

# Journal

January 2012

## Annual report features successes

For BPA, 2011 was an exciting year with many significant accomplishments. From new transmission tower designs that are saving the agency millions to cafeteria trash composting that makes BPA a bit more sustainable, all the reasons 2011 was a successful year are included in the 2011 Annual Report.

The agency produced net revenue of \$82 million last year. It also invested more than \$1 billion in Northwest transmission, hydropower, fish and wildlife, and energy infrastructure.

In addition to highlighting BPA's 2011 activities and accomplishments, the interactive, online version includes 14 videos.

Go to [www.bpa.gov/corporate/Finance/A\\_Report/](http://www.bpa.gov/corporate/Finance/A_Report/).

## Crews overcome unique challenge

What started last summer as a routine bushing replacement on key transformers turned into a nearly six-month challenge that required expertise and teamwork from across BPA.

The transformers had been in service for almost 60 years as a result of solid construction and good maintenance. Now they should be good for another 20 years.

The story began in June when testing on two transformer banks at the Goshen Substation about 20 miles south of Idaho Falls revealed seven bushings close to failing. Bushings are insulated connections where wire leads attach to transformers. On the Goshen transformers they measure about 7 feet long, with a copper core surrounded by porcelain insulation.

The transformers were built in 1952 to European standards that are no longer used. BPA had been able to replace the bushings almost 30 years ago, but not today. The bushings are no longer manufactured.

The substation is critical because it supplies power to most of the east side of BPA's Idaho Falls District, where frigid winter temperatures drive up electricity use and put pressure on the transformers to meet peak loads.

Bushings made to current specifications would not fit the transformers with proper clearances. So BPA contracted

with ABB, a power technology company, to manufacture new bushings for the transformers.

The new bushings fit the transformers, but just barely. It turned out that the connections still did not provide enough clearance. While crews originally hoped to finish the replacement by August, it proved much more time-consuming.

Virginia Transformer Corp., a transformer manufacturer with offices in Idaho, helped BPA determine that the lack of clearance could be addressed by filling the transformers with more oil, which provides insulation and cooling. However, a "nitrogen blanket" that prevents deterioration of oil inside the transformers left no room.

The solution was the addition of new conservator tanks to the transformer banks to give the oil enough "breathing room" to expand and contract, Gribble said. BPA contracted with Virginia Transformer to install the tanks so oil levels could be raised to provide the required insulation.

"Now we can go into these colder months coming up with more confidence," said Idaho Falls District Manager Dee Wilson.

## Traders swap electrons on new platform

Real-time power traders have a new, high-tech tool that allows them to see the energy market and find the best deals at a glance.

## Watch us work

**WAFERTECH INNOVATION USES MILD CLIMATE TO SAVE ENERGY, MONEY.** In a unique partnership, WaferTech has installed a \$1.6 million energy efficient cooling system. The structure will save the Camas, Wash., semiconductor manufacturer about \$200,000 a year, or 4 million kilowatt hours of energy.

**TO WATCH** these and other videos, go to [www.bpa.gov/go/news](http://www.bpa.gov/go/news). You can also visit our **Facebook** page and **YouTube** channel.



Traders in the real-time market have relied on the telephone for decades, but now they can consult an electronic trading platform called WebExchange. So far, participants include BPA, 16 other utilities and a renewable energy generator.

WebExchange will help the wholesale electricity market pick up the pace as it moves toward scheduling power in shorter, 30-minute increments. This new way of working will accelerate the region's progress toward smoothly integrating wind energy on the grid.

Like traders on eBay, WebExchange participants post offers when they want to sell energy and bids when they want to buy. The bids and offers are visible to every user at once.

"With WebExchange, you can instantly see how many offers are out there and what the prices are," says real-time trader Sandra Fellin. "I'm looking forward to seeing what it can do, if it will replace the phone calls."

In the real-time power market, traders historically bought and sold power for the hour ahead, making fine-tuned adjustments to balance energy and demand each hour. Now they can make adjustments within the hour too.

The shorter scheduling time frame provides more market flexibility to respond to unexpected changes in power generation and demand, making more effective use of available transmission.

BPA participated in the development of WebExchange with members of the Joint Initiative: ColumbiaGrid, Northern Tier Transmission Grid and WestConnect

## BPA protects scenic Gorge

BPA and Friends of the Columbia Gorge have reached an agreement on measures to protect and enhance scenic and natural resources in the Columbia River Gorge National Scenic Area.

These measures will help address concerns about potential effects on National Scenic Area landscapes of BPA's Big Eddy-Knight transmission line project, currently under construction. Approximately seven miles of this new 28-mile 500-kilovolt high-voltage power line will be in the National Scenic Area.

