

# Journal

July 2013

## BPA welcomes new PUD into public power family

Deep in the woods that blanket Washington's Olympic Peninsula, the Northwest's newest public utility, Jefferson County PUD, began receiving BPA power on April 1. BPA Administrator Bill Drummond celebrated the event in June with Jefferson County's commissioners, managers, staff and community.

Drummond addressed the crowd from the loading dock inside the PUD's newly refurbished operations center outside Port Townsend, Wash. "I would like to congratulate all those who helped make Jefferson County PUD a reality," he said. "Your hard work has ensured that the people in Jefferson County will be served by clean, emission-free hydropower for generations to come."

Jefferson County PUD is the eighth publicly owned utility to be formed in the last 65 years.

"It took a lot of work for Jefferson County PUD to get to this point," Drummond said.

Before signing a power contract in June 2010, the PUD had to meet specific requirements to purchase power from BPA on a preference and priority basis. Prospective PUDs must meet six standards for service. And then it must observe a three-year waiting period before service can begin. BPA uses that period to augment the system to serve the new load.

The PUD purchases 38 average megawatts to serve about 18,000 power customers in Jefferson County. It also serves about 3,500 water and/or sewer customers.

## Colville Tribes celebrate hatchery opening

The Confederated Tribes of the Colville Reservation hosted a First Salmon and ribbon-cutting ceremony on June 20 to celebrate the opening of a state-of-the-art hatchery in Bridgeport, Wash., near Chief Joseph Dam. The facility will significantly boost the availability of chinook salmon for the tribe and for sport fishing in the Columbia River, as well as reintroduce spring chinook to the Okanogan River.

The hatchery, which cost \$50 million to construct, will release up to 2.9 million chinook each year. The construction and program implementation was a collaborative effort



*Chairman John Sirois of the Confederated Tribes of the Colville Reservation cuts the ribbon to open the Chief Joseph Hatchery near Bridgeport, Wash., on June 20. Also pictured from the left is Tom Karier, a Washington member to the Northwest Power and Conservation Council; Terry Brewer, president of Grant PUD Commission; Bill Drummond, administrator for Bonneville Power Administration; Nancy Johnson, chair of the Health and Human Resources Committee for the Colville Business Council; Ernest Brooks of the Colville Business Council; and Col. Bruce Estok, commander of the Seattle District of the U.S. Army Corps of Engineers.*

of the Colville Tribes, the U.S. Army Corps of Engineers, BPA, the Northwest Power and Conservation Council, and the Grant County Public Utility District. Additional partners include the Washington State Parks and Recreation Commission, Douglas County PUD and Chelan County PUD.

"The opening of the Chief Joseph Hatchery is a cause for celebration for the tribe," said John Sirois, tribal chairman. "It commemorates both the return of the chinook salmon and serves as a testament to the important and meaningful work that can be accomplished when federal, tribal and state entities come together for the common purpose of restoring our Columbia River."

The completed hatchery is due in part to a historic 2008 agreement, the Columbia Basin Fish Accords, which enables a greater level of cooperation between the federal



agencies in the Northwest that are responsible for salmon recovery efforts and the tribes, as well as providing assured funding for numerous projects over a 10-year period.

“At the heart of this project is a lasting partnership that leverages the combined capabilities of the Colville Tribes and state and federal agencies to bring ecological, social and economic benefit to the Columbia River Basin,” said Lorri Bodi, vice president of BPA’s Environment, Fish and Wildlife department.

The main hatchery facility is on 15 acres of the Corps’ property on the north bank of the Columbia River within the boundaries of the Colville Reservation. The Colville Tribes will manage the hatchery under guidelines recommended by the Hatchery Scientific Review Group, a committee of scientists that reviewed all salmon and steelhead hatcheries in the Columbia Basin at the request of the U.S. Congress.

The hatchery will help to rebuild naturally spawning salmon runs in areas impacted by the construction and operation of the Federal Columbia River Power System as well as provide partial mitigation for hydroelectric project impacts to Upper Columbia chinook salmon associated with the operation of the Mid-Columbia PUD dams on the Columbia River.

