

journal

March 2006

www.bpa.gov/corporate/pubs/Journal

ColumbiaGrid is new group's name

ColumbiaGrid is the new name for the regional transmission entity being developed by BPA, Chelan and Grant public utility districts, Puget Sound Energy and Seattle City Light. In a late January meeting, the sponsors discussed the interrelationship between Grid West and the new organization and how their efforts would build off previous work done under Grid West and the Transmission Issues Group. They emphasized the need to work closely with Grid West to minimize seams issues.

They said it is possible that at some point the region will come back together under a single entity, but that is not the current focus of this process. In the near term, the group agreed to fund work through June and focus on three areas: governance, reliability and the scope of the proposal itself. For more information, see the Web site: www.columbiagrid.org.

BPA and ISO team on wind

BPA plans to integrate 2,000 megawatts of wind power by the end of 2008, and the agency may team up with the California Independent System Operator to develop new tools to manage this wind energy.

Since its creation in 1998, the California ISO has worked with large scale wind power. Wind development in California is expected to grow substantially in the next few years under a statewide Renewable Portfolio Standard, which mandated that 20 percent of all electrical energy come from renewable resources by 2010. BPA hopes to learn from the ISO experience to manage large scale wind in the Pacific Northwest.

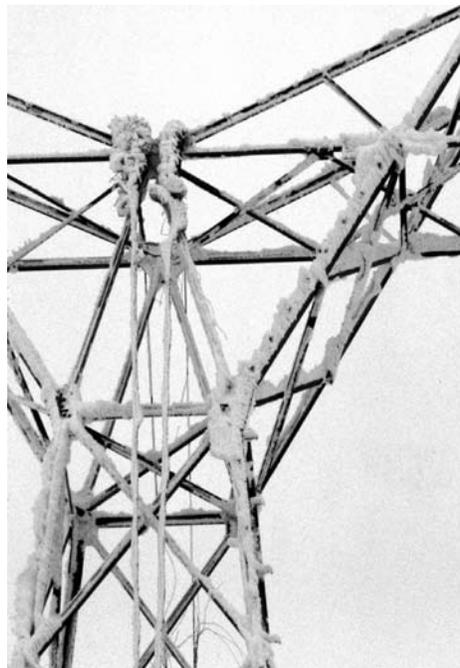
The primary issue that BPA faces is the management of wind ramps within the hour due to the integration of large wind projects in small geographic areas (see the article below). The collaboration and possible cost sharing between BPA and Cal ISO will accelerate the development of new tools to manage wind.

New meter reads wind 24/7

BPA installed an anemometer (a wind measurement device) atop a 150-foot tower Jan. 10 near Boardman,

Ore. It will help predict within-the-hour wind ramps at Stateline, the largest wind project on BPA's grid. Ramps are large and sudden changes in wind energy that are difficult to predict.

The new anemometer, named Chinook, is part of an effort to forecast wind ramps. It is the latest addition to BPA's long-term wind monitoring program — a collection of five anemometers in the mid-Columbia basin — which started in the early 1980s.



BPA line crews have been busy this winter keeping the power on during harsh weather.

Sea lions barred at dam

The U.S. Army Corps of Engineers began installing permanent barriers at Bonneville Dam in February to keep sea lions from entering fish ladders while allowing adult salmon to pass. The Sea Lion Exclusion Devices, or SLEDs, are steel racks installed into the 12 fishway entrances at the dam.

The SLEDs will vary from 10 to 15 feet in width and 30 to 36 feet in height. The Corps will install 24 in all. Each weighs more than 10,000 pounds. The cost is largely funded by ratepayer dollars through BPA.

Although sea lions have visited the tailwater of the dam for many years, the first time one was observed entering the fishways was in 2004. Biologists are concerned that the presence of sea lions in the fishways may delay fish passage, increase predation or damage sensitive monitoring equipment.

Narrows line work begins

Construction crews began site work in early February for a new, mile-long transmission line across the Tacoma Narrows of Puget Sound. Major construction will follow this spring and last through the year. The 110-kilovolt line has the potential for an upgrade to 230-kV. It will serve growth in the area for many years.

Tacoma Power's line is the only electrical link to Peninsula Light Co., which serves the Gig Harbor peninsula. BPA has a general transfer agreement with Tacoma to serve Peninsula Light, a full requirements customer. The project will cost \$15.8 million. Tacoma



will pay \$4 million, and BPA will pick up the rest. BPA provided engineering, procurement, and construction consultation and oversight for the project.

