

News From BPA - Your Northwest Energy Partner

# **“LOW-INCOME WEATHERIZATION” BPA DECIDES TO KEEP A GOOD THING GOING**

Northwest low-income weatherization activities by the States and Community Action Agencies will continue to receive direct funding from BPA for the 2002 to 2006 rate period to the tune of \$15 million (\$3 million per year). This is good news for the States and CAPs who were set to see their BPA funds go away Oct. 1, 2001. For the last four years, these agencies have been spending about \$2.75 million per year in BPA funds on low-income weatherization.

“After considering the public, customer and constituent comments raised in the Rate Case about low-income weatherization, we decided the right thing to do was to leave the current funding structure unchanged” said John Pyrch, BPA’s Acting Energy Efficiency Vice President.

BPA announced its decision on May 15, as part of its new power rates announcement.

“Thanks to BPA, thousands of people will see their electric bills brought down to earth,” said Sara Patton, director of the NW Energy Coalition. “By funneling its spending through local experts, BPA will get the most out of its investment.”

Low-income weatherization programs in Idaho, Montana, Oregon and Washington will benefit from this decision. To date, BPA funds have already helped weatherize almost 5,000 low-income homes in these states.

“These are good programs that are producing good results,” Pyrch said. “They are a vital part of BPA’s public benefits, so it makes sense that we continue to fund them the way we traditionally have to keep the success going.”

The state CAPs are currently set up to do the job. They have the infrastructure and measuring systems in place and they have seasoned employees reaching and serving low-income consumers. It has been made clear that there is no need to reinvent the wheel here.

In its initial rates proposal, BPA recommended that low-income weatherization be designated a qualifying activity in

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## **"Low-income Weatherization" BPA Decides to Keep a Good Thing Going**

*(Continued)*

the Conservation and Renewable Discount program. The recommendation would have eliminated the \$2.75 million in annual funding to the states/CAPs and relied on BPA's power customers to deliver low-income weatherization savings.

BPA's decision to direct fund the states and CAPs does not mean that power customers cannot do low-income

weatherization under the C&RD. In fact, BPA hopes and anticipates that some will still install low-income weatherization measures in their service area to qualify for a C&RD credit. These efforts will supplement BPA's direct funding of the states' and help even more low-income consumers improve their energy use.

*- Sharon Doggett*

# **BPA CUSTOMERS TAKE A SHINE TO ENERGY STAR®**

The Bonneville Power Administration's (BPA) Energy Efficiency Representatives and ENERGY STAR® representatives are finding eager acceptance of the ENERGY STAR® message among utility customers. In September, 1999 there were only two utility partners in the region. Today there are 31 and the number is growing every week (see below). Utility partners signed up in the NW now represent more than 33 percent of all the utility partners on the ENERGY STAR® Web site, [www.energystar.gov](http://www.energystar.gov).

"The ENERGY STAR® partnership requires minimal paperwork and links our customers into a network of support for local utility actions," says Ken Keating, BPA market transformation coordinator. Many customers are signing up in preparation for the Conservation and Renewable Discount, but all of them see the partnership as a way of maintaining their

relationships with consumers and local vendors. BPA and the NW Energy Efficiency Alliance (Alliance) provide leverage for local efforts by helping with regional promotions. All partners were notified of the recent ACE/True Value Hardware and Fred Meyer Compact Fluorescent Light promotions. In

October, BPA will join with the Alliance to produce a training insert on ENERGY STAR® that is required reading for all Sears employees.

Sears is one of several national ENERGY STAR® retail partners. This is a way to increase the level of salesperson knowledge in 87 stores across the region for very little cost. BPA will continue to seek ways to make the partnerships more useful for its customers.



