interest group that will include structural engineers, carpenters, landscape designers and master gardeners who will learn together and build a few projects together this summer.

According to Oregon State University assistant professor Gail Langellotto, "OSU Professor David Sandrock and graduate student, Erin Shroll, are measuring the effectiveness of green roofs in controlling storm water run-off. The research project includes the green roof at the Portland Building and other replicated green roofs at the OSU campus in Corvallis, Ore. At OSU, we have talked about forming a technology 'incubator' for this very thing: giving people the knowledge, training and support to create and install green roofs. Getting a core group of interested individuals together is of course essential to achieving this goal."

A two to three hour demonstration and tour beginning at OSU's green roof experimental station in Corvallis is tentatively planned for a Saturday this spring. Participants will have an opportunity

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Small Compressed Air Systems: Study Group Update

The Northwest Compressed Air Study Group is developing a coordinated regional approach to achieving energy savings through small compressed air systems using consistent marketing, evaluation and incentive structure. Members of the group include representatives from BPA, the Energy Trust of Oregon, Puget Sound Energy, Idaho Power, Pacific Power and others

A market characterization study is a key to developing this regional approach. The study group:

- Hired the Cadmus Group through a competitive process to characterize the industrial compressed air equipment and services market in Washington, Oregon, Idaho and Montana.
- Focused on small- to medium-sized (less than 100 horsepower) stand alone compressed air systems.
- Will use the results to help design and support the implementation of compressed air programs.

The study provides detailed information on market structure, including market share by horsepower and information about the volume of new and used compressed air equipment. In addition, the study identifies and addresses issues regarding major market players including manufacturers, distributors, vendors, contractors and industrial users.

To join the Compressed Air Study Group effort, or if you have suggestions, please contact Jennifer Eskil: jleskil@bpa.gov.

-- Jennifer Eskil

Clark Public Utilities, ESD Office and 157th Plaza featured in *NW Current*

Clark Public Utilities, the Energy Smart Design™ - Office program, 157th Plaza and Schlect Construction were featured in *NW Current*, an online news journal at http://www.nwcurrent.com/efficiency/11710131.html and in the *Vancouver Business Journal* at http://www.vbjusa.com/stories/2007-12-07/breaking_barriers.html.

-- Mira Vowles (503) 230-4796

Reid Hart Energy Manager of the Year

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Efficient Design (SEED) Program. The other award was presented to Dave Furr of Salem-Keizer Public Schools for his work toward decreasing overall energy costs in the school system by over $450,000 per year.

Jack Callahan, Manager of Energy Efficiency's Engineering Services, who nominated Hart said, "Instituting change was Reid's challenge. Convincing users of the importance of commissioning and training took time. One outcome of Hart's work is that BPA includes his specifications in the Energy Smart Design™ - Office, which incents for energy efficiency."

APEM is a membership organization founded in 1982 as a partnership of business, government and utilities. Oregon APEM provides a forum for education and professional development for energy and resource management professionals in Oregon and southwest Washington.

-- Mira Vowles (503) 230-4796

Vampire Electronics

Continued from page 6

November 30 on a set of Altec computer speakers, a Samsung cell phone charger, and a Dell laptop power supply. None of the items were in use during the test period, but were plugged into an electrical outlet. During the test period:

- The inactive speakers used an average of 0.092 kilowatt-hours per day, which translates to 33.65 kWh/year and, at $0.06/kWh, cost $2.02/year.
- The cell phone charger and laptop power supply used less than the 0.5-watts minimum required to register on the test meters.
- Assuming usage is just below 0.5 watts, the cell phone charger and laptop power supply would use 0.012 kWh/day. This is 4.38 kWh/year and at $0.06/kWh would cost $0.26/year.

While these costs are small when considered individually, all devices added together become a significant source of wasted energy and money.

-- Erin Hope (509) 625-1362 and
Tony White (503) 230-4525

In the Federal Sector

BPA Helps Save Energy at Chief Joseph Dam

Chief Joseph Dam, near Bridgeport, Wash., and downstream from Grand Coulee Dam, had a busy and newsworthy year. On June 12, the dam celebrated its 50 year anniversary of service as the nation's second largest producer of hydropower (second only to Grand Coulee). To celebrate, the Army Corps of Engineers hosted local tribes and dignitaries from the Northwest.