## Rare habitat protected

The effort to rebuild salmon and steelhead runs to the Willamette Valley was bolstered by a successful habitat conservation effort on the North Santiam River, once a powerhouse of fish production in the Willamette Basin. A partnership between Western Rivers Conservancy, the Confederated Tribes of the Grand Ronde, BPA and the Oregon Department of Fish and Wildlife conserves two miles of the North Santiam River. The tribe will serve as the sponsor for the project, which protects 338 acres with benefits for fish and wildlife.

Once proposed for gravel mining, the project lands include riparian features, with 130 acres of floodplain forest, numerous winding side channels, 20 acres of wetlands and a unique native upland prairie. The riparian features are important to winter steelhead, spring chinook, Pacific lamprey, Oregon chub and other species that inhabit the river.

“The tribe has the natural resource expertise to care for this vital habitat and shares WRC’s vision to protect and restore a remarkable block of riverfront, forests and wetlands,” said Reyn Leno, tribal chairman.

The tribe will monitor fish and wildlife habitat and develop a management plan for the land. The public will have an opportunity to provide input on the plan, which will be submitted to BPA for final approval. The tribe plans to

replant several farm fields with culturally important native species. This will expand what is already the largest and oldest riverside forest in the area, when combined with an adjacent tract owned by the Bureau of Land Management.

The North Santiam River drains a large portion of the Central Oregon Cascades into the Willamette River. At one time, it produced two-thirds of the Willamette River’s steelhead and a third of its spring chinook. These runs have declined steeply and are listed as threatened under the Endangered Species Act, primarily due to population growth and development in the Willamette Valley.

Funding for the project was provided by BPA through the Willamette Wildlife Habitat Agreement, signed in 2010. This agreement between Oregon and BPA provides stable funding for at least 19,000 acres in wildlife habitat acquisitions in the Willamette Valley to bring BPA’s total conservation of lands there to 26,000 acres. This land acquisition will help to offset impacts of the federal dams on the Willamette River and its tributaries.

## BPA builds a new wind forecast

Sitting in a dark room, enfolded by screens of twinkling data, Adam Caccavano mediates a powerful dance between Northwest wind and water.

As BPA duty schedulers like Caccavano coordinate the flows of water and hydroelectric power generation at the 31 federal dams, a new tool called the Super Forecast is helping them better anticipate the action of the wind across the turbines of BPA customers around the Columbia River Basin.

“It’s definitely one of the most valuable things that’s been done in the last few years to help us perform our jobs,” says Caccavano.

The Super Forecast methodology, a software program launched in March, is another step in BPA’s efforts to ensure the safe and reliable integration of variable resources, such as wind power.

“This is a great example of the type of innovation and creativity that has made BPA a world leader in renewable energy integration,” says Elliot Mainzer, BPA acting deputy administrator. “Hats off to Scott and the team.”

The system of federal dams in the Northwest undergirds the stability of the transmission grid in the renewable energy era. Federal hydro managers hold water and generation capacity in reserve to balance wind’s variability. Meanwhile, the system stretches and flexes to provide navigation, flood control, irrigation and protection for migrating fish. BPA and the region are seeking opportunities to use the finite resources of the Columbia system more efficiently.

The agency collaborated with wind customers for four years to arrange to collect the additional data that feeds the wind forecasting efforts. BPA is now able to monitor wind speed at 31 wind plants integrated by the agency.

The site-specific wind data is provided to BPA's two private wind-power forecasting vendors, strengthening their predictions. Each company's forecast varies based on proprietary factors, including which data it chooses to emphasize.

"Some forecasts are better in certain time frames than others — like short-term or long-term forecasting, or they'll tend to be more accurate for some sites than others," says analyst Nathan Henshaw. "That reflects the variety of different terrain in our balancing area and the complexity of the Gorge."

The BPA-developed software operates like a mini-Kentucky Derby, pitting vendor forecasts against each other every hour around the clock. The ingenious algorithm evaluates their accuracy against the actual behavior of the wind and declares which one hit the winner's circle most often over the past seven days — at each wind site. The winner becomes the official BPA forecast for the upcoming hour at that site.