*- Ken Keating*

### ***BPA's Energy Star Utility Partners***

*Consumers Power  
City of Forest Grove Light and Power  
Tillamook PUD  
Lane Electric  
The Energy Outlet  
Salem Electric  
Columbia River PUD  
Emerald PUD  
Okanogan County Electric Cooperative  
Kittitas County PUD  
City of Milton-Freewater  
Umatilla Electric Cooperative  
Grays Harbor PUD  
Franklin County PUD*

*Kootenai Electric Cooperative  
Blachly-Lane Electric Cooperative  
Columbia Rural Electric Association  
Modern Electric Water Company  
Vera Water and Power  
Nespelem Valley Electric Cooperative, Inc.  
Pend Oreille County PUD  
Town of Coulee Dam Light Department  
Mission Valley Power  
Pacific County PUD No. 2  
Orcas Power and Light Cooperative  
Inland Power & Light Company  
Clatskanie PUD  
Clearwater Power Company*

*Ravalli County Electric Coop., Inc.  
City of Richland\*  
Snohomish County PUD\*  
Eugene Water and Electric Board\**

*\* indicates ENERGY STAR (DOE/EPA)-  
direct signed partnership agreement*

# ENERGY WEB

## A New Kind of Network

There's a transformation under way that is effecting the current electric industry structure. It is a fusion of energy and communications that appears will inevitably lead to a major change in how power is delivered and received. Technological changes, political changes, and market or economic changes (influenced in part by environmental ethic) are driving this transformation.

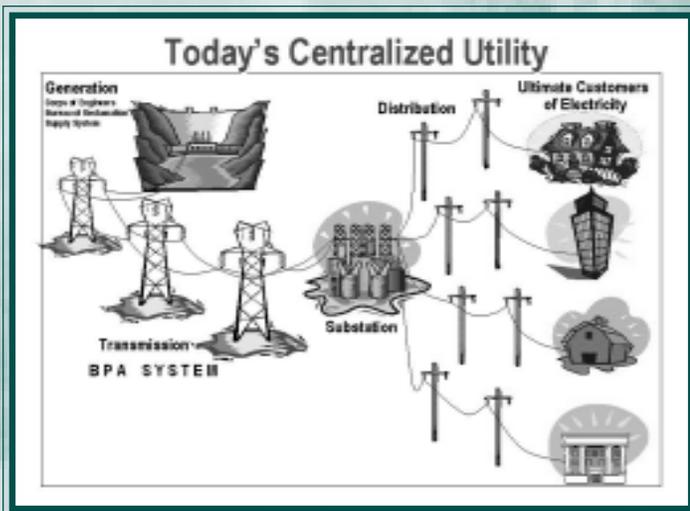
The move is toward a radically different system where integrated power plants and a regional grid are supplemented by a variety of providers of decentralized energy products and services. This new system will connect end-users, central

about the production, distribution and use of energy that are linked via communications to the overall system.

The emergence of a multi-faceted, consumer-driven Energy Web has impacts for BPA as a central-system wholesale power provider, as well as utilities that connect to that system and service end-use consumers. How should we engage in this industry transformation? In the case of BPA, we have embraced the idea of the Energy Web and intend to look for ways we can inform, educate and help the Northwest in this evolution. Ways that contribute to creating an energy structure that is functional and brings widespread economic and environmental benefits to BPA ratepayers and the region as a whole.

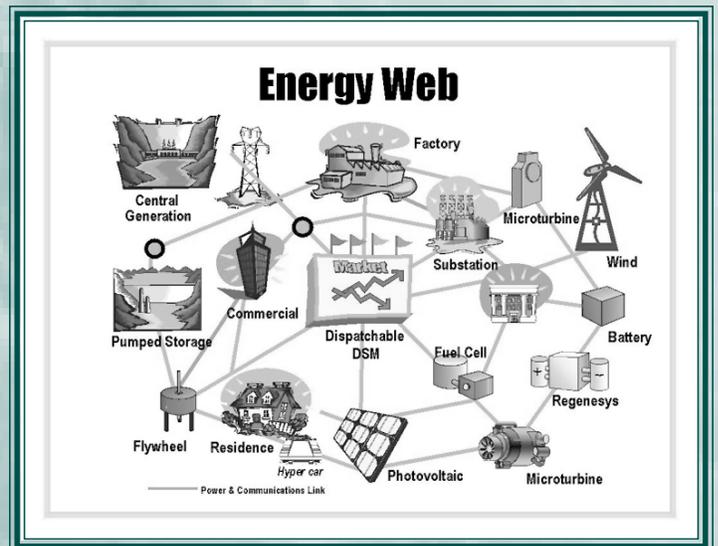
You may have already read in this newsletter some of what BPA has been doing that relates to the Energy Web. Our involvement with fuel cells, demand-side management, automated metering and the Electric Revolution Conference are just a few examples. Look for more articles in future issues of the Energy Efficiency newsletter that will focus on other efforts that tie to the Energy Web.

