



Journal

May 2014

BPA breaks ground on new power line

BPA will begin constructing the Central Ferry-Lower Monumental transmission line this month. The new line is expected to carry more than 800 megawatts of renewable wind energy, enough to power about half a million Northwest homes when the wind is blowing.

The 38-mile, 500-kilovolt line in Washington will connect the new Central Ferry Substation in Garfield County to the existing Lower Monumental Substation in Walla Walla County. It is expected to be energized in December 2015.

“Building the right facilities in the right place at the right time is a key principle of our long-term transmission services planning process,” said Richard Shaheen, BPA vice president for Engineering and Technical Services. “Specifically, this project will add critical transmission grid capacity, support new transmission requests from generators in the Snake River area and be a welcome boost to local and regional economies.”

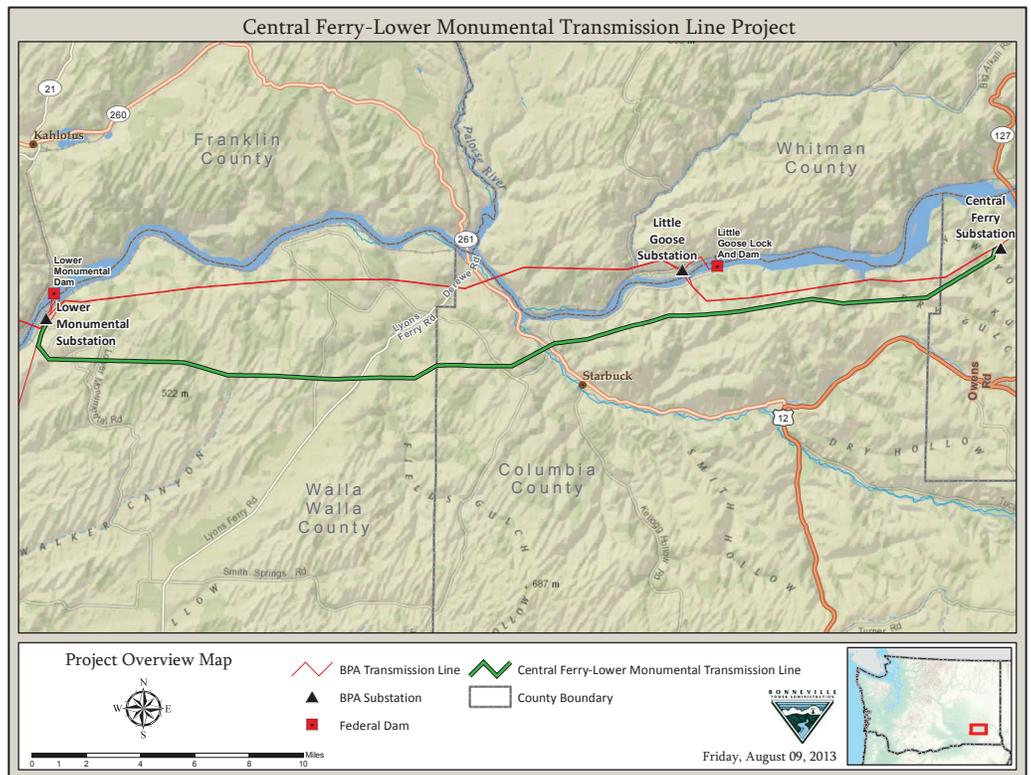
For more than 75 years, BPA has been the major developer of energy infrastructure in the Pacific Northwest. Electric utilities and power consumers depend on BPA to maintain reliable transmission service at low rates and meet growing demands for electricity.

Numerous power generation projects, including large wind projects, have requested interconnection with the BPA transmission system in the Snake River area. After studying the transmission system, BPA determined that there is not enough available transmission capacity to accommodate the requests. The new line will allow BPA to meet the transmission requests and

allow additional power to flow between areas east of the Cascade Range to heavily populated areas in the west.

BPA put construction on hold in August 2011 because of uncertainties regarding the need for the new line. However, in August 2013, BPA announced it was moving forward with construction. Existing customer need coupled with an agreement for Portland General Electric to acquire phase two of Puget Sound Energy’s Lower Snake River Wind Project, which PGE renamed the Tucannon River Wind Farm, required construction activities to begin this spring.

The Tucannon River Wind Farm will help PGE satisfy Oregon’s renewable energy standard, which requires the utility to supply 15 percent of the energy its customers use from renewable resources by 2015 and 25 percent by 2025.



The new transmission line will provide capacity for more renewable resources in southeast Washington.





Water volume looks good; will runoff shape follow suit?

The Northwest is once again in a weather-pattern identity crisis. The water-supply forecast has gone from “okay” in late 2013, to “oh no — a drought,” in early February, to “looking great,” most recently. But what has been a bumpy ride since December could become challenging again very quickly.