At time of the celebration BPA Energy Efficiency staff was working deep inside the dam to reduce internal energy loads. BPA's work at the dam focused on replacing more than 2,400 fluorescent fixtures with a "state of the art" high performance fluorescent lighting system. This work, implemented by BPA Project Managers Craig Ciranny and Rick Jones, not only saves 50 percent more energy as the previous T12 system at the Dam, it saves 20 percent more energy than the standard T8 system which is commonly used today. The installation of the new T8 system also improved lighting quality throughout the Dam.

More than 1,400 compact fluorescent lamps (CFLs) also were installed Occupancy sensors were installed in high bay warehouses to turn the lights on only when the space is occupied. Prior to these controls, the lights were on 24/7.

BPA also completed a lighting retrofit at the nearby Chief Joseph Substation, which is one of many BPA substations that are undergoing lighting retrofits through cooperation between Energy Efficiency's Federal Agency Program and BPA Transmission Services.

The Chief Joseph Dam projects produce savings of 1,873,027 kWh/year. Craig Ciranny, Rick Jones, the Corps facilities management staff, and the BPA lighting contractor, Northwest Edison Co., deserve a lot of credit for completing the complex project on time and within budget, and delivering significant energy savings for the region.

-- Craig Ciranny (503) 230-5865

(Submitted by Kathryn Patton)

Chief Joseph Dam

Washington Governor Declares Navy Energy Awareness Week

In October, all of Washington State's naval bases received awards for the energy conservation efforts they achieved with BPA's assistance.

In addition to the awards, the Department of the Navy efforts were recognized by Governor Christine Gregoire who declared October 29, 2007, through November 2, 2007, "Navy/Marine Corps Energy Awareness Week".

In October, the Navy held its annual Secretary of the Navy Energy Awards Ceremony in Washington, D.C. Each year the Navy honors its commands that achieve excellence in energy conservation.

Top honors for a Small Shore Naval Command were won by Naval Base Kitsap, Bremerton, where the BPA Federal Agency Energy Efficiency Program staff have been doing work for nearly a decade. Projects at Bremerton range from conventional and high intensity discharge lighting retrofits, to pump and motor replacements, HVAC system improvements and building controls. For

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Washington Governor Declares Navy Energy Awareness Week

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its efforts, the base received a $30,000 award and the right to fly the Secretary of the Navy's "Energy Flag" for one year – a true honor for a base.

Naval Base Kitsap, Bangor, received the Platinum level award for lighting retrofits in the highly secure Strategic Weapons Facility Pacific and for other creative projects completed with BPA assistance.

Naval Undersea Warfare Center Keyport won top honors and a $35,000 prize for an industrial command. Naval Shipyard Puget Sound and Naval Air Station Whidbey Island received Gold Level awards, while Naval Station Everett received a Blue Level award.

Michael Huber, the BPA Energy Efficiency manager for the BPA-Navy program, said, "The Navy considers BPA its General Contractor for designing, constructing and managing energy efficiency projects. Since the Program got up to speed in 2002, BPA has implemented about $30,000,000 in delivery orders. We have a great partnership with Navy and subcontractor personnel, and with BPA procurement officers. It is gratifying that we have received national attention for our team efforts!"

BPA expects the Washington naval bases to continue winning national awards in the future. The BPA Federal Program has about $20 million of new projects in progress at Bremerton, Bangor, Puget Sound Naval Shipyard, Keyport, and Everett. In addition, on November 26, BPA and the Navy signed a new Basic Ordering Agreement to allow work and services to be ordered for five more years.

Since October 2002, the efforts of the Navy and BPA have reduced BPA Navy loads by almost 15 percent. This has helped BPA achieve its regional energy savings targets.

During 2001-2006, only utility programs run by Seattle City Light, Snohomish County PUD, Benton County PUD, Cowlitz County PUD, and Eugene Water and Electric Board (EWEB) contributed more kwh savings to BPA than did the Navy. In 2006 and 2007, only the savings from Seattle City Light and EWEB exceeded the Navy energy savings delivered to BPA. The Navy-BPA partnership is truly a win-win for both parties.

-- Michael Huber (206) 220-6778
(Submitted by Kathryn Patton)

Green Roofs

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to see the materials, handle them, examine green roofs in various stages of completion and ask questions.