- Sharon Doggett



generation, transmission, distribution, distributed generation, energy storage devices, dispatchable demand-side management, metering and controls, and related telecommunications. Because these pieces are linked together, the term "Energy Web" has surfaced as a way to describe this new integrated network.

Today's electricity network is dominated by a hierarchical structure, with electric power flowing downward from large, centralized generation sources through transmission and distribution lines to end-users. In the Energy Web of the future there will be many more sources of generation, many more transactions and many more energy products and services. For example, households and businesses will no longer just use energy. They may be the source of significant amounts of electrical generation that feeds back into the grid, making them part of a vast energy marketplace with many buyers and sellers. End-use producers, end-use consumers, transmitters and others will be making independent decisions



# BPA Joins Governors to Announce Funding Commitment for Northwest Energy Efficiency Alliance

“The Northwest Energy Efficiency Alliance has been incredibly successful in bringing energy efficiency improvements to our Northwest communities, and this innovative partnership is gaining national recognition for that accomplishment,” said Judi Johansen, BPA administrator, at the St. Patrick’s Day event celebrating the renewed funding of the Alliance for the next five years.

Washington Governor Gary Locke and Oregon Governor John Kitzhaber joined Johansen and many Washington and Oregon electric utility executives on Friday, March 17, to announce the Northwest’s commitment to fund \$100 million for the Alliance. The two Governors signed the agreement that had already been signed by Governor Kempthorne of Idaho and Governor Racicot of Montana. Of the \$100 million, BPA will be contributing \$50 million over the 5-year period.

“That all these Northwest entities have given their support to the Alliance out into the future sends a strong signal that the region



**Governor Kitzhaber**



**BPA Administrator Judi Johansen**



**Governor Locke**

shares a common vision of the value of conservation,” Johansen said.

Alliance executive director Margaret Gardner pointed out that the non-profit’s projects have saved 16 average megawatts, so far, enough to power 10,000 homes. By 2010, the Alliance expects to save over 400 aMW.

**- Ken Keating**

## WAY TO GO!!!

*On April 15, 2000, the Energy Outlet sponsored the Great Torchiere Turn-in to encourage consumers to trade up to energy efficient Energy Star torchieres. The first turn-in took place at Home Depot. Three hundred and forty people turned in 530 halogen lamps, nearly filling a ten cubic-yard recycling dumpster with lamp parts. Total estimated kilowatt-hour savings as a result of this event were 17,900 kWh per year!*

# Power Factor Savings a Winner for Wells Rural



Wells Rural Electric Cooperative has just completed a power factor study that if implemented could mean increased efficiency and savings for some of this Wendover, Nevada utility's big customers. It's also a way for Wells, a BPA customer, to meet the BPA requirement for power factor.

Many utilities assess a penalty to the energy demand if the power factor is lower than 95 percent. BPA has set in its power sales and transmission contracts, effective October 1999, a power factor penalty threshold of 97 percent. To reach that 97 percent BPA threshold, means Wells needs to improve its customers' power factor.

An engineering team from BPA's Energy Efficiency group is working with Wells' staff, to identify sources of power factor problems within the utility system. That require looking at billing histories for industrial, commercial and municipal facilities served by Wells and taking measurements at each facility. From this, recommendations are being made to improve specific situations. If power factor can be significantly improved at the Wendover sites, the reduction in the current that formerly moved through the transmission and distribution lines to feed the reactive power components will reduce the power loss in line and equipment.

Measurement, data collection and analysis is now done for five casinos, two hotels, three industrial plants, one municipal site, one store and one school in the Wells service area. So far recommendations for improvement include adding capacitors, filters and various conservation measures.

