

Journal

July 2010

Region pulls out all stops for fish

Following a dry winter, June's record-breaking rain led to heavy runoff in the Columbia. While some water spilling over the dams is good for young salmon migrating downstream (SEE "SUMMER SPILL STARTS," BELOW), too much spill can churn air into the water and lead to nitrogen saturation. This can cause a condition in fish similar to the bends in humans.

To avoid nitrogen saturation, BPA ran as much water as possible through federal hydropower turbines, which take water from below the surface, preventing contact with the air. To make that possible, utilities throughout the region and some in California shut down coal and natural gas power plants and used surplus hydropower. The Columbia Generating Station nuclear plant took its generation as low as 22 percent of normal output; the U.S. Army Corps of Engineers and Bureau of Reclamation coordinated filling reservoirs; and B.C. Hydro reduced Columbia River streamflows arriving from Canada.

For three days, BPA also reduced the amount of balancing reserve service it supplies to wind power plants. In this service, BPA reduces hydropower production when wind generation goes above its scheduled output, so reducing reserves helped keep spill at safe levels. Throughout the period, wind project operators continued their scheduled power sales and delivered between 1,500 megawatts and 2,500 megawatts to their customers.

Summer spill starts

The U.S. Army Corps of Engineers began summer spill June 21. Spill will continue at all eight federal dams on the lower Snake and Columbia through Aug. 31.

These spill operations, as well as fish passage improvements at the dams, have been a foundation of federal agencies' actions for listed fish for years. Under NOAA Fisheries' biological opinion for federal hydro system operation for endangered salmon, the amount of water spilled over dams for fish, as opposed to running through hydropower turbines, is equivalent to more than 10 percent of the annual average energy output of the federal hydro system.

This spill regime is distinct from operations on the hydro system during extremely high runoff, such as during mid-June when federal hydro operators balanced spill with sending water through turbines to avoid nitrogen saturation.

Because of spill and structural improvements at the dams, juvenile fish survival through all eight dams is as good as or better than in the 1960s, when there were four federal dams on the lower Columbia and Snake rivers.

Oregon lauds BPA stream program

They mean less work and lower costs for ranchers; they're a whole lot better for fish; and they just reaped BPA and its partners the Oregon State Land Board's 2009 Project Stream Award.

They're lay-flat stanchion dams, low-profile structures that divert stream water for agricultural purposes without degrading stream quality. Since 1999, BPA has funded installation of more than 100 of the fish-and-people friendly devices in Oregon's John Day River Basin through the Upper John Day Watershed Restoration Program, administered by the Grant County Soil and Water Conservation District.

The conservation district works with landowners in the John Day basin to open up habitat for spring chinook and summer steelhead by replacing "push-up" irrigation dams with the more fish-friendly structures. Push-up dams have been used since the 1880s to divert stream water for agricultural purposes. These dams require reconstruction with heavy equipment every season. This annual construction in and along streams can severely damage stream banks and degrade water quality.

Landowners who participate in the watershed restoration program receive assistance to instead install permanent lay-flat stanchion dams, which allow for fish passage and require little or no maintenance.

More than 70 push-up dams have been replaced in the program on the upper mainstem of the John Day River, opening up more than 50 miles of the river for salmon and steelhead. Dozens of additional replacements on



tributaries have further increased spring chinook and steelhead access to spawning and rearing habitat.

Program partners include the Confederated Tribes of the Warm Springs Reservation, the Oregon Watershed Enhancement Board, Oregon Department of Fish and Wildlife, Oregon Department of Agriculture, Grant Soil and Water Conservation District, the U.S. Bureau of Reclamation and private landowners.

BEF contract proposal out for comment

BPA is proposing revisions to a contract between the agency and the Bonneville Environmental Foundation. The proposed contract would continue BPA funding for BEF at roughly current levels over the term of BPA Regional Dialogue contracts. BPA is requesting customer and public comments on the revised contract through July 23.

BPA provides funding to the Foundation to support work that complements BPA's environmental responsibilities and that supports regional goals for renewable energy generation. For more information, see PI section of the Journal.

Technology increases wind power use

For much of April, the region's wind plants ran at more than 90 percent capacity, compared to the normal average of 30 percent. Recent advancements by BPA and the region's wind community helped make this possible. The advancements include:

BETTER WIND FORECASTING — BPA is working with wind developers in the region to more accurately predict when and where the wind will blow, and at what speed. For example, BPA is now harvesting information from 14 anemometers it installed in the region specifically designed to forecast for wind turbines.

