

Journal

April 2011

BPA to build new transmission line

BPA will begin construction this summer on a new transmission line across southeast Washington. The project is expected to provide up to 170 jobs and will carry 840 additional megawatts of renewable wind energy — enough to power about half a million Northwest homes when the wind is blowing.

The new Central Ferry-Lower Monumental line will extend west about 38 miles from a new Central Ferry Substation in Garfield County, through Columbia County to BPA's Lower Monumental Substation in Walla Walla County.

"Infrastructure like this is vital to regional and national efforts to deliver renewable energy and enhance our energy independence," said Larry Bekkedahl, vice president of engineering and technical services. "The jobs associated with the project will also be a welcome boost to local and regional economies."

The new line could be energized as soon as summer 2013.

BPA helps Forest Service save energy

In West Yellowstone, Mont., where the daily low temperature is below freezing nine months a year, energy efficiency measures can make a big difference.



That's why the Hebgen Lake Ranger District of the Gallatin National Forest is partnering with BPA and the Fall River Rural Electric Cooperative to reduce the amount of energy used in Forest Service facilities. The Forest Service stands to reduce energy use by 25 percent, saving thousands of dollars annually.

Energy efficiency specialists from BPA and Fall River conducted an energy audit on the Forest Service buildings in 2010. Based on those audit results, a number of actions are being implemented. Already, 21 old inefficient refrigerators have been recycled and replaced with super-efficient models.

"Not only did BPA help us find these refrigerators locally at a great price, they gave us a \$525 rebate to help lower the total cost of the refrigerators and paid over \$2,600 to have the old ones recycled," said Cavan Fitzsimmons, Hebgen Lake District Ranger.

Other improvements will include replacing old lighting, installing occupancy sensors and replacing inefficient ceiling radiant heat with more efficient convective electric wall heaters with thermostats. To help fund this effort, BPA is providing more than \$60,000 in rebates and lighting incentives.

World watches BPA track wind

A near-real-time display of all energy feeding into the portion of the electric grid BPA controls has become one of the most-watched parts of the agency's website. The new monitor displays the output of all the wind, thermal and hydro generation in BPA's balancing authority against the agency's load. The display is updated every five minutes and is now watched carefully by researchers, energy experts and curious onlookers around the world.

The graph shows how hydro generation and load fluctuate in parallel. Hydro generation is well beyond load at this time of year because BPA exports power beyond the limited boundaries of its balancing authority. Thermal generation follows its own logic and fluctuates little. Wind generation follows wind speed, which is entirely unrelated to load.



“About three years ago, wind generation was increasing enough that people started talking about the issues involved in integrating it,” said Bart McManus, electrical engineer. One of the big issues was how backup energy reserves could balance the ups and downs of wind generation.

“Researchers at universities and laboratories were eager to begin conducting analyses, but they lacked data,” McManus said. “People wanted to know what the issues were. They’d ask, ‘What are you really seeing?’”

McManus worked with Roy Ellis, who recently retired, to set about showing them what BPA sees in its system. The result is a data gold mine of 19 charts and tables BPA has made publicly available through its website. The information combines near-real-time data with data going back to 2007. It also provides a list of all the wind generators in BPA’s balancing authority; a graphic, displaying the history of the growth of wind; a list of wind generators with nameplate capacities; and more.

The response has been impressive. “People at a company researching wind integration in utilities for the Department of Energy tell me there are only about six sources in the world publishing this kind of information, and that we are at the top of the list for the amount of data provided,” said McManus.

Many utilities consider such information proprietary or fear it will give users unfair advantage in the marketplace. McManus isn’t buying those arguments. “If everyone has access to the information,” he says, “no one has unfair advantage. And the generation data is a total from all sources so it is not possible to get information on the output from any one generation source.”

The growing volume of data helps researchers examine the variability of wind generation over years and how that variability relates to the growth of installed wind capacity. Strategies to improve the integration of wind power into the grid will have to be based on data. BPA is producing the data, and the world is monitoring it.

See the data at www.transmission.bpa.gov/Business/Operations/Wind/default.aspx.

Bond sale saves millions

BPA and Energy Northwest — operator of the region’s only nuclear plant — are restructuring debt to save regional ratepayers about \$182 million in debt service costs over the next two fiscal years. The deal will be complete in early April.

In the summer of 2010, BPA, its utility customers and other interested parties engaged in a thorough scrubbing of the agency’s costs preliminary to BPA setting its rates for the 2012–2013 fiscal years. Participants noticed that BPA’s nonfederal (Energy Northwest) debt service jumped up in fiscal 2012, continued to climb for a few years and then plummeted sharply in about 2019.

