

Energy

EFFICIENCY

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News From BPA—Your Northwest Energy Partner

The Challenge and Our Pledge

Presently BPA is facing a major financial challenge—a \$1.2 billion gap between revenues and expenses. The problem is driven by a combination of financial commitments and revenue shortfalls. We buy power to meet increased load; we have increased payments to investor-owned utilities; we increased spending on fish and wildlife; and we must cover rising maintenance costs. Two years ago, the drought meant we had no seasonal surplus power to sell on the secondary market—normally a source of about 25 percent of our power revenues. Although we had surplus inventory to sell this past year, market prices went down and stayed down, thus decreasing revenues for a second year in a row.

BPA leaders have identified and committed to immediate steps that will help but not close the gap entirely. Already,

cost containment efforts have led to a \$350 million reduction in expenses, and BPA has committed to hold all power-related costs to 2001 levels with no built-in inflation. Another \$500 million in savings looks promising but will require collaboration with other entities such as Energy Northwest, the Corps of Engineers, Bureau of Reclamation, Northwest Power Planning Council and other partners. Long-term plans to ensure future financial security are being discussed with customers. But cost savings and deferrals alone won't close the gap. It will require significant improvement in revenues from secondary power sales, and there is growing concern about the potential for another low water year.

As BPA takes steps to address its financial difficulties, the Administrator remains committed to retaining the benefits of

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Conservation Genius

The MacArthur Fellowship award, commonly known as the genius award, is given to talented individuals who have shown extraordinary originality and dedication in their creative pursuits. David Goldstein, Energy Program Co-Director

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E-mail Newsletter

In an effort to continue cutting costs at BPA, Energy Efficiency staff are in the process of developing an e-newsletter to take the place, where possible, of the hardcopy version that is mailed to customers each quarter.

Not everyone has access to e-mail, and some people prefer a hardcopy. You can tell us

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2003 Conservation Conference/Contest

Did you attend the *Conservation or Crisis? A Northwest Choice* conference in September 2001? The conference panels and topics included:

- Conservation Strategy
- States' Perspectives
- Lessons Learned from the Past
- Price Signals and Metering
- Partnerships
- Stewardship
- The Role of the Media.

Speakers included Glen Heimstra, Allen Hammond, Ralph Cavanagh, and others. BPA Administrator Steve Wright gave his memorable conservation "roller coaster" speech.

October 1 and 2, 2003, is the date for the next Energy Efficiency conference. The conference will bring together utilities, federal, state, and local governments, end users, tribes, and contractors to share energy efficiency successes and challenges. Financially constrained times often foster creative solutions to regional economic woes. This conference will provide fertile ground for planning and planting the future of energy efficiency.

What should we name it? Energy Efficiency sponsored a contest for employees in December to get potential titles for the conference. Please send your suggested title, as well as topic ideas to your BPA Account Executive or Energy Efficiency Representative. The actual title will be selected in late January.

Please mark your calendar to attend.

--Jennifer Eskil (509) 527-6232

The mission of the EE customer newsletter is to provide customers with information they will find useful.

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the system for regional stakeholders. BPA is looking for efficiencies in its programs so that it can continue to deliver benefits but at a lower cost.

BPA has acted as a steward for the Columbia River resources for decades, and our leaders remain committed to responsible stewardship. This time of crisis is also a time of opportunities. We welcome your input on meeting this challenge. We in Energy Efficiency pledge to assist BPA leaders and utility customers in solving the financial problems. We pledge to do all that is possible to reduce costs while partnering with customers to ensure we pass this valuable heritage on to generations to come.

Jean Oates
Editor

Editor's Note: If you did not receive Administrator Steve Wright's letter to the region detailing the current financial situation and what BPA is doing to address it, go to http://www.bpa.gov/Power/PL/FinancialChoices/11-22-2002_Wright_Letter.pdf or call 1-800-622-4520.



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Clark Public Utilities Green Lights Program

Clark Public Utilities, Vancouver, Washington, teamed with the Bonneville Environmental Foundation early in 2002 to offer the Green Lights program to Clark customers.

Through Green Lights, Clark customers voluntarily pay a little extra for their electricity each month. This “extra” money is pooled with the contributions of thousands of others in the region to support the development of clean renewable energy resources in the region. One of those projects is the White Bluffs Solar Station, the largest photovoltaic solar power facility in the Northwest, located near Richland, Washington. The facility produces enough power to provide for the year-round electricity needs of about 20 homes. The White Bluffs project is one of three regional projects that are supported with Green Lights dollars (the other two are the Stateline and Condon wind projects).