Let’s review: The first forecast in December 2013 predicted a water year in the mid-90-percent range of average. In late January and early February, forecasts dipped to near 80 percent of average.

Then in late February and March, precipitation increased — big time. The second-wettest February on record in the Columbia Basin (going back to 1977) was followed by

the wettest March on record. The water-supply forecast from the Northwest River Forecast Center stood at 106 percent of average as of April 22.

While the volume of water for the spring and summer runoff season is looking good, BPA must closely monitor how the spring snowmelt progresses, which is called the “shape” of the runoff. The ideal shape is slow, consistent snowmelt that gradually drains into the Columbia River system well into August. This provides ample water for fish passage, power production and other Federal Columbia River Power System functions.

All it takes is a few too many warm, rainy days in the mountains east of the Cascades to upset this delicate balance. If too much snow becomes water too quickly in May and June, the fish and financial outlook for summer becomes much more challenging.

“Snowpack is really our largest and most important storage reservoir,” says Erik Pytlak, who manages the weather and streamflow forecasting group in BPA Power Services. “Unlike the dams, which we use to control river flows out of upstream reservoirs, we can’t control how warm or wet it may get. That basically means our largest reservoir is uncontrolled. The good news, though, is that we can forecast its behavior with a little bit of lead time. So the main mission of our weather and hydrologic forecasters this time of year is to catch any sudden changes in how the snowmelt is progressing, and give us time to prepare and adjust for what is about to head our way.”

Steve Kerns, manager of BPA’s short-term planning group, says his team is watching the forecast carefully. “An increasing volume forecast will have us concerned about oversupply conditions in spring and early summer. On the other hand,” he adds, “rapid runoff or a drop in the volume forecast may make it challenging to meet peak summer loads.”

Obviously, there is more to come. But right now, at least, things are looking good.

Prepping students for careers in energy

BPA has partnered with Oregon BEST, a nonprofit organization for advancing clean technology innovations, in an academic prize program in which the region’s most promising university students will search for solutions to some of the energy industry’s biggest challenges.

The Northwest Energy Experience, or NW Energy XP, pairs select teams of university students and faculty advisers with BPA subject matter experts. Oregon BEST kicked off the NW Energy XP activities at a luncheon April 11 in Portland, Ore.

BPA Administrator Elliot Mainzer says the goal of the prize program is to build regional expertise in the power industry and attract more top talent to careers in energy.

“We’re creating a Northwest energy innovation lab that equips students with the skills and mindset essential to contributing to our energy future,” Mainzer says.

The program provides teams of faculty and students an opportunity to explore topics in the utility industry, especially those that might lead to the integration of new, clean technologies. A unique aspect of the program is that it requires each team to include members from at least two universities.

“Building strong relationships between universities and between disciplines is an important part of developing professional networks for our future industry leaders,” says Johanna Brickman, Oregon BEST’s director of collaborative innovation.

At the April 11 kickoff, the prizewinners from the initial participating schools — Oregon State University, Oregon Institute of Technology, Portland State University and Washington State University, Vancouver — formed three inter-university teams and picked a study topic.

A team of students from Oregon Tech and WSU will study distributed generation modeling. A second team of students from OSU and PSU will work on optimizing hybrid electrical systems with consideration to climate modeling. And a third team from OSU and PSU will study synchrophasor data. Synchrophasors are small devices installed at substations that transmit precise current, frequency and voltage readings, giving operators a wide-area view of the power system.

Each participating university’s foundation has been given \$50,000 to award to its winning students in the form of tuition credits as well as a project stipend. The program is sponsored by BPA’s Technology Innovation Office.

BPA and Oregon BEST are looking for other Northwest universities and industry partners to join in sponsoring this prize. The next round of awards will be made in October. Visit www.oregonbest.org to learn more.

Credit ratings agencies affirm BPA is stable

The nation’s three major investment credit ratings agencies have affirmed BPA is on solid financial footing. In late March, Fitch rated BPA-backed bonds AA with a stable outlook. Moody’s Investors Service also called BPA’s financial outlook stable with an Aa1 rating. Finally, Standard & Poor’s gave the third stable outlook, assigning

BPA-backed financial instruments an AA- rating. The ratings are unchanged from the last review.

BPA requested the review following a \$634 million bond sale, which BPA and Energy Northwest offered the capital markets on April 8. These bonds will finance capital improvements at Energy Northwest’s Columbia Generating Station nuclear plant, restructure Energy Northwest’s debt portfolio to align it more closely with Columbia’s asset life and glean refinancing savings of about \$38.6 million across fiscal years 2014 through 2024.

Javier Fernandez, BPA’s acting treasurer, was buoyed by the market’s response.