For more information, please contact Diane Cooper via e-mail to coopor@msn.com

-- Mira Vowles (503) 230-4796

Brainy Bunch Receives Lego Robotics Champion Award

The Brainy Bunch, a Lego robotics team consisting of sixth and seventh grade girls from Stoller and Meadow Park Middle Schools, Portland, earned the Champion award at a local First Lego League tournament held at Intel in December.

This year's First Lego League challenge was about understanding the elements of energy use in a world that uses more and more energy every day. For their research project, the Brainy Bunch looked at the amount and types of energy needed to keep the Penguinarium warm, well lighted and operational. After the audit, the girls researched green energy options and developed solutions to help the zoo improve its energy efficiency.

Mira Vowles, BPA engineer. Vowles said, "This team of 10 - 12 year old girls chose making the Oregon Zoo Penguinarium more energy efficient as their research project. I got to review their presentation and it was a winner!"

Teressa Whitney, Brainy Bunch Coach, said, "The Brainy Bunch will compete at the Oregon State tournament on January 19. For more information about lego robotics, go to www.firstlegoleague.org."

-- Mira Vowles (503) 230-4796

Submitted by Teressa Whitney

Brainy Bunch Energy champions: From left: Cami Goodfellow, Laura Whitney, Alyssa Kayfes, Erica Lipski and Roopa Ramanujam

Save a Watt Gets Stuffed

Above: Save a Watt visited Clatskanie PUD (Ore.) in October. Because of the PUD's staffing constraints, rather than have someone wear the costume, Save a Watt was stuffed and then placed in the lobby. Customers, especially the kids at Halloween, enjoyed the display, including Jaret (left) and Kelli Rakoz and Elisha Brajcich, CPUD Utility Service Representative. Elisha does not routinely check customer's vital signs; she, too, is in costume. (Photo by Becky Rakoz.)

Regional energy efficiency staff changes occur often. BPA invites its customer utilities and other regional energy entities to submit key events as they occur for people active in and known to the Northwest energy efficiency community. Please send milestones to: eenewsletter@bpa.gov. *(BPA reserves the right to determine if events are suitable for posting.)*

Northwest Energy Efficiency Community MILESTONES

Collins, Darby	BPA, Portland. On detail from BPA Public Affairs to Energy Efficiency as EE Summit Director
Duncan, Teri	New BPA EE Marketing Manager, Portland. Formerly with PECI.
Hartwell IV, Ray	BPA, Portland. New EE Trade Ally Network Coordinator; previously employed by a New York economic research consulting firm.
Laurella-Smith, Toni	BPA, Walla Walla, retired
Le, David	BPA, Portland. Transferred to a position as an electric engineer with BPA Transmission Services in Vancouver
McCombie, Marla	BPA, Montana, retired
Tash, Christa	BPA, Walla Walla, retired

BPA Administrator's Excellence Awards

Each spring, people who are nominated by their BPA peers compete for recognition in various categories of service at BPA. Several awards are given to people from outside the agency as well.

This year, Energy Efficiency's **Becky Clark** (Portland) and **Nancy Vacca** (Spokane) are among the recipients of the Unsung Hero Award. The award is given to people who meet the following criteria:

- Steadfast contributions to the organization through consistent effort and positive attitude
- Performance of essential functions that are not high profile
- Low visibility
- Contributions that are consistently dependable, credible and accurate
- Demonstrated high motivation and team orientation
- Positively reflected in organization morale and environment
- Efforts result in considerable cost-savings or-avoidance through streamlining processes, efficiencies, cost-effective approaches to operations or fiscal prudence.

The Exceptional Public Service Award is given to a private citizen who works toward advancement of some of the same purposes that BPA serves in the Pacific Northwest, including improvement of EE programs or operations, and assistance in the development or delivery of policies or programs.

This year, the Exceptional Public Service Award goes to **Mark Higginson*** of North Pacific Paper Corporation (NORPAC), Longview, Wash. (See the October 2007 issue of the EE Customer Newsletter: http://www.bpa.gov/Energy/N/reports/newsletter/October2007/October_2007_News.pdf, page 2, for a description of the impact Higginson has made, and continues to make, on industrial energy efficiency in Cowlitz County PUD's service territory.)