"We agreed to work with Friends of the Columbia Gorge to support these measures because we understand the value of the National Scenic Area," said BPA Project Manager Emmanuel Jaramillo. "While we have taken many steps to minimize the effect of our new line on the National Scenic Area, we understand this project is of significant concern to Friends of the Columbia Gorge. We believe this agreement will help us work together to preserve the area's scenic qualities."

Under the agreement, BPA will work with Friends of the Columbia Gorge to support a variety of measures to maintain or restore scenic qualities of the National Scenic Area. Examples include the removal of physical structures and restoration of disturbed areas.

BPA will make about \$1.78 million available to third parties, as well as review and approve all funding requests that comply with the agreement. It will coordinate proposed measures within the National Scenic Area with the Columbia River Gorge Commission and the U.S. Forest Service.

"We appreciate the BPA's willingness to reduce the impacts of the project and to set up a fund to protect and enhance scenic resources and habitat within the Columbia River Gorge National Scenic Area," said Michael Lang, conservation director for Friends of the Columbia Gorge. "Now we can focus on identifying projects that protect and enhance this national scenic treasure for our children and future generations."

## Tower redesign is global award finalist

Two engineers from the Structural Design team, David O'Claire and Juan Nuño, represented BPA at the Dec. 1 Global Energy Awards ceremony in New York City. BPA's innovative work on steel lattice tower redesign earned the agency a finalist spot at the Platts-sponsored event. The new tower designs are lighter, stronger and greener. They're also less expensive, saving BPA about \$11 million on the McNary-John Day transmission project alone. For information, go to [www.bpa.gov/go/news](http://www.bpa.gov/go/news).

# Public Involvement [Updates & Notices]

## AGENCY PROJECTS

### Southeast Idaho service — Boardman to Hemingway transmission line option [Regionwide]

BPA is considering comments on its proposed participation in Idaho Power Company's Boardman to Hemingway transmission line. This is one alternative BPA is considering to provide service to its customers in southeast Idaho following the end of deliveries under the South

Idaho Exchange in June 2016. BPA accepted comments through Dec. 23 and held a public meeting Dec. 15. For information, go to <http://transmission.bpa.gov/PlanProj/default.cfm>.

### Strategic Capital Discussions [Regionwide]

BPA accepted public input through Dec. 12 on the agency's capital funding scenarios following a series of meetings that began in September 2011. Demands for capital are exceeding BPA's forecast

of available capital financing, requiring the agency to rethink its capital funding strategy. If no action is taken, BPA anticipates its access to borrowing from the U.S. Treasury could be exhausted as early as FY 2016. For information, go to [www.bpa.gov/corporate/Finance/FinancePublicProcesses/2011CapitalStratDisc.cfm](http://www.bpa.gov/corporate/Finance/FinancePublicProcesses/2011CapitalStratDisc.cfm).

#### **Future programs, costs and rates [Regionwide]**

BPA Administrator Steve Wright will lead a high level strategic discussion with regional interests Jan. 31, 2012, on future programs, costs and rates. The discussion will serve as a foundation for the upcoming Integrated Program Review process for the FY 2014 – 15 rate period. The leadership and all interested parties representing customers, public interest groups and tribes are invited to participate. [SEE CALENDAR]

#### **Quarterly Business Review [Regionwide]**

BPA will hold its Quarterly Business Review Jan. 30. For information, go to [www.bpa.gov/corporate/finance/ibr/qbr](http://www.bpa.gov/corporate/finance/ibr/qbr). [SEE CALENDAR]

### **POWER – PROJECTS UNDER REVIEW**

#### **Proposed CFAC power sales agreement [Regionwide]**

The National Environmental Policy Act analysis for the proposed power sales agreement between BPA and the Columbia Falls Aluminum Company is largely complete. Under the agreement, BPA would sell 140 average megawatts to CFAC, which could allow CFAC to operate two of five potlines at the Columbia Falls, Mont., smelter. BPA is reviewing this proposal in light of its Direct Service Industry Options EIS and is preparing a Supplement Analysis pursuant to NEPA regulations. The draft agreement is at [www.bpa.gov/go/cfacpowersales](http://www.bpa.gov/go/cfacpowersales). The DSIO EIS is at [http://efw.bpa.gov/environmental\\_services/Document\\_Library/Direct\\_Service\\_Industry\\_Options/](http://efw.bpa.gov/environmental_services/Document_Library/Direct_Service_Industry_Options/).