When the existing Narrows line was built in 1926, it was the longest electrical span in the world and was considered an engineering marvel.

EPRI recognizes BPA innovators

The Electric Power Research Institute has recognized two BPA employees for developing one of its software tools far beyond its out-of-the-box capabilities. EPRI awarded Karl Vischer its Power Delivery Individual Product Champion award, and Oattie Nabors' work has been written up in the publication, "EPRI Innovators."

Vischer and Nabors began working with EPRI's energy portfolio software, called Energy Book, to carry out a long-term economic and risk evaluation of BPA's energy conservation resources. Energy Book initially focused only on power assets and transactions. Vischer modeled BPA's power portfolio of real and financial assets and substantially expanded the model to include run-of-the-river hydro and wind information, and a transmission component.

Then, Nabors applied the system to the energy conservation programs in the BPA portfolio. It has shown BPA how its conservation resources can add value and mitigate overall market risk.

Weather brings BPA crews out

BPA field crews have been busy with the harsh weather conditions at times around the region this winter.

Heavy rainfall on Jan. 23 caused a landslide in which several trees fell close to a BPA 230-kilovolt line west of Roseburg, Ore. Quick action by a crew to remove the

trees that night saved a sure outage the next day. When the crew returned the next day, it found the slide had moved another five feet, which would have put the downed trees right in the power lines.

The Feb. 3 to 5 weekend kept line crews from seven BPA districts hopping to repair downed lines and restore power from outages on the Olympic Peninsula. A windstorm took out 20 transmission line sections and two microwave stations in BPA's Olympia region alone. Crews worked through the night of Feb. 3 and all the next day to restore power. The wind stopped Saturday afternoon, and BPA had all the power restored by midnight.

BPA helps train police

BPA is helping train local law enforcement officers in the Puget Sound area on the hazards in an energized substation yard. That's in response to several incidents in which police have chased suspects up to a substation fence and have wanted to continue the search within the substation yard.

BPA's Snohomish Region teamed up with safety and security personnel from Puget Sound Energy, Seattle City Light, Tacoma Power and Snohomish Public Utility District to develop electrical safety instruction for the law enforcement officers. The utilities developed a training video and showed it Jan. 23 to King County Sheriff's officers and SWAT team members.

BPA then gave about 25 officers a tour of the Sno-King substation, pointing out potential hazards in the control house and energized yard. Future training sessions for other Puget Sound area law enforcement agencies may be scheduled later this year.

public involvement

updates and notices

AGENCY – ONGOING PROJECTS

Supplement Analysis to the Business Plan EIS – Regionwide
BPA is preparing a Supplement Analysis to its Business Plan EIS, scheduled for release in early 2006. The 1995 Business Plan EIS analyzed environmental impacts of BPA's business practices, such as marketing and transmitting power, energy conservation, renewable energy development, and fish and wildlife mitigation. The analysis looked at effects on the natural, economic and social environments. Letters announcing and outlining the supplement analysis to the Business Plan EIS went out December 2004. Comments were accepted through March 1, 2005. For more on the supplement analysis and the comments received, see BPA's Web site: www.efw.bpa.gov/environmental_services/Document_Library/bpsa.

FISH AND WILDLIFE – ONGOING PROJECTS

Chief Joseph Hatchery Program – Okanogan County, Wash.
The Northwest Power and Conservation Council has recommended that BPA fund a program sponsored by the Confederated Colville Tribes to assist in conservation and recovery of summer/fall chinook salmon in the Okanogan subbasin and the

Columbia River between the Okanogan River and Chief Joseph Dam. This program would include construction, operation and maintenance of a hatchery at the base of the Chief Joseph Dam and a few acclimation ponds throughout the Okanogan River subbasin. Adult fish broodstock collection for gathering eggs would occur throughout the project area. Egg incubation and early rearing would occur at the new hatchery. Final rearing and release of juvenile fish would occur at new and existing acclimation ponds. While the focus of the program would be the propagation of summer/fall chinook salmon, the EIS will also consider use of the proposed facilities to reintroduce spring chinook salmon to historical habitats in the Okanogan subbasin. Comments were accepted through Sept. 19, 2005. A draft EIS will be available for review and comment in spring 2006. For more information, see BPA's Web site: www.efw.bpa.gov/environmental_services/Document_Library/Chief_Joseph/.