MORE OPPORTUNITY TO SELL AND BUY WIND POWER — In the past, last-minute power sales were limited to an hourly schedule. There was little opportunity to buy and sell sudden bursts of "extra" wind. So if the wind picked up unexpectedly and beyond BPA's ability to integrate it, wind turbines would have to shut down. In May, for the first time, wind farms used BPA's new within-hour scheduling mechanism to prevent such a shutdown and deliver more wind power to regional customers.

SYNCHING WIND TURBINES WITH THE DAMS — For decades, automatic generation control has adjusted the output of the region's 10 largest federal dams to meet demand. Now, at one wind farm, BPA's automatic generation control also steps in at lightning speed to bring the wind power output into balance. Absent this direct connection, wind project operators have to take steps in their control rooms to respond.

STRONGER COORDINATION AMONG UTILITIES — BPA is launching a pilot program to let wind projects in BPA's grid contract with remote utilities to sell them the balancing services BPA now provides. This project is slated to begin in October. Go to www.bpa.gov for more information.

DOE exec visits transmission project

Daniel Poneman, deputy secretary of the U.S. Department of Energy, joined Steve Wright, BPA administrator, June 15, along BPA's new McNary-John Day transmission line. Poneman was there to announce \$2 billion in Northwest projects funded by BPA's increased borrowing authority under the American Recovery and Reinvestment Act.

Poneman praised progress on construction of the 500-kilovolt line. He said new transmission projects and other upgrades to the Northwest power system are providing jobs and boosting clean and renewable energy.

As part of the Recovery Act, BPA's U.S. Treasury borrowing authority was increased by \$3.25 billion in February 2009. BPA, DOE and the Office of Management and Budget identified up to \$2 billion in major projects BPA will fund through that increased borrowing.



A helicopter strings line for the construction of BPA's new McNary-John Day power line, thanks to ARRA funding.

BPA seeks demand response ideas

BPA is seeking ideas from its utility customers for commercial and industrial demand response pilot projects that could help meet their local needs and BPA's regional resource obligations. In demand response, customers change their power consumption in response to utility or power system needs.

Historically, BPA has met its peak capacity needs through the flexibility of its hydropower system. Now, load growth, wind integration and operational constraints have consumed much of this traditional flexibility.

BPA plans to identify and recruit potential pilots from utilities this summer, select the best and start implementing them this fall.

AGENCY PROJECTS

Bonneville Environmental Foundation [Regionwide]

BPA invites interested parties to comment through July 23 on a proposed revised contract between BPA and the Bonneville Environmental Foundation to continue BPA funding for BEF at roughly current levels over the term of BPA Regional Dialogue contracts. BPA provides funding to BEF to support work that complements BPA's environmental responsibilities and that supports regional goals for renewable energy generation. To comment or review the contract, go to www.bpa.gov/applications/publiccomments/OpenCommentListing.aspx. SEE CALENDAR.

Integrated Program Review [Regionwide]

Interested parties are invited to review the agency's program cost levels during the Integrated Program Review. BPA will accept comments on proposed program spending levels through July 29. Workshops have been scheduled to address major program category cost forecasts. A draft schedule of workshops to be held through July is posted at www.bpa.gov/corporate/Finance/IBR/IPR/.

2012 BPA Rate Proceeding [Regionwide]

BPA will conduct a combined power and transmission rate proceeding, the 2012 BPA Rate Case (BPA-12), to set rates for the FY 2012–2013 period. This rate case is expected to begin in late 2010. Pre-rate case workshops will be held through the summer to help customer utilities and others become familiar with and work through cost allocation issues informally before the formal proceedings. For information, go to www.bpa.gov/corporate/ratecase/2012/. SEE CALENDAR.

Energy Efficiency post-2011 proposal [Regionwide]

BPA has been conducting a public process to engage customers and other stakeholders in the role BPA should play to facilitate the continued successful development of energy efficiency at the lowest cost to the region. Phase two of the public process, discussing implementation details, begins July 7 at a kickoff meeting. For information, go to www.bpa.gov/Energy/N/post-2011/. SEE CALENDAR.

FISH AND WILDLIFE – PROJECTS UNDER REVIEW

Klickitat Hatchery Program EIS [Klickitat County, Wash.]

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

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/.

POWER – PROJECTS UNDER REVIEW

Direct Service Industry lookback payments [Regionwide]

BPA is issuing for public comment a draft record of decision addressing several legal issues relating to the potential for "lookback" payments to or from its direct-service industry customers as a result of recent court decisions. There will be a 30-day

comment period followed a 15-day cross comment period in which stakeholders may address previously submitted comments.