### **FISH AND WILDLIFE – PROJECTS UNDER REVIEW**

#### **Lolo Creek permanent weir fish trapping facility [Clearwater County, Idaho]**

BPA is considering comments on a proposal to fund the replacement of a 10-year-old seasonal fish weir. The final EA is expected in summer 2012. For information, go to [www.bpa.gov/go/lolocreekweir](http://www.bpa.gov/go/lolocreekweir).

#### **Kootenai River Native Fish Aquaculture Program [Boundary County, Idaho]**

BPA expects to release a preliminary EA in spring 2012. For information, go to [www.bpa.gov/go/kootenaiaquaculture](http://www.bpa.gov/go/kootenaiaquaculture).

#### **Klickitat Hatchery Complex Program [Klickitat and Yakima counties, Wash.]**

BPA is incorporating comments into the final EIS, expected in May 2012. For information, go to [www.efw.bpa.gov/environmental\\_services/Document\\_Library/Klickitat\\_Hatchery\\_Program/](http://www.efw.bpa.gov/environmental_services/Document_Library/Klickitat_Hatchery_Program/).

#### **Kalispel Memorandum of Understanding [Pend Oreille County, Wash.]**

The Kalispel Tribe and the three federal action agencies are proposing to enter a 10-year Memorandum of Agreement for fish and wildlife mitigation projects. For information, go to [www.efw.bpa.gov/environmental\\_services/Document\\_Library/Kalispel\\_MOA/](http://www.efw.bpa.gov/environmental_services/Document_Library/Kalispel_MOA/).

#### **Yakama Nation Mid-Columbia Coho Restoration Project [Chelan and Okanogan Counties, Wash.]**

BPA expects to release a final EIS in March 2012. For information, go to [www.bpa.gov/go/midcolumbiacoho](http://www.bpa.gov/go/midcolumbiacoho).

#### **Springfield Sockeye Hatchery Project [Bingham County, Idaho]**

BPA released a preliminary EA for public review in December 2011 and is accepting comments through Jan. 16, 2012. For information,

go to [http://efw.bpa.gov/environmental\\_services/Document\\_Library/Springfield\\_Sockeye\\_Hatchery/](http://efw.bpa.gov/environmental_services/Document_Library/Springfield_Sockeye_Hatchery/).

#### **Northeast Oregon Hatchery Program, Grande Ronde-Imnaha Spring Chinook Hatchery Project [Wallowa County, Ore.]**

A second ROD authorizing construction is deferred until the National Marine Fisheries Service reviews and approves the program's Hatchery Genetics Management Plan, which is scheduled for 2012. For information, go to [www.efw.bpa.gov/environmental\\_services/Document\\_Library/Grande\\_Ronde/](http://www.efw.bpa.gov/environmental_services/Document_Library/Grande_Ronde/).

### **TRANSMISSION – PROJECTS UNDER REVIEW**

#### **Transmission rates cost of service analysis [Regionwide]**

BPA will hold two workshops in January. On Jan. 11, BPA will review the transmission rates calculation process. On Jan. 19, the discussion will include dynamic transfer capability, generator operation impacts on the hydro system, and the Montana Interti. An updated analysis on rate impacts of rolling in the costs of various portions of BPA's portion of the Eastern Intertie is available at [www.bpa.gov/corporate/ratecase/bp14\\_meeting\\_ws.cfm](http://www.bpa.gov/corporate/ratecase/bp14_meeting_ws.cfm). [SEE CALENDAR]

#### **Alvey-Fairview line rebuild [Lane, Douglas and Coos counties, Ore.]**

BPA accepted comments and held public meetings in December on a proposal to rebuild the Alvey-Fairview No.1 transmission line. For information, go to [http://efw.bpa.gov/environmental\\_services/Document\\_Library/Alvey-Fairview/](http://efw.bpa.gov/environmental_services/Document_Library/Alvey-Fairview/).

#### **Network Open Season and Generation Interconnection Reform [Regionwide]**

BPA hosted a customer meeting Dec. 6 on Precedent Transmission Service Agreement reforms related to the 2008, 2009 and 2010 Network Open Season processes and results. For information, go to [http://transmission.bpa.gov/customer\\_forums/open\\_season\\_2011/](http://transmission.bpa.gov/customer_forums/open_season_2011/). [SEE CALENDAR].

#### **I-5 Corridor Reinforcement Project [Oregon and Washington]**

BPA hosted a public meeting Dec. 8 in Battle Ground, Wash., to provide a project update and listen to input from the public. A draft EIS is scheduled for spring 2012 followed by a formal comment period. For information, go to [www.bpa.gov/go/i5](http://www.bpa.gov/go/i5).