Two of the casinos reviewed serve as very fine examples of how raising power factor can be a benefit. The estimated annual dollar savings for one casino is enough to pay for the project cost for five years. These savings are obtained mainly by eliminating the power factor penalty. Findings show that by reaching a 95 percent power factor level the estimated annual dollar savings for

the second casino are substantial. Improving power factor in that casino even further, to 98 percent, will increase the annual cost savings by an additional 30 percent. And in this case the simple payback is completed in only 3.9 years.

"Working with Wells has been a great experience for all of us on BPA's Energy Efficiency technical team," says Nelly Leap, electrical engineer. "This project provided an excellent opportunity for us to demonstrate the power factor software that **Electrotek** (a private sector firm) developed in collaboration with BPA. And it is rewarding to know our work will help save energy and money for Wells and their customers."

The cost savings from this project go mostly to Wells Rural Electric. An improvement in power factor makes more system capacity available for the utility to deliver useful power to the West Wendover, Nevada area. At the same time, BPA benefits by reducing the amount of its limited power resources that is wasted as losses in the transmission system.

- **Nelly Leap**

## **Power Factor – What is it?**

*Power factor is a way of measuring the percentage of reactive power in an electrical system. Reactive power represents wasted energy – electricity that does no work. Reactive power is the result of electrical current interaction with inductive loads like motors, transformers, fluorescent lights, arc welders and induction furnaces. Electric systems with many motors exhibit low power factor and increased conductor and transformer losses. Power factor can be improved by the addition of shunt capacitors.*

## **Power Factor – Why improve it?**

*Improving power factor can reduce power losses and free up the capacity of the existing transmission and distribution equipment for both utilities and end-users. Raising power factor to 95 percent and above is a proven way of increasing the efficient use of electricity. Economic benefits for end-users result from reduced power bills and improved voltage conditions. Utility providers benefit from, lower line and transformer losses, released system capacity and improved power factor.*

# Lighting Design Lab has Mock-up Facility

Lighting mock-ups are a valuable means of showing owners and tenants throughout the Northwest the possibilities in efficient lighting design and application. The Lighting Design Lab is the only facility in the nation with two movable ceilings for mocking up lighting designs. Mock-ups involve installing fixtures, painting walls and bringing in props or furniture in advance of actual construction to let designers, owners and tenants view real conditions. Adjustments can be made in the fixture placement or design selection before actual installation. This leads to



quality, efficient lighting that works for everyone. Companies that have used the mock-up services include: Microsoft, Starbucks, Safeway, Clackamas High School, BPA for its Olympia Substation, ODS Tower in Portland, Bellingham Special Care and many more.

If you or your customers would like information on mock-ups, call the Lighting Design Lab at 1-800-354-3864 or visit their Web site at: [northwestlighting.com](http://northwestlighting.com).

- *Diana Grant, Lighting Design Lab*

## Northwest Solar Alliance Helps Move the Northwest Into the Solar Age

***“Catching some rays” takes on a whole new meaning for Northwesterners, thanks to the Northwest Solar Alliance.***

BPA along with the states of Idaho, Montana, Oregon and Washington and the U.S. Department of Energy’s Seattle Regional Office have entered a cooperative effort to make the Northwest a major player in a national initiative to include solar as a vital part of a sustainable energy future.

By signing the Northwest Solar Alliance’s ‘white paper’ of purposes, goals and objectives, these charter members have agreed to promote solar energy applications.

Solar energy is one area that BPA’s utility customers can engage in to qualify for the Conservation and Renewables Discount. The rate discount will take effect next year. BPA hopes through its work with the alliance to connect its customers with solar opportunities.

“Harnessing the sun to generate electricity is not cost-effective right now in most applications, but it can be in certain situations,” said Terry Esvelt, currently BPA’s Acting Deputy Administrator. “We need to take advantage of this clean, renewable resource and increasingly put it to work for the region. We see the Northwest Solar Alliance as an excellent

opportunity to help make this happen.”