Draft Resource Program [Regionwide]

The draft Resource Program examines the agency's projected power supply needs for 2012–2019 under Regional Dialogue contracts. BPA expects to release a final Resource Program this summer. For information, go to www.bpa.gov/power/P/ResourceProgram/Index.shtml.

TRANSMISSION – PROJECTS UNDER REVIEW

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. BPA expects to announce project updates this summer (check the website). A draft EIS is scheduled for spring 2011 followed by another formal comment period. For information, go to www.bpa.gov/go/i5.

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

BPA is proposing a new 500-kV 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. BPA expects to issue a draft EIS in early fall. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Big_Eddy_Knight/.

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

BPA is proposing a new 500-kV 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 a draft EIS on July 2. For information, go to www.bpa.gov/go/centralferry.

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-kV transmission line. The agency will produce a preliminary EA this fall or winter. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Walla_Walla-Tucannon_River_Rebuild/.

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

BPA is proposing to rebuild approximately 32 miles of a 115-kV wood pole transmission line. The agency will produce a preliminary EA this fall or winter. For information, go to www.bpa.gov/go/albany-eugene.

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

BPA is proposing to rebuild the 115-kV wood-pole Bandon-Rogue line. The agency will produce a preliminary EA this fall or winter. 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-kV overhead transmission lines at Grand Coulee Dam to replace aging

underground lines between the dam's third powerhouse and the 500-kV spreading yard. The schedule to release the draft EA has been delayed. Look for updates in the Journal about the release of the draft EA and public meetings. The final EA is scheduled for October 2010. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Grand_Couleef/.

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

Energy Northwest asked BPA to interconnect up to 82 megawatts of power generated from the proposed Radar Ridge Wind Project located in Pacific County, Wash. The U.S. Fish and Wildlife Service will complete an EIS, and BPA will serve as a cooperating agency under NEPA. USFWS held public scoping meetings in June and accepted comments through June 28. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Radar_Ridge_Wind_Project/.

Whistling Ridge Energy Project [Skamania County, Wash.]

In May, BPA released a joint draft EIS with the Washington Energy Facility Site Evaluation Council. Joint public meetings were held in June. BPA and EFSEC will accept comments through July 19. Comments received by both agencies will be combined so all comments can be addressed in the final EIS. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Whistling_Ridge/. SEE CALENDAR.

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.]

BPA proposes to construct a new 616 square-foot communications building and 80-foot microwave tower at the Antelope Communications Site on Pine Mountain near Bend, Ore., to help BPA maintain and operate the transmission system safely and reliably. BPA accepted comments through June 14. BPA is waiting for approval from the U.S. Forest Service to begin construction. For information, go to www.bpa.gov/corporate/public_affairs/docs/2010/.

Transmission Services Facility Project [Vancouver, Wash.]

BPA is conducting a feasibility study on building a new office building on its Ross Complex in Vancouver to meet workspace needs. BPA will produce a preliminary EA in fall or winter 2010. The feasibility study is expected to be complete by early 2011. 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.]

This program, sponsored by the Confederated Tribes of the Colville Reservation, would benefit chinook salmon in the Okanogan subbasin and the Columbia River below Chief Joseph Dam. BPA issued a ROD in March 2010, and the U.S. Army Corps of Engineers, a cooperating agency in the EIS, expects to issue a ROD in late 2010. Construction on some ancillary facilities to the hatchery, such as employee housing and acclimation ponds, is underway. 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/corporate/public_affairs/Calendar/. For Americans with Disabilities Act accommodations, please call toll free 800-622-4519.

Energy Efficiency post-2011 proposal (phase two kickoff): Rates Hearing Room, 905 N.E. 11th Ave., Portland, Ore.

- July 7, 1 to 4:30 p.m.

Integrated Program Review: Rates Hearing Room, 905 N.E. 11th Ave., Portland, Ore.

- July 13, 9 a.m. to noon (follow-up/general managers meeting)

2012 BPA Rate Proceeding workshops: Rates Hearing Room, 905 N.E. 11th Ave., Portland, Ore.

- July 14, 9 a.m. to 5 p.m.
- July 15, 9 a.m. to 5 p.m.

Central Ferry-Lower Monumental Transmission Line Project public meeting

- July 21, 5 to 7 p.m., Seneca Activity Center, Dayton, Wash.

CLOSE OF COMMENT

July 19 – Whistling Ridge Energy Project

July 23 – Direct Service Industry lookback payments

July 29 – Integrated Program Review

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.