Over 200 Clark customers – individuals and businesses — are program participants. A portion of their contributions will be used to develop projects in Clark’s service territory. For more information about the program, visit Clark’s website at www.clarkpublicutilities.com.

*Submitted by Shirley Skidmore, Clark Public Utilities
-- Elly Adelman (503) 230-5052*

The Living Machine

Work began in October 2002 to install a Living Machine® at YMCA Camp Seymour in Pierce County, Washington. The camp is an outdoor center located in the southern Puget Sound area, which provides year-round environmental education programs, summer camping, and retreats for families, schools and other not-for-profit organizations. The camp’s 150 acres border a half-mile of saltwater shoreline and include old growth and second growth forested areas.

The Living Machine® system will be tested by BPA to see how it compares with conventional wastewater treatment systems in terms of reliability and its eligibility to become a conservation project. BPA is also developing the methodology that would be used to verify energy savings. The project is a visible demonstration of functional and sustainable waste processing alternatives.

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C&RD Proposed Changes Due March 30

It’s that time again. Proposed changes to the Conservation and Renewables Discount are due by March 30, 2003. Following the March 30 due date for proposals, utilities will have a two-month opportunity to provide comments.

The request for proposed changes will go out to utilities in early February.

-- Mark Johnson (503) 230-7669

Vera Service Director Becomes Mayor

Mike DeVleming, Vera Water and Power, Veradale, Washington, customer service director and conservation manager, became Mayor of Spokane Valley, population 80,000, on November 26. Earlier in November, he won the bid for an elected position on the Spokane Valley City Council. He ran on a “strong energy conservation plank”.

DeVleming has been with Vera Water and Power since 1987, beginning with a position as an assistant engineer, and moving on to his current position in 1989.

Congratulations, Mr. Mayor.

-- Rosalie Nourse (509) 358-7463



Solar Photovoltaic System Installed

In September, Humboldt State (California) University engineering students assisted National Park employees

and Michael Huber, BPA engineer, in the installation of the 2.5 kW grid-tied photovoltaic system (left) at the Wolf Creek Outdoor Environmental Education Center, near Crescent City,



California. Huber and Chris May, a solar-water contractor in the area, presented a class to the students. They also taught members of the California Civilian Conservation Corps about photovoltaic wiring. The California Energy Commission will rebate one-half of the cost of this system, so that the total installed cost is approximately \$11,000.

-- Michael Huber (206) 220-6778



WHAT SEVERAL UTILITIES DID FOR ENERGY AWARENESS MONTH or FOR PUBLIC POWER WEEK

October was Energy Awareness Month

October 6 to October 12 was Public Power Week

Flathead Electric Coop

Flathead Electric Cooperative, Kalispell, Montana, aggressively promotes energy awareness through frequent media promotions, ongoing distribution of energy efficient printed materials and frequent speaking engagements at local meetings and service clubs.

-- *Marla McCombie (406) 829-3313*

City of Chewelah

In October, the City of Chewelah, Washington, adopted the "City of Chewelah Conservation Rebate Program". Chewelah, in partnership with BPA, implemented a rebate program for qualifying energy efficient products purchased by the citizens/property owners of the City. The purpose of this program is to save electric customers money, not only by reducing the amount of money paid for an energy efficient product, but also by reducing their power bill.

Chewelah, as part of its educational conservation program, also approved funding of \$1,000 for the distribution of inexpensive do-it-yourself conservation materials which will be provided to low-income families in the City. The funding channels through Energy Programs at Rural Resources.

Submitted by David L. Park, Chewelah City Administrator

-- *Rosalie Nourse (509) 358-7463*

Franklin County PUD

Public Power Week is nationally recognized as a week set aside to honor public power and those responsible for making public power communities. Franklin Co. PUD, Pasco, Washington, celebrated the week with refreshments, hand-outs, bucket truck rides, and safety demonstrations during the week.

Submitted by Mary Bauman, Franklin PUD

-- *Rosalie Nourse (509) 358-7463*

Nespelem Valley Electric

Nespelem Valley Electric Coop, Nespelem, Washington, is in the process of developing a series of radio commercials to promote energy efficiency. In the radio spots, "Electric Bill"

describes to listeners ways they can save energy. Each of the four sets of tips is unique.

-- *Rosalie Nourse (509) 358-7463*

City of Richland

The City of Richland, Washington, partnered with ENERGY STAR® in December to add a slide to the local cinema's screen encouraging residential customers to "Make a change this holiday Season". The slide presented ideas to save money on utility bills, including purchasing an ENERGY STAR® appliance or installing ENERGY STAR® windows, and how end-users might qualify for a low interest loan.