“The April 8 bond-pricing results are a direct consequence of BPA’s financial strength, as evidenced by our credit ratings and active investor outreach,” says Fernandez. “I am thrilled by the outstanding pricing results, which are a testament to our commitment to delivering the highest value to our ratepayers.”

In reviewing the BPA-supported Energy Northwest bonds, the ratings agencies confirmed their previous ratings and noted several BPA strengths that should inspire investor confidence. The fact that BPA is a federal entity with the support of the U.S. government lends significant credibility to BPA operations. This government support is explicit, as evidenced by BPA’s \$7.7 billion U.S. Treasury borrowing authority, and implicit, due to BPA’s high-profile role as a stable entity in the Pacific Northwest and its position within the Department of Energy. The agencies also cited BPA’s competitive rates and long-term power contracts, which will provide a revenue stream through 2028, as factors contributing to the across-the-board stable outlook.

While a stable rating is good, BPA is always looking for opportunities to improve. Higher ratings would benefit BPA’s ratepayers by lowering the costs, such as interest on debt, that are tied to bond ratings. When BPA’s cost of borrowing money is lower, fewer funds must be recovered through rates to repay it.

The ratings agencies noted that BPA faces several challenges. Some, such as the effect of hydro conditions on financial performance, are not within BPA’s control, but are mitigated in risk analyses and planning processes. But other challenges are within BPA’s control, such as its financial reserves position and overall debt structure and management. To address these issues, BPA is planning a series of public discussions on financial reserves and debt management later this summer as part of its Integrated Program Review.

Public Involvement [Updates & Notices]

AGENCY PROJECTS

Integrated Program Review [Regionwide]

The next meeting will be held May 28. The IPR occurs every two years and gives participants an opportunity to review and comment on BPA's program spending level estimates before they are set for inclusion in rate cases. For information, go to www.bpa.gov/goto/IPR.

Spring Operations and Oversupply [Regionwide]

BPA will monitor hydropower and transmission system conditions through the spring. As needed, BPA will host conference calls to provide updates on system conditions and the potential for oversupply. Current operations information is available at www.bpa.gov/goto/oversupply.

BP-16 Rate Case Workshops [Regionwide]

BPA will hold a series of workshops through August in preparation for the BP-16 rate proceeding to set power, transmission and ancillary service rates for fiscal years 2016–2017. For information, go to www.bpa.gov/goto/BP16.

POWER

Energy Efficiency Post-2011 Policy Review [Regionwide]

The next regional meeting will be May 8 in Kennewick, Wash. BPA is conducting this public process to review and consider improvements to its energy efficiency policy framework and associated implementation elements that were put in place Oct. 1, 2011. The Post-2011 Review will be conducted by five work groups that will discuss issues and report out at regional meetings. For information, go to www.bpa.gov/Energy/N/post-2011/.

TRANSMISSION

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

BPA will begin construction this month on the 500-kilovolt Central Ferry-Lower Monumental Transmission Line in eastern Washington. Energization is expected in December 2015. For information, go to www.bpa.gov/go/centralferrylomo.

Hooper Springs Transmission Line Project [Caribou County, Idaho]

BPA has released a supplemental draft Environmental Impact Statement that includes a preferred alternative for the proposed transmission line in Caribou County, Idaho. BPA will host a public meeting on May 27 in Soda Springs, Idaho, and accept comments through Aug. 7. For information, go to www.bpa.gov/goto/hoopersprings.

Transmission System Segmentation Policy Review [Regionwide]

BPA is conducting a public review of its segmentation policy. This process is a result of the BP-14 rate case, in which a number of parties weighed in on a variety of segmentation concerns and offered recommendations for alternative methodologies. Segmentation is a part of the cost allocation process in determining transmission rates. For information, go to www.bpa.gov/goto/BP16.

Pacific Direct Current Intertie Upgrade Project [Lake, Jefferson, Crook, Deschutes and Wasco counties, Ore.]

BPA expects to issue the final environmental assessment in May. The project includes proposed upgrades on the DC transmission line from Celilo Substation south to the Nevada-Oregon border. For information, go to www.bpa.gov/goto/PDCIUpgrade.

CALENDAR OF EVENTS

EE Post-2011 Review regional public meeting

- May 8, 2 to 5 p.m., Kennewick, Wash. (location to be determined)

Hooper Springs Transmission Line Project

- May 27, 5 to 8 p.m., Tigert Middle School, 250 E. Second South St., Soda Springs, Idaho

Integrated Program Review

- May 28 (time and location to be determined)

Spring Operations Conference Calls

Meetings are tentatively scheduled for Thursdays at 1 p.m., but will only be held as needed. Check the BPA calendar for meeting notices and phone bridge information.

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

FOR MORE INFORMATION

Information on other projects under environmental review is available at www.bpa.gov/goto/NEPA.

For information about the National Environmental Policy Act in general, go to www.bpa.gov/goto/environmentalplanning.

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. 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.