To aid in transmission scheduling, BPA is making the project-specific forecasts available to wind generation owners and their scheduling agents at no charge (costs are recovered through rates).

By getting the most out of vendor forecasts, the Super Forecast also helps BPA fulfill the Department of Energy's top recommendations to balancing authorities on the integration of wind: to have a wind forecasting program and to use multiple forecasting vendors.

## **Power system gets smarter with new microgrid**

The Northwest is another step closer to a smarter, more efficient power grid thanks to a new "microgrid" facility in Salem, Ore.

Portland General Electric unveiled its new Smart Power Center at a May 31 ceremony. The new 8,000-square-foot facility is part of a regionwide umbrella project — the Pacific Northwest Smart Grid Demonstration Project — that's testing and validating smart technologies and capabilities. A 5-megawatt battery system is the star of the new center and the largest application of energy storage in the Battelle-led demo project — the largest regional smart grid project in the country, involving 17 organizations across five Northwest states.

PGE, an investor-owned utility that serves more than 821,000 customers in northwest Oregon, is one of 11 electric utilities participating in the five-year, \$178-million regional

smart grid project that launched in 2010. About half of PGE's \$23-million involvement in the project was paid for with DOE funds, including the \$10-million Smart Power Center.

PGE's new center will test how smart assets can work together at the regional level to optimize the Northwest's abundance of renewable resources and provide needed balancing services that can enhance the reliability of the grid. The 5-MW lithium-ion battery system is a component of the microgrid facility, which is a highly reliable, localized power zone that can provide reserve power to about 500 local customers if there's a power outage.

Oregon Sen. Ron Wyden, chairman of the U.S. Senate Energy and Natural Resources Committee and a champion of smart grid and energy storage initiatives, joined Assistant Secretary Hoffman as a speaker at the grand opening.

"Increasing renewables, reliability and storage moves our country toward a low-carbon, more sustainable energy future," Sen. Wyden said. "This Smart Power Center and the Pacific Northwest Smart Grid Demonstration Project show that when it comes to energy innovation, Oregon takes a back seat to no one."

The energy storage system will respond to regional grid conditions with the help of a key aspect of the demonstration project called transactive control. It helps power producers and users decide when and where the area's power will be consumed by automatically responding to signals representing future power costs and planned energy consumption. The Salem battery will use the signal to coordinate its charge and discharge cycles with the power grid's supply and demand.

BPA is a major partner in the demonstration project and is leading the development of a regional business case for investing in smart grid infrastructure and technologies.

"New, smarter technologies can help us make the most of the region's renewable resources, improve how we operate the power system and bolster its resilience," said Elliot Mainzer, BPA acting deputy administrator. "We're looking closely at the benefits and economics so we can tell Northwest electric utilities and ratepayers which 'smart' investments will provide long-term value."

BPA is working to support utilities in the project as they unite to address both regional and utility requirements. The utilities have varying goals but are working together to enhance the economics, reliability and integration of renewables for the power system. BPA has taken a lead role in assuring that the utility perspective as well as the regional perspective is addressed to meet the needs of power consumers throughout the Northwest. BPA's Technology Innovation Office is contributing \$10 million to the five-year project, which is matched with an additional \$10 million from DOE.

# Public Involvement [updates & Notices]

## AGENCY PROJECTS

### Quarterly Business Review [Regionwide]

BPA will hold its Quarterly Business Review on July 30. These meetings focus on BPA's finances with a review of current fiscal year actual financial results compared to financial forecasts, such as the start-of-year target, as well as other current agency topics. BPA will also report on how actual spending compares to rate case assumptions. For information, go to [www.bpa.gov/goto/QBR](http://www.bpa.gov/goto/QBR).

