

journal

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Eliminating guesswork with LiDAR

Aerial survey data collected using laser-based remote sensing technology is bringing significant advancement to the transmission line industry. LiDAR (Light Detection and Ranging) technology creates 3-D topographic data that is linked to a global positioning system. The data is used by transmission line design engineers, surveyors, cartographic technicians and vegetation maintenance program managers to assist in the building, maintenance and operation of transmission lines.

"LiDAR data is accurate to within six inches of the true position," says Alan DeJong, project manager for the LiDAR program. LiDAR also saves time, money and effort. BPA's use of LiDAR is already estimated to have saved \$530,000 on capital projects.

BPA releases 2007 annual report

BPA had a successful year despite low water conditions. The annual report, released in November, shows the agency continued to earn strong modified net revenues in fiscal year 2007 despite water runoff that was 89 percent of average. These financial results enable the agency to hold rates steady in fiscal year 2008.

"Our employees, customers and others in the region were crucial in helping us manage our

costs, and we did so while continuing to deliver safe, reliable power," said Administrator Steve Wright.

Wright emphasized that while fiscal year 2007 was good for BPA, the entire West Coast energy industry needs to be diligent in the coming years by building more generation and transmission resources while also investing more in energy efficiency measures.

The annual report is available online at www.bpa.gov/corporate/Finance/a_report/. A limited number of hard copies of the report will be available Dec. 12.

Proposed conservation easements to benefit fish

BPA is proposing to fund the purchase of two conservation easements in northwest Montana to protect critical habitat for the threatened bull trout and westslope cutthroat trout, a subspecies that is considered at risk by local tribes and the state of Montana.

The 320-acre Squeezer Creek easement in Lake County provides high-quality cold water habitat for native fish and protects one of the most important spawning areas in the Swan Valley for the threatened bull trout. Additionally, this parcel of land is home to other threatened and endangered species, such as the grizzly bear, Canada lynx and grey wolf.

The 92-acre Jocko River easement in Sanders County is a core recovery area for bull trout and is also home to the westslope cutthroat trout.

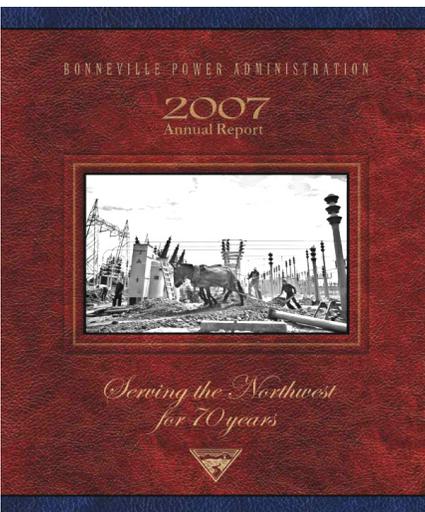
Both of these easements would provide BPA with credits for partial mitigation of resident fish habitat losses due to construction and operation of the Hungry Horse Dam on the Flathead River.

For more information on conservation easements, visit www.efw.bpa.gov.

BPA promotes green construction

BPA's Energy Smart Design™ - Office program promotes energy efficiency during the building design process. All Energy Smart Design™ buildings will have a lighter carbon footprint and be kinder and gentler to the surrounding environment than those built in accordance with current energy codes. The program, which was launched in October, will help build the 157th Plaza project in Vancouver, Wash.

"From the ground up, this facility will be an Energy Smart building," said Mike Weedall, BPA's vice president of Energy Efficiency. "Using everything from high performance technologies to earth-friendly construction materials, the building will help the environment starting at the very basic level of design." Energy Smart Design™ saves between 10 and 20 percent of the energy a typical building uses. For this facility, that means energy savings of more than \$8,000 a year.



Features in the 26,000 square foot building include:

- “Light harvesting” intelligent lighting controls and fixtures that draw on the natural light and only supplement with electrical lighting when needed.
- Coated exterior windows with special shades that bring in light but reduce heat/cold exchange.
- A fully integrated high-tech heating, ventilation and air-conditioning system (HVAC) with extra thermostat zones. The HVAC system monitors the exterior temperature and saves electricity by pumping in the heat or cold outside to adjust the temperature inside.
- Permeable parking lot materials that will allow rain to soak into the groundwater at a natural pace instead of running off and pooling.

BPA started Energy Smart Design™ - Office because it considers commercial new construction a hard to reach market, and energy conservation measures not implemented in new buildings are lost opportunities. The earlier the building owner and design team start to talk about efficiency, the more cost effective the new building will be.

The program offers a \$0.50 per square foot incentive to office builders. The office package is the first of several Energy Smart Design™ programs to be introduced. In the future, schools