Proposal for Alternative Contracting Approach for Capitalizing BPA Funded Wildlife Land Acquisitions – Regionwide
BPA is seeking feedback on a draft proposal for an alternative contracting concept for capitalizing land acquisitions for

wildlife mitigation. The draft proposal addresses some issues that have led to a perceived slowing of mitigation efforts resulting from implementation of the agency's capitalization policy. For more information, see BPA's Web site:

www.efw.bpa.gov/.

Salmon Creek EIS – Okanogan County, Wash.

BPA proposes to fund a project to enhance fish habitat, fish passage and instream flows in 4.3 miles of lower Salmon Creek, a tributary of the Okanogan River. The project would rehabilitate the stream channel, revegetate stream banks and increase streamflows. A draft EIS was released in September 2004 and is available on BPA's Web site: www.efw.bpa.gov/environmental_services/Document_Library/Salmon_Creek. A public meeting was held September 2004, comments accepted through Nov. 9, 2004. Further environmental analysis is delayed until a master plan is completed. Environmental analysis will continue only if the master plan is approved for funding by the Northwest Power and Conservation Council.

South Fork Flathead Watershed/Westslope Cutthroat Trout Conservation Program EIS – Flathead National Forest, Mont.

BPA released the final EIS for the South Fork Flathead Watershed/Westslope Cutthroat Trout Conservation Program on July 25, 2005. Subsequently, some parties informed BPA that the final EIS did not include comments they submitted during the draft EIS comment period (July 12 through Aug. 20, 2004). BPA accepted comments that raised new information or identified changed circumstances from those discussed in the FEIS through Dec. 12, 2005. The FEIS is available on BPA's Web site: www.efw.bpa.gov/environmental_services/Document_Library/South_Fork_Flathead/.

POWER – ONGOING PROJECTS

Power Function Review – Regionwide

Additional workshops have been scheduled to review program expense levels for the FY 2007 to 2009 rate period. Following these workshops, BPA will issue a draft closeout report for public comment – by the end of April. Additional information is available on BPA's Web site: www.bpa.gov/power/review. (See *calendar of events*)

Wholesale Power Rates 2007 to 2009 Supplemental Proposal – Regionwide

The FY 2007 Wholesale Power (WP-07) Rate Case will determine BPA's power rates for the FY 2006 to 2009 rate period. These rates will be set in accordance with the 7(i) rate setting process. BPA published a Federal Register Notice Nov. 8, 2005, that announces the beginning of this 7(i) proceeding and summarizes BPA's initial proposal. As a result, ex parte communications are prohibited as of this date until the end of the proceeding.

On Feb. 8, BPA filed a motion requesting the hearing officer revise the WP-07 rate case schedule to allow BPA to submit supplemental testimony that will modify BPA's initial proposal by eliminating estimates of revenues from the Transmission business line for the inside the band component of the generation input allocation for generation-supplied reactive for FY 2008 and 2009. This modification is necessary in light of recent FERC cases regarding generation input cost for generation-supplied reactive power and voltage control. The motion also requested that a new participant comment period be instituted, which began Feb. 13, and will close March 6, to allow for comments on the supplemental reactive proposal. Additional information is available on the Web site: <http://www.bpa.gov/power/pfr/rates/ratecases/wp07/>. (See close of comment)

Regional Dialogue– Regionwide

BPA is preparing to issue a policy proposal for public comment by the end of March. This policy proposal will address key issues in the post 2011 time frame. These issues include service to public customers, benefits to investor-owned utilities, benefits to direct service industries, and conservation and renewables. Additional information is available on BPA's Web site: www.bpa.gov/power/regionaldialogue.

Transfer Service – Regionwide

BPA held four meetings in November and December to discuss outstanding issues from the April 2005 agreement regarding transfer service that BPA executed with customers served through general transfer agreements or open access transmission tariff arrangements. BPA reviewed the issues discussed and brought the proposals back to the customer group on Feb. 9. Additional information is available on BPA's Web site: www.bpa.gov/power/pi/subscription/announcements.shtml.

TRANSMISSION – ONGOING PROJECTS

Hanford Reach National Monument CCP/EIS – Benton, Franklin and Grant counties, Wash.