The Solar Alliance aims to reduce global warming and other environmental threats through the promotion of solar electricity in the Pacific Northwest. It does this in part by supporting the national Million Solar Roofs Initiative, a federal program to promote the addition of one million solar units nationwide. The Solar Alliance also will support Pacific Northwest solar electric manufacturers, installers and consultants. It aims to help reduce the cost of solar electricity for early adopters; develop qualified solar technicians and technology innovators; create regional public awareness of photovoltaic’s value and potential; identify and assist with implementation of viable projects; and facilitate activities that reduce the cost of solar electric equipment. All of this contributes to a smooth transition into the solar age. The group is looking to increase in size and impact as it recruits other supporting members.

- *Steve Fucile*

# BPA steps up to help fund Solar Data Center

BPA has announced it will provide nearly \$900,000 in funding over five years to the Regional Solar Radiation Data Center. The center, operated by the University of Oregon, collects high-quality long-term solar radiation data from 13 sites in the Pacific Northwest.

In making this announcement, Administrator Judi Johansen said, "The program has been collecting solar radiation data since 1977 but has been inadequately funded of late. Funding this program demonstrates BPA's commitment to the development of renewable resources under the Northwest Power Act."

Frank Vignola, director of the university's solar energy center, said, "BPA's funding will give a big boost to the program and help us achieve many of our goals. It will enable us to add new monitoring sites and produce software and Internet tools to facilitate use of the data."

The center also contributes data to the National Solar Radiation Data Base run by the National Renewable Energy Laboratory.

The Eugene Water & Electric Board and Portland General Electric will continue to contribute about \$25,000 and \$17,200 per year, respectively, to the program. The Northwest Power Planning Council also helps to fund the program.

Solar data collection is to solar resource development as stream gauging is to hydropower. A minimum of 15 and preferably 30 years of data are needed to characterize the climate in an area because of short-term or cyclical weather patterns.

The Energy Information Administration projects a 9.2 percent annual growth rate in the use of solar power to generate electricity over the next decade, with robust growth expected for off-grid and distributed applications of photovoltaics. As solar energy becomes more economical, the demand for high-quality data will increase.

## July is NW Solar Awareness Month

Join in by participating in one of the events already planned or put something together for your company or local community. To learn more about what's happening checkout:

**[www.energy.state.or.us/SolarAware](http://www.energy.state.or.us/SolarAware)** or call BPA Energy Efficiency Representatives: Steve Fucile (509) 358-7455 or Elly Adelman (503) 230-3679.

Visit Energy Efficiency's Web site at:  
<http://www.bpa.gov/Energy/N/default.htm>

WWW.

# ELECTRIC Revolution II

## High Tech Tools to Close The Energy - and Reliability - GAP

**August 2-4, 2000**

**Oregon Convention Center, 777 NE Martin Luther King Jr. Boulevard, Portland, Oregon**

### **Sponsors:**

**Bonneville Power Administration**

**U.S. Department of Energy**

**Congressional Renewable Energy Caucus co-chairs Reps. Greg Walden (R-Ore.) and Mark Udall (D-Colo.)**

Supporting Sponsors:

Canadian Institute of Energy, Electric Power Research Institute, Greater Puget Sound Electric League, Northwest Energy Coalition, Natural Resources Defense Council, Northwest Energy Efficiency Council, Renewable Northwest Project, Northwest Public Power Association, Washington PUD Association, Association of Professional Energy Managers — Oregon Chapter, Energy Market Report, Inland Northwest Electric League, Northwest Power Planning Council

**Explore the ways the Pacific Northwest can meet a predicted 3,000-megawatt shortfall in electricity and overcome growing transmission reliability problems – in part through renewables and emerging technologies. You will:**

- **Hear updates on state and national legislative and regulatory proposals.**
- **Hear updates on technical advancements in energy efficiency and distributed generation including fuel cells, motors, lights, computer controls and renewables.**
- **Share ideas about how to get power from these new sources to load centers while boosting system stability and avoiding safety problems.**
- **Hear practical advice on how to turn emerging technologies into business opportunities.**
- **Visit exhibitors who will show the latest thinking in small- and large-scale renewables, energy efficiency, fuel cells and other sources of distributed power. Hear practical advice on how to turn emerging technologies into business opportunities.**