#### **Midway-Benton No.1 Replacement Project [Benton County, Wash.]**

BPA is considering comments on a proposal to rebuild the 115-kV Midway-Benton No. 1 transmission line. A draft EA is expected in summer 2012. For information, go to [http://efw.bpa.gov/environmental\\_services/Document\\_Library/MidwayBentonRebuild/](http://efw.bpa.gov/environmental_services/Document_Library/MidwayBentonRebuild/).

#### **Lund Hill Wind Interconnection Project [Klickitat County, Wash.]**

BPA is deciding whether to interconnect up to 60 megawatts from the proposed Lund Hill Wind Project. BPA expects to complete a ROD in winter 2012. For information, go to [www.bpa.gov/go/lundhillwind](http://www.bpa.gov/go/lundhillwind).

#### **Grand Coulee Dam Line Replacement [Okanogan, Grant and Douglas counties, Wash.]**

BPA released a final EA and FONSI in December 2011 and expects to begin construction in March 2012 that will continue through the winter of 2012 as weather permits. We will host an informal open-house meeting in the Grand Coulee area closer to the start of construction. For information, go to [www.bpa.gov/go/coulee](http://www.bpa.gov/go/coulee).

### **Creston-Bell Transmission Line Rebuild [Lincoln and Spokane counties, Wash.]**

BPA is proposing to rebuild approximately 54 miles of 115-kilovolt wood pole transmission line. For information, go to [http://efw.bpa.gov/environmental\\_services/Document\\_Library/Creston\\_Bell/](http://efw.bpa.gov/environmental_services/Document_Library/Creston_Bell/).

### **Albany-Eugene Transmission Line Rebuild [Lane and Linn counties, Ore.]**

BPA is proposing to rebuild approximately 32 miles of a 115-kilovolt wood pole transmission line. BPA expects to issue a draft EIS in January 2012. For information, go to [http://efw.bpa.gov/environmental\\_services/Document\\_Library/Albany-Eugene\\_Rebuild/](http://efw.bpa.gov/environmental_services/Document_Library/Albany-Eugene_Rebuild/).

### **Hooper Springs Transmission Project [Caribou County, Idaho]**

BPA is proposing a new 115-kilovolt transmission line and a new 138/115-kV substation, called Hooper Springs Substation, in Caribou County, Idaho. For information, go to [www.bpa.gov/go/hoopersprings](http://www.bpa.gov/go/hoopersprings).

### **Juniper Canyon II Wind Interconnection Project [Klickitat County, Wash.]**

BPA is deciding whether to interconnect up to 101 megawatts from the proposed Juniper Canyon II Wind Project. To interconnect the project, BPA would build a new substation, the Wood Creek Substation, along an existing BPA transmission line near Roosevelt, Wash. BPA expects to complete a ROD in winter 2012. For information, go to [www.bpa.gov/go/juniper canyon II](http://www.bpa.gov/go/juniper canyon II).

### **Whistling Ridge Energy Project [Skamania County, Washington]**

BPA and Washington Energy Facility Site Evaluation Council released a final EIS in August. BPA plans to issue a ROD in winter 2012. For information, go to [www.bpa.gov/go/whistling](http://www.bpa.gov/go/whistling).

### **Antelope Mountain Communication Project [Deschutes County, Ore.]**

For information, go to [www.bpa.gov/corporate/public\\_affairs/docs/2010/](http://www.bpa.gov/corporate/public_affairs/docs/2010/).

### **Transmission Services Facility Project [Vancouver, Wash.]**

For information, go to [www.efw.bpa.gov/pdf/Transmission\\_Services\\_September\\_2009.pdf](http://www.efw.bpa.gov/pdf/Transmission_Services_September_2009.pdf).

## **FISH AND WILDLIFE – PROJECTS UNDER CONSTRUCTION**

### **Chief Joseph Hatchery Program [Okanogan County, Wash.]**

For information, go to [www.efw.bpa.gov/environmental\\_services/Document\\_Library/Chief\\_Joseph/](http://www.efw.bpa.gov/environmental_services/Document_Library/Chief_Joseph/).

### **Lyle Falls Fish Passage Project [Klickitat County, Wash.]**

For information, go to [www.efw.bpa.gov/environmental\\_services/Document\\_Library/Lyle\\_Falls/](http://www.efw.bpa.gov/environmental_services/Document_Library/Lyle_Falls/).

## **TRANSMISSION – PROJECTS UNDER CONSTRUCTION**

### **Big Eddy-Knight Transmission Project [Wasco County, Ore., and Klickitat County, Wash.]**

For information, go to [www.efw.bpa.gov/environmental\\_services/Document\\_Library/Big\\_Eddy-Knight/](http://www.efw.bpa.gov/environmental_services/Document_Library/Big_Eddy-Knight/).