BPA is participating in a land management planning process led by the U.S. Fish and Wildlife Service. The USFWS seeks to develop a comprehensive conservation plan as required by the Refuge System Improvement Act of 1997. BPA is providing information and writing sections of the plan that pertain to transmission facilities, roads, energy facilities and river flow management within the monument. A draft environmental impact statement is scheduled for release this spring.

Klondike III/Biglow Canyon Wind Integration Project – Sherman County, Ore.

BPA has been asked by PPM Energy Inc. to interconnect 300 megawatts of the output of the proposed Klondike III Wind Project and by Orion Energy LLC to interconnect 400 MW of the proposed Biglow Canyon (formerly Sherman County) Wind Project. Integration would require BPA to build and operate a new double-circuit 230-kilovolt transmission line, approximately 12 miles long, expand one substation and build another. The new facilities would be built near the towns of Wasco and Rufus, Ore. BPA is analyzing the effects of the proposed action and both wind projects in an EIS. BPA expects to issue a draft environmental impact statement in April. Scoping meetings were held in Wasco, Ore., in March and April 2005. Comments were accepted through Jan. 5, 2006. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Wind/.

Libby (Flathead Electric Cooperative) to Troy Section of the Libby to Bonners Ferry 115-kV Transmission Line Rebuild – Lincoln County, Mont.

BPA is proposing to rebuild a 17-mile-long section of the Libby to Bonners Ferry 115-kilovolt transmission line to improve its reliability and meet future load growth in Lincoln County, Mont. Current options include: (a) rebuilding as a single-circuit 115-kV wood-pole H-frame line with some wood-pole equivalent steel poles; (b) rebuilding as a double-circuit 115-kV tubular steel-pole line; (c) rebuilding as a double-circuit 230-kV tubular steel-pole line; and, (d) not rebuilding the line. BPA plans to analyze the environmental effects of the proposed project and comments received during the scoping process in an environmental impact statement and expects to issue a draft EIS in spring 2006. Comments were accepted through Oct. 30, 2005. An informational public meeting on electric and magnetic fields was held Nov. 17, in Libby, Mont. For more information, see BPA's Web site: http://www.transmission.bpa.gov/PlanProj/%20Transmission_%20Projects/.

Port Angeles Transmission Line Interconnection – Port Angeles, Wash.

Olympic Converter LP has requested interconnection to the Federal Columbia River Transmission System of a 550-megawatt transmission cable across the Strait of Juan de Fuca from Vancouver Island, B.C., to Port Angeles, Wash., on the Olympic Peninsula. The line would interconnect at BPA's existing Port Angeles Substation. BPA is leading the environmental studies and coordinating efforts with the Department of Energy. The draft EIS is scheduled for release this spring. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Transmission_Projects/.

Rock Creek Substation – Klickitat County, Wash.

BPA will offer contract terms for interconnection of 150 megawatts of power from the Goodnoe Hills wind project and up to 200 MW of power from the White Creek wind project into the Federal Columbia River Transmission System. The tiered record of decision was signed Nov. 9, 2005. The interconnection involves constructing a new 500/230-kilovolt substation along the Wautoma-John Day 500-kV transmission line between structures 85/4 and 85/5. This new facility, called Rock Creek Substation, will require approximately 7.5 acres of land in the Goodnoe Hills area, off Hoctor Road in Klickitat County, Wash. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Wind/.

Seven Mile Hill Wind Project – Wasco County, Ore.

UPC Wind Partners, LLC, requested BPA to interconnect 40 megawatts of power it plans from its proposed wind development southwest of The Dalles, Ore. BPA is considering constructing a simple tap to create a three-terminal line within a switchyard beneath BPA's The Dalles-Hood River 115-kilovolt transmission line. UPC would build a 115/34.5-kV substation adjacent to the switchyard, but outside the transmission right-of-way. BPA will largely parallel its National Environmental Policy Act review process with the Wasco County review of the conditional use permit application for this project. BPA plans to issue a tiered record of decision under the Transmission Business Plan environmental impact statement. UPC is now conducting bat and bird studies and tentatively plans to file a conditional use permit application with Wasco County in 2006.

Thurston-Willakenzie 115-kV transmission line – Lane County, Ore.