### **Invited speakers include:**

- **Roger Hamilton**, commissioner, Oregon Public Utilities Commission
- **Yakout Mansour**, vice-president for grid operations, B.C. Hydro
- **Tom Karier**, Washington representative, Northwest Power Planning Council
- **Ralph Cavanagh**, energy program co-director, Natural Resources Defense Council
- **Stan Price**, Northwest Energy Efficiency Council
- **G. Heber Weller**, formerly of Florida Power & Light
- **Karl Stahlkopf**, vice-president of power delivery, Electric Power Research Institute
- **Karl Rabago**, director of corporate consulting, Rocky Mountain Institute
- **Steve Walton**, director for electric power transmission, Enron
- **Scott Castelaz**, vice-president of marketing and strategic planning, Encorp
- **Allan Stewart**, managing director of the electric power group, PIRA Energy Group
- **Rick Bush**, editor in chief, Transmission and Distribution Magazine

**For information, call (503) 230-3325 or check out the Electric Revolution web site at: [www.bpa.gov/Corporate/KCC/electric\\_rev2/conference.htm](http://www.bpa.gov/Corporate/KCC/electric_rev2/conference.htm).**

# ELECTRIC Revolution II

High Tech Tools to Close The Energy – and Reliability – GAP

## Registration Form

**Return the Energy Efficiency Newsletter survey on page 10, along with this registration form to get a 10 percent discount on the admission price (a \$15 value!) to Electric Revolution. One survey per registration, please. If you register by July 1, you get an added \$25 discount!**

To register, please complete the following form and mail to:

**Sharon Doggett – PND-1  
Bonneville Power Administration  
P.O. Box 3621  
Portland, OR 97208**

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Company \_\_\_\_\_  
Mailing address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Phone \_\_\_\_\_ Fax \_\_\_\_\_ e-mail \_\_\_\_\_

**Pricing information (please check all boxes that apply to you)**

- Standard delegate price (\$150)  
 Early registration discount, by July 1 (\$25 off)  
 Survey form enclosed (another \$15 off)

**Payment options**

- Check (payable to Bonneville Power Administration)  
 Money order (sorry, no cash please)  
 Charge my credit card:  
 Visa       Mastercard       American Express       Discover

Name as it appears on the card: \_\_\_\_\_  
Card account number: \_\_\_\_\_ Expiration date \_\_\_\_\_  
Signature \_\_\_\_\_

Please indicate the best way to confirm your registration:

Phone \_\_\_\_\_ Fax \_\_\_\_\_ e-mail \_\_\_\_\_

**Your registration will be confirmed after payment information is verified. No refunds will be given after July 17, 2000.**

# Feedback Survey

For about 2- ½ years we have been sending the Energy Efficiency Newsletter to customers and constituents. This newsletter is for you, so please take a moment to tell us how we can make it better.

Fill out this paper copy survey and return it along with the Electric Revolution II registration form on the reverse side and you'll get a 10 percent discount on the admission price (a \$15 value!) to the conference. One survey per registration, please.

If you are not able to attend Electric Revolution II, but would still like to comment on the newsletter you can send in this paper copy survey or go to our Web site at <http://www.bpa.gov/Energy/N/externews.htm>

1. Do you read the Energy Efficiency Newsletter?  yes  no
2. Do EE Newsletter articles give you the information you want?  yes  no
3. What types of articles do you look for most?  
 BPA Conservation initiatives  Technology information/developments  industry trends  
 NW utility projects  regulatory issues/activities  Other NW energy efficiency-related projects  
 Renewables  regional forums and conferences  other
4. What current EE Newsletter features do you like the best?  
\_\_\_\_\_  
\_\_\_\_\_
5. What current EE Newsletter features do you like the least?  
\_\_\_\_\_  
\_\_\_\_\_
6. What other features/articles would you like to see?  
\_\_\_\_\_  
\_\_\_\_\_
7. How often would you like to see the EE Newsletter?  
 quarterly  bi-monthly  monthly
8. If you could change one thing about the EE Newsletter, what would it be?  
\_\_\_\_\_  
\_\_\_\_\_
9. Overall, how do you rate EE Newsletter content?  very valuable  valuable  
 some articles I value others I do not  not valuable