### Columbia River Treaty 2014/2024 Review [Regionwide]

BPA and the U.S. Army Corps of Engineers have released a working draft of a regional recommendation concerning the future of the Columbia River Treaty with Canada. It is a result of a multi-year, collaborative process between the U.S. Entity, regional sovereigns and the public. As the name describes, this document is still very much a draft. It is the basis for further regional discussion with both sovereigns and stakeholders. Discussion and refinement of the working draft will continue through the summer. The U.S. Entity remains receptive and open to stakeholder perspectives and comments.

Interested parties may comment using the Treaty Review website, with comments requested by early August. The U.S. Entity anticipates that a final draft regional recommendation, endorsed by the sovereigns participating in the process, will be available for stakeholder and public comment in September. The final regional recommendation is due to the U.S. Department of State in December. To view the working draft recommendation or submit comments, go to [www.crt2014-2024review.gov](http://www.crt2014-2024review.gov), email [treatyreview@bpa.gov](mailto:treatyreview@bpa.gov), or call BPA at 800-622-4519 or the Corps at 503-808-4510.

### BP-14 and OS-14 Rate Cases [Regionwide]

On July 22, BPA expects to issue the final ROD for the BP-14 rate proceeding to set power and transmission rates for the 2014-2015 fiscal years. In a separate docket, OS-14, BPA proposes rates to recover the costs incurred under the Oversupply Management Protocol. For information, go to [www.bpa.gov/goto/RateCase](http://www.bpa.gov/goto/RateCase).

## TRANSMISSION

### Keeler-to-Pennwalt Transmission Line Removal Project [Multnomah and Washington counties, Ore.]

Beginning in mid-July, BPA will remove two segments of old, unused transmission line. The lines have been out of service for many years. If left unattended, they could pose a public safety risk. BPA is working with the Portland Parks and Recreation Department on the sections of this unique project that pass through Portland's Forest Park.

For information, go to [www.bpa.gov/goto/WoodPoleRemoval](http://www.bpa.gov/goto/WoodPoleRemoval).

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

BPA released a draft EIS and sought comments in March 2013. BPA will respond to comments received in the final EIS. BPA sent a letter to update interested parties in June and share our expected next steps toward identifying a preferred alternative, completing the EIS process and reaching a decision. For more information, go to [www.bpa.gov/goto/HooperSprings](http://www.bpa.gov/goto/HooperSprings).

### Boyer-Tillamook Access Road Improvement Project [Tillamook and Yamhill counties, Ore.]

BPA expects to release a preliminary EA this summer on a project to improve a 13-mile portion of the access road system for the 115-kV Boyer-Tillamook No. 1 transmission line. For information, go to [www.bpa.gov/goto/BoyerTillamookAccessRoads](http://www.bpa.gov/goto/BoyerTillamookAccessRoads).

### Keeler-to-Tillamook Transmission Line Rebuild Project [Washington and Tillamook counties, Ore.]

BPA plans to release an EA this summer on its proposal to rebuild 58 miles of the existing 115-kV transmission lines between Hillsboro and Tillamook, Ore. For information, go to [www.bpa.gov/goto/KeelerTillamook](http://www.bpa.gov/goto/KeelerTillamook).

### I-5 Corridor Reinforcement Project [Cowlitz and Clark counties, Wash., and Multnomah County, Ore.]

All comments that BPA accepted on the draft EIS through March 25 are posted online. BPA will respond to comments in the final EIS, expected in 2014. BPA will attend local fairs and festivals in southwest Washington in July to provide general project information and answer questions. For information, go to [www.bpa.gov/goto/i-5](http://www.bpa.gov/goto/i-5) or call 800-230-6593.

## FOR MORE INFORMATION

Information on other projects under environmental review is available at [www.bpa.gov/goto/NEPA](http://www.bpa.gov/goto/NEPA).

For information about the National Environmental Policy Act in general, go to [www.bpa.gov/goto/environmentalplanning](http://www.bpa.gov/goto/environmentalplanning).

## CALENDAR OF EVENTS

### Quarterly Business Review

- **July 30**, 9:30 a.m. to 3 p.m., Rates Hearing Room, 1201 Lloyd Blvd., Suite 200, Portland, Ore.

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

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. Email 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.