### **Bandon-Rogue No.1 Transmission Line Rebuild [Coos and Curry counties, Ore.]**

For information, go to [www.efw.bpa.gov/environmental\\_services/Document\\_Library/Bandon-Rogue\\_Rebuild/](http://www.efw.bpa.gov/environmental_services/Document_Library/Bandon-Rogue_Rebuild/).

### **Walla Walla-Tucannon River Transmission Line Rebuild [Walla Walla and Columbia counties, Wash.]**

For information, go to [www.efw.bpa.gov/environmental\\_services/Document\\_Library/Walla\\_Walla-Tucannon\\_River\\_Rebuild/](http://www.efw.bpa.gov/environmental_services/Document_Library/Walla_Walla-Tucannon_River_Rebuild/).

### **Juniper Canyon I Wind Interconnection Project [Klickitat County, Wash.]**

For information, go to [www.efw.bpa.gov/environmental\\_services/Document\\_Library/Juniper\\_Canyon\\_Wind/](http://www.efw.bpa.gov/environmental_services/Document_Library/Juniper_Canyon_Wind/).

### **Albeni Falls-Sand Creek Transmission Line Project [Bonner County, Idaho]**

For information, go to [www.transmission.bpa.gov/PlanProj/Transmission\\_Projects/default.cfm?page=albe](http://www.transmission.bpa.gov/PlanProj/Transmission_Projects/default.cfm?page=albe).

### **McNary-John Day Transmission Line Project [Sherman and Umatilla counties, Ore.; Klickitat and Benton counties, Wash.]**

For information, go to [www.transmission.bpa.gov/PlanProj/Transmission\\_Projects/](http://www.transmission.bpa.gov/PlanProj/Transmission_Projects/).

### **Leaning Juniper II-Jones Canyon Substation Expansion Wind Interconnection Project [Gilliam County, Ore.]**

For information, go to [www.efw.bpa.gov/environmental\\_services/Document\\_Library/Leaning\\_Juniper/](http://www.efw.bpa.gov/environmental_services/Document_Library/Leaning_Juniper/).

### **Palisades-Goshen Transmission Line Reconstruction [Bonneville and Bingham counties, Idaho]**

For information, go to [www.efw.bpa.gov/environmental\\_services/Document\\_Library/Palisades/](http://www.efw.bpa.gov/environmental_services/Document_Library/Palisades/).

## **CALENDAR OF EVENTS**

To view BPA's public involvement calendar, go to [www.bpa.gov/go/calendar](http://www.bpa.gov/go/calendar). For Americans with Disabilities Act accommodations, please call toll free 800-622-4519.

### **Transmission rates cost of service analysis workshops**

- **Jan. 11**, 9 a.m. to 4 p.m.
- **Jan. 19**, 9 a.m. to 4 p.m.  
BPA Rates Hearing Room, 911 N.E. 11th Ave., Portland, Ore.

### **Quarterly Business Review meeting**

- **Jan. 30**, 10 a.m. to 3:30 p.m., BPA Rates Hearing Room, 911 N.E. 11th Ave., Portland, Ore.

### **Discussion on future programs, costs and rates**

- **Jan. 31**, 10 a.m. to 4 p.m., BPA Rates Hearing Room, 911 N.E. 11th Ave., Portland, Ore.

## **CLOSE OF COMMENT**

Submit comments to [www.bpa.gov/comment](http://www.bpa.gov/comment).

- **Jan. 16**, Springfield Sockeye Hatchery Project

The Journal is a monthly publication of the Bonneville Power Administration. If you have questions or comments, or you want to be added to the mailing list for any project, call toll free (800) 622-4519.

To order copies of documents, call: (800) 622-4520 or (503) 230-7334. Written comments may be sent to: BPA, P.O. Box 14428, Portland, OR 97293-4428. E-mail address: [comment@BPA.gov](mailto:comment@BPA.gov). BPA home page: [www.bpa.gov](http://www.bpa.gov). For details on BPA environmental reviews listed above, including site maps and documents issued to date, see [www.efw.bpa.gov/environmental\\_services/nepadocs.aspx](http://www.efw.bpa.gov/environmental_services/nepadocs.aspx). Process Abbreviations: EA-Environmental Assessment, EIS-Environmental Impact Statement, ESA-Endangered Species Act, FONSI-Finding of No Significant Impact, NOI-Notice of Intent, ROD-Record of Decision.