Energy Northwest and BPA have a long history of cooperation on bond refinancing to reduce debt service costs. This time, the two agreed to extend and restructure about \$1 billion in bonds over a two-year period. The impact of the refinancing is to smooth out the ups and downs of the debt service over the life of the bonds and to reduce debt service costs in the next rate period.



Juj named VP

Hardev Juj is stepping up from the acting role to become vice president of Transmission Planning and Asset Management.

He has served as acting vice president for that organization since spring 2009. In this capacity, Juj is responsible for planning for the future of BPA’s

more than 15,000 circuit miles of transmission lines. He will also serve as BPA’s chief engineer.

“Hardev has almost three decades of experience in various transmission-related capacities with Northwest utilities,” said Brian Silverstein, senior vice president of Transmission Services. “During his time at BPA, he has helped ensure our success in integrating more than 3,000 megawatts of wind energy and overseen development of asset plans to upgrade our aging infrastructure and help keep the lights on in the Northwest.”

When Juj joined BPA in 2007, he brought 26 years of electric utility experience to his role as Transmission Services’ manager of System Operations. In addition to his power system planning and operations expertise, Juj gained managerial experience as the senior principal professional engineer for Tacoma Public Utilities and as director of asset management at Seattle City Light.

Juj is the chairman for Northwest Power Pool’s board of directors and serves on the North American Electric Reliability Corporation’s Members Representative Committee. He also is a member of the University of Washington’s Industrial Advisory Board and the Electric Energy Industry Consortium. Juj holds a bachelor’s and a master’s in electrical engineering, specializing in system protection.

Public Involvement [Updates & Notices]

AGENCY PROJECTS

Environmental redispach draft ROD [Regionwide]

The public comment period for BPA's draft record of decision on environmental redispach and negative pricing closed March 11. BPA received and is now responding to 39 comments. In March, BPA released a proposed business practice describing how the agency would approach an environmental redispach event. BPA hosted a public conference call March 25 to review the proposed BP, answer specific questions and seek comments. Based on input received, BPA expects to make a final decision on environmental redispach and post the final business practice in April. For more information, go to www.bpa.gov/corporate/AgencyTopics/ColumbiaRiverHighWaterMgmt/.

Quarterly Business Review [Regionwide]

BPA will hold its Quarterly Business Review May 3. BPA staff will present and discuss financial results through March 31 and the FY 2011 second quarter forecast. BPA will post a final agenda April 15 and presentation materials April 28 at www.bpa.gov/corporate/finance/lbr/qbr. [SEE CALENDAR].

Integrated Program Review process improvement [Regionwide]

BPA is hosting a meeting April 12 for customers and past participants of the Integrated Program Review process to discuss possible improvements to IPR materials, meeting discussions and technical-level participation. If you would like to participate, call Stephanie Adams at 503-230-4671, or email her at saadams@bpa.gov no later than April 8. [SEE CALENDAR]

Energy Efficiency Post-2011 Phase 2 Implementation Proposal [Regionwide]

Five workgroups provided recommendations to BPA on the implementation of energy efficiency programs during Phase 2 of the Post-2011 public process. BPA considered these recommendations and in January released a proposal for public comment and held a series of public meetings. BPA released a response to public comments last month, thereby closing out the Post-2011 public process. Accompanying the response will be the final Post-2011 Energy Efficiency Implementation Program, which will contain the Post-2011 energy efficiency implementation details. These details will be published in the Energy Efficiency Implementation Manual, which will be updated accordingly on April 1 to allow six months notice before those details take effect Oct 1. For information, go to www.bpa.gov/Energy/IV/post-2011/.

FISH AND WILDLIFE – PROJECTS UNDER REVIEW

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

For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Mid-Columbia_Coho_Restoration_Project/.

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

For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Grande_Ronde/.

Klickitat Hatchery Program [Klickitat and Yakima counties, Wash.]

For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Klickitat_Hatchery_Program/.

POWER – PROJECTS UNDER REVIEW

Customer Contract High Water Mark Calculations [Regionwide]

BPA accepted written comments through March 28 on its proposed final customer Contract High Water Mark calculations. The CHWM calculations are established in the Tiered Rate Methodology and will determine how much power a customer is eligible to purchase at BPA's Tier 1 rate. BPA has worked closely with customers over the last year and appreciates all the effort that has gone into refining and finalizing the data. The CHWM calculations are posted at www.bpa.gov/power/pl/regionaldialogue/implementation/documents/#HW.