BPA relocated a segment of its Thurston-Willakenzie 115-kilovolt transmission line located in Springfield, Ore. The Oregon Department of Transportation had asked BPA to move two transmission structures and the existing transmission line away from buildings and proposed development in the Gateway Industrial Park. They were adjacent to Interstate 5 just south of the Beltline Road interchange. BPA built about one mile of new single circuit 115-kV line from the Thurston-Willakenzie transmission line just west of the McKenzie River to Eugene Water and Electric Board's McKenzie Substation. Construction began last November and was completed in February. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Transmission_Projects/.

Tucannon River-North Lewiston 115-kV Transmission Line – Garfield County, Wash. and Nez Perce County, Idaho

A section of the Tucannon River-North Lewiston 115-kilovolt transmission line needs pole replacement and a new conductor to improve reliability and safety. Access road construction began last fall. Public meetings were held in February in Pomeroy and Clarkston, Wash. Construction for replacing the poles and conductor will begin in June. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Transmission_Projects/.

Willow Creek Winds Interconnection Project – Gilliam and Morrow Counties, Ore.

Invenergy, LLC requested interconnection of up to 180 megawatts of power generated from the proposed Willow Creek Winds Interconnection Project located in Gilliam and Morrow counties, Ore. BPA proposes to interconnect up to 150 MW to BPA's Tower Road-Alkali 115-kilovolt transmission line in Gilliam County. Interconnection would require rebuilding one mile of transmission line and constructing two switch structures

within the existing BPA right-of-way. Invenergy is currently proposing a 72-MW project with no firm expansion plans at this time. A public scoping meeting was held Oct. 18, in Arlington, and comments were accepted through Nov. 1. BPA will analyze project impacts in a tiered record of decision under the Business Plan environmental impact statement, scheduled to be completed in 2006. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Wind/.

SUPPLEMENT ANALYSES

To view copies of the supplement analysis, visit the link provided.

Watershed Management Program Environmental Impact Statement

www.efw.bpa.gov/environmental_services/Document_Library/Watershed_Management/

- SA-249 Satus Creek Watershed Restoration Project (Yakama Reservation Watersheds Project – FY2006), Yakima County, Wash.
- SA-250 Idaho Fish Screening Improvement – Bohannon Creek Diversions, Lemhi County, Idaho
- SA-251 Tapteal Bend Riparian Corridor Restoration Project (AMENDMENT), Benton County, Wash.
- SA-252 Umatilla Basin Anadromous Fish Habitat Enhancement Project – B&G Resources Easement, Umatilla County, Ore.

Transmission Vegetation Management Program Environmental Impact Statement

- SA-276 Chehalis Raymond, Lewis and Pacific counties, Wash.
- SA-277 Colville-Republic #1, 1/1 to 44/12, Ferry and Stevens counties, Wash.
- SA-278 Addy-Cusick #1, 1/1 to 26/11, Stevens and Pend Oreille counties, Wash.
- SA-279 Keller Tap to Grand Coulee-Okanogan #2, 6/7 to 21/2, Okanogan and Ferry counties, Wash.
- SA-280 Pearl-Marion No. 1, Clackamas and Marion counties, Ore.
- SA-281 McNary-Ross No. 1, Skamania and Clark counties, Wash.
- SA-282 Nasselle Tap to Allston Astoria No. 1, 115-kilovolt, Pacific and Wahkiakum Counties, Wash.
- SA-283 Schultz-Raver Corridor, Kittitas County, Wash.

CALENDAR OF EVENTS

Power Function Review II

- March 6, 1 to 4 p.m., Technical Group Meeting, BPA Rates Hearing Room, 911 N.E. 11th Avenue, Portland, Ore.
- March 8, 9 a.m. to 4 p.m., Management Level Discussion, BPA Rates Hearing Room, 911 NE 11th Avenue, Portland, Ore.

CLOSE OF COMMENT

- March 6 – Wholesale Power Rates 2007 to 2009 Supplemental Proposal

RECORD OF DECISION SIGNED

- Feb. 10 – Residential Exchange Program Settlement Agreement with Clark Public Utilities

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 (503) 230-3478 in Portland or toll free 1-800-622-4519.

To order copies of documents, call: 1-800-622-4520 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, DEIS-Draft Environmental Impact Statement, FEIS-Final Environmental Impact Statement, FONSI-Finding of No Significant Impact, NOI-Notice of Intent, ROD-Record of Decision, SA-Supplement Analysis.