# UPDATES

## IT IS OFFICIAL!

### **RATE CASE ROD APPROVES CONSERVATION AND RENEWABLES DISCOUNT PROGRAM**

The Rate Case Record of Decision (ROD) has been signed, which authorizes BPA to offer the Conservation and Renewables Discount Program (C&RD). The C&RD has been under discussion for some time; but as a Rate Case issue it needed to be reviewed in the formal Rate Case process before it could be offered officially.

BPA is offering utilities and direct service industries a rate reduction of 0.5 mills per kilo-watt-hour to develop their own conservation and renewables programs. Through a discount on their monthly power bill, customers will have additional funds to spend on new conservation and renewable resource programs. Customers, not BPA, will determine what their electric energy conservation and renewable resource needs are and how to spend these funds. On an annual basis, each customer will report to BPA their electric energy conservation achievements and associated costs. Over the five-year Rate Period, BPA anticipates that C&RD funds will capture 40 to 50 average megawatts of additional electric energy conservation. Utilities will also have the option of spending the C&RD funds to purchase Green Power,

insulating low-income housing or to fund such organizations as the BPA Environmental Foundation or the Northwest Energy Efficiency Alliance.

The Rate Case ROD spells out the basic framework for the C&RD Program. The details on what conservation measures and what renewable resource projects will qualify and the implementation rules are presently being determined. The NW Power Planning Council is leading an effort by the Regional Technical Forum (RTF) to recommend qualifying energy conservation measures and the value of the electric energy savings. For more information on RTF activities you can visit the Council's web page at: [www.nwppc.org](http://www.nwppc.org). BPA is currently running a public process called the C&RD Implementation Issues Working Group to build regional support on the Implementation Guidelines. The Working Group is helping BPA determine administrative, marketing, and evaluation activities that would qualify for the discount, as well as numerous other implementation issues. For more information on the C&RD Program or to participate in the public process, visit our web page at: [www.bpa.gov/Energy/N/c&r.htm](http://www.bpa.gov/Energy/N/c&r.htm).

## CONAUG - WHAT IS IT?

During the 2002-06 rate period, BPA anticipates the need to augment its power supply by at least 1,000 average megawatts due to expected Subscription contract loads in excess of available supply. Although we will make short-term market purchases to cover most of the new demand, BPA has reserved at least 150 average megawatts of the augmentation portfolio for conservation. This Conservation-as-part-of-Augmentation effort is called ConAug. We are holding monthly public meetings to get input for shaping ConAug activities.

At the first meeting in March, BPA leadership promised a ConAug straw proposal for interested parties to consider.

The BPA web page, ConAug section, includes the straw proposal. The web page also includes the agenda for the next meeting, summaries of previous meetings, handouts for all meetings, time lines, and the list of attendees.

Those interested in attending the public ConAug meetings are invited to come to BPA Headquarters on the 4<sup>th</sup> Wednesday afternoon of each month through August. You may also call Rebecca Clark of BPA at (503) 230-3158 for more information or go to our web site at: <http://www.bpa.gov/Energy/N/conaug.htm>

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

We would like to hear from you.

Comments: \_\_\_\_\_

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Article suggestions: \_\_\_\_\_

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\_\_\_\_\_

## **BPA's Energy Efficiency Representatives**

Elly Adelman ..... (503) 230-3679  
Frank Brown ..... (206) 216-4231  
Shannon Greene..... (206) 216-4201  
Tom Hannon ..... (509) 358-7450  
Rick Miller..... (509) 358-7464  
Rosalie Nourse ..... (509) 358-7463  
Mike Rose ..... (503) 230-3601  
Chris Tash ..... (509) 527-6217

***Editor:***

Sheila Fitzsimmons  
(503) 230-3059

***Associate Editor:***

Sharon Doggett