Residential Exchange Program [Regionwide]

In early March, BPA sent a proposed Residential Exchange Program settlement agreement to its customers and others for their consideration and action. Representatives of BPA's investor-owned utility customers, the majority of BPA's consumer-owned utility customers and trade associations, the Citizens Utility Board — an IOU consumer organization — and IOU regulators negotiated the proposed agreement. If a "critical mass" approves the settlement, and if the agency signs the agreement at the conclusion of the REP-12 proceeding, it would replace the current REP beginning in FY 2012. "Critical mass" includes a threshold requirement that 91 percent of the COU load sign the agreement. BPA's ex parte rules prohibit BPA employees from engaging in off-the-record communications with non-BPA/DOE staff on this 7(i) proceeding. The staff position in the REP-12 initial proposal recommends that BPA adopt the agreement. The agreement has been posted at www.bpa.gov/corporate/ratecase/2012/rep-12.cfm.

TRANSMISSION – PROJECTS UNDER REVIEW

Open Access Transmission Tariff [Regionwide]

BPA is hosting a series of customer workshops on transmission tariff issues. The next workshop will be April 13 [SEE CALENDAR].

I-5 Corridor Reinforcement Project [Oregon and Washington]

BPA is proposing a new 500-kilovolt transmission line from a new substation near Castle Rock, Wash., to a new substation near BPA's Troutdale Substation, Troutdale, Ore. A draft EIS is scheduled for fall 2011 followed by a formal comment period. For information, go to www.bpa.gov/go/i5.

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

BPA is accepting comments through April 18 on the proposed rebuild of approximately 54 miles of 115-kilovolt wood pole transmission line. The agency held public meetings in March. For information, go to http://efw.bpa.gov/environmental_services/Document_Library/Creston_Bell/.

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

BPA is proposing a new 500-kilovolt transmission line between BPA's existing Big Eddy Substation in The Dalles, Ore., and a new substation (Knight) under an existing BPA line near Goldendale, Wash. The final EIS is expected in early summer, followed by ROD in late summer. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Big_Eddy-Knight/.

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. A draft EIS is expected in summer 2011. For information, go to www.bpa.gov/go/albany-eugene

Central Ferry-Lower Monumental Transmission Line Project [Garfield, Columbia and Walla Walla counties, Wash.]

BPA decided to build a new 500-kilovolt transmission line between the new BPA Central Ferry Substation in Garfield County and BPA's Lower Monumental Substation in Walla Walla County, Wash. BPA released the ROD in March. Construction could begin this summer. For information, go to www.bpa.gov/go/centralferrylomo.

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.

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

BPA is proposing to rebuild the 47-mile Walla Walla-Tucannon River 115-kilovolt transmission line. The agency will produce a preliminary EA this spring. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Walla_Walla-Tucannon_River_Rebuild/.

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

BPA is proposing to rebuild the 115-kilovolt wood-pole Bandon-Rogue line. The agency released a preliminary EA in February for public review and comment through March 11. BPA will produce a final EA in spring 2011. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Bandon-Rogue_Rebuild/.

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

The Bureau of Reclamation asked BPA to construct six new 500-kilovolt overhead transmission lines at Grand Coulee Dam to replace aging underground lines between the dam's third powerhouse and the 500-kV spreading yard. An EA is expected in early spring 2011. For information, go to www.bpa.gov/go/coulee/.

Radar Ridge Wind Project Interconnection [Pacific County, Wash.]

For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Radar_Ridge_Wind_Project/.

Whistling Ridge Energy Project [Skamania County, Wash.]

For information, go to www.bpa.gov/go/whistling.

Horn Butte Wind Project [Gilliam and Morrow counties, Ore.]

For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Horn_Butte_Wind_Project/.

Antelope Mountain Communication Project [Deschutes County, Ore.]

For information, go to 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.

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/.

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

For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Lyle_Falls/.

TRANSMISSION – PROJECTS UNDER CONSTRUCTION

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

For information, go to 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.

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/.

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/.

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

For information, go to 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. For Americans with Disabilities Act accommodations, please call toll free 800-622-4519.

IPR process improvement

- **April 12**, 9 a.m. to noon, BPA Rates Hearing Room, 911 N.E. 11th Avenue, Portland, Ore.

Open Access Transmission Tariff workshop

- **April 13**, 8:30 a.m. to 4:30 p.m., Skybridge Conference Room B, 2 World Trade Center, 121 S.W. Salmon St., Portland, Ore.

Quarterly Business Review

- **May 3**, 1 to 4 p.m., BPA Rates Hearing Room, 911 N.E. 11th Avenue, Portland, Ore.

CLOSE OF COMMENT

- **April 18**, Creston-Bell transmission line rebuild

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. BPA home page: 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. 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.