In addition to the big screen promotion, winter tips workshops were offered to Richland residents. Fifth grade students in the City's school system learned about conserving energy through a presentation on how to use energy wisely at home and at school.

Submitted by Dawn Senger, Energy Specialist, City of Richland

-- *Chris Tash (509) 527-6217*

Benton County PUD

Benton PUD, Kennewick, Washington, held a one-week celebration of Public Power in October with a lobby display of contrasting historic black and white photos and current color photos.

Cookies were served to customers, and one day provided an opportunity for seniors to come in, sign-up for their low-income discount. They also received an electrical safety packet, listened to an electrical safety presentation, picked up information from local senior agencies, and enjoyed a foot care talk by a local podiatrist.

Submitted by Nikki Johns, Marketing Specialist, Benton PUD

-- *Rosalie Nourse (509) 358-7463*

Watch for the fiscal year 2002 **Year in Review**, a report of key Energy Efficiency accomplishments in partnership with customers. Ask your Account Executive or Energy Efficiency Representative for a copy. The Review will not be distributed by mail. Copies are limited.

Big Bend Electric Installs Solar System, Refurbishes Original Sign

Students of Hiawatha Elementary School, Othello, Washington, attended a ceremony October 9, 2001, to dedicate the school's solar electric panels. The 16 photovoltaic panels were a joint effort of Big Bend Electric Coop, Ritzville, Washington, and BPA.



Big Bend Electric Coop rescued and refurbished the coop's original neon sign (above), which is now mounted on the coop building. **Dale Anderson, Member Services Manager at BBEC, said the red neon can be seen for five miles.**



The panels provide more than electricity. They provide teachers with a tool to aid in teaching students about renewable energy. The school receives educational material to incorporate into their curriculum, and are able to monitor power production through a BPA website.

-- Chris Tash (509) 527-6217



Above: (L-R) BBEC Project Coordinator Dave Barden, Hiawatha Assistant Principal Aurora Garza, Principal Heather Franklin, BBEC Lineman Kurt Staley, and Othello School District Assistant Superintendent Rose Search.

Left: Dave Barden, Big Bend Electric Coop Project Coordinator, talks to students of Hiawatha Elementary School about the solar panel that was installed at the school and dedicated on October 9, 2001.

Boise Particle Board Plant

BPA staff recently visited the Boise Particle Board Plant in LaGrande, Oregon to place metering equipment on the new premium efficiency motors BPA helped fund through Oregon Trail Electric Coop's participation in the Conservation Augmentation initiative. The motors power a new sander Boise purchased from an Italian manufacturer. The sander is supposed to be the best on today's market. Boise's customers have elevated their requirements for a high quality finished product and the old sander couldn't produce the quality needed to satisfy the orders. The sander will help Boise remain competitive.

Plant representatives presented an overview of the energy efficiencies they have accomplished at the plant in the two years they have had an "Energy Team". The measures range from a message posted by doorways reminding employees to turn off lights when not in use to motor change-outs. The

plant will save \$311,000 annually in energy costs due to the changes.

Submitted by Nancy Van Sickle, Oregon Trail Electric Coop
-- Chris Tash (509) 527-6217

E-mail newsletter, continued from page 1

which you prefer and provide a bit of feedback about the newsletter at the same time.

You will find a response card tucked into the folds of this newsletter. Please fill out the postage-paid card and drop it in the mail.

If you do not find a card enclosed with your newsletter, or if you have questions, please contact Jean Oates at (503) 230-5861 or at jaoates@bpa.gov.

Franklin County PUD Promotes LED Holiday Lights



The lights are almost as bright as regular holiday lights and use 80-90 percent less electricity. The lights are indoor/outdoor approved, can connect end to end, and will stay lit if one bulb fails. LED lights are rated to last up to 200,000 hours and are virtually unbreakable because they have no glass and no filament.

Submitted by Mary Bauman, Franklin PUD
-- Rosalie Nourse (509) 358-7463

Far upper left: Todd Blackman (left) and Darroll Clark of Franklin Co. PUD display LED holiday lights for sale at the PUD office in December.

Left: Todd Blackman, fireman and Energy Services Specialist at the PUD, decked out in a new, safe, more energy efficient way of lighting the holidays.

The holidays are behind us, but it's never too early to plan for the next holiday season or to save dollars and energy.

You can operate 12 strings of LED holiday lights 10 hours a day for a month for only 25 cents. Traditional holiday lights would cost about \$16 to operate for the same period of time.

Franklin PUD, Pasco, Washington, ordered a variety of types and colors of the bulbs and sold them at the main office in December. The PUD had sold 420 boxes of lights by early December.



LED lights come in a variety of sizes, shapes and colors.

OSU Students Design Alternative Energy Portable Remote Watering System



Left: Soap Creek, near Corvallis, Oregon. Below: Oregon State University students, OSU professor Alan Wallace, and the Soap Creek Ranch foreman get ready to work on a project to keep cattle out of stream beds.



Energy Efficiency's Brad Miller is mentoring four Oregon State University senior electrical engineering students on a sustainability project for their senior design work. The Soap Creek Ranch project is to design, construct, and demonstrate an alternative energy portable remote watering system for cattle. The purpose of the system is to keep the cattle out of stream beds. The current preliminary design uses a combination of solar photovoltaic and other types of generation to power the system. Other types of generation such as wind, fuel cells, methane, and diesel also have been considered. Wind is not ideal for this location; however, it will be addressed in the project as an alternative for other more suitable sites. Fuel cells are currently deemed too expensive and unreliable. As the technology develops, fuel cells will become more viable.

--Brad Miller (503) 230-3764

Conservation Genius, continued from page 1

for the Natural Resources Defense Council, San Francisco, certainly has.

David is directly responsible for that super-efficient new refrigerator you have that uses the equivalent energy of a 75-watt bulb, as well as the fact that refrigerator energy use has dropped in half since 1992. David helped the Pacific Northwest separate excellent conservation investments from poor ones with his advice on the Hood River (Oregon) Conservation Project. David got the Genius Award -- but the ordinary citizen of the Pacific Northwest is the real winner, through saving energy, saving money, and saving the beautiful Northwest environment. The energy efficiency community is proud to see one of their own recognized. Congratulations, David.



-- Terry Oliver (503) 230-5853

ENERGY STAR® Gets New Look



Starting January 2003, ENERGY STAR® will begin a two-year logo change process. The new logo will be eye-catching blue. The Environmental Protection Agency and the Department of Energy offer practical reasons for the change to blue monochrome, including:

- The need to stand out in retail settings;
- The need to display well whether large or small size; and
- To transition easily from the old logo.

There are also strategic and aesthetic reasons to change. Visit the ENERGY STAR® web site to appreciate the new label: www.energystar.gov.

Coast Guard Employees Honored

In October, BPA recognized two civilian Port Angeles Coast Guard employees, Shanon Ferrel and Ray Gallinger, for doing an excellent job of retrofitting three North Olympic Peninsula Coast Guard stations with energy-efficient lighting. The projects are expected to save over 200,000 kWh per year and over \$8,000 in annual energy costs.

--Frank Brown (206) 220-6774

--Rick Jones (206) 220-6782

Don Davey Retires

After 38 years in the field of energy conservation at BPA, Don Davey is retiring, effective December 31, 2002. Don served as a conservation advisor to the Administrator in the 70's, continuing in that role until a formal conservation function was created at BPA in 1980. In recent years, Don has been in charge of BPA's Super Good Cents and residential lighting programs. He has met and worked with many customers over the past decades.



By the way, Don's total length of federal service is 41 years.

FWEE Scholarship Contest

The Foundation for Water and Energy Education sponsors a scholarship contest each year for high school juniors and seniors. The question for the 2,500-word 2003 essay is: "What mix of resources will be used to meet the region's power needs in 2015?" Applications must be postmarked no later than March 10, 2003. Customers of BPA utilities are eligible to enter. For more information, visit www.fwee.org or call your Energy Efficiency Representative.

-- Becky Clark (503) 230-3158

Living Machine, continued from page 3

What is the Living Machine®? It's an anaerobic reactor developed by Living Machines, Inc. Wastewater flows from the facility plumbing into the reactor. As the solid material settles, anaerobic bacteria, which live without oxygen, consume the wastes in the liquids. There is no heat or mixing involved. The reactor is buried much like a traditional septic tank. Gases are filtered through activated carbon to control odor. Jonathan White, Peninsula Light and Power, Gig Harbor, Washington, found the project for BPA.

— Mike Rose (503) 230-3601; Todd Amundson (503) 230-5491

The vats pictured in the greenhouse below are where aerobic treatment of waste flow takes place. Within the vats are very



small horsepower aeration pumps and living creatures such as algae, plants, fish, and snails. The pipes overhead deliver the water from one vat to the next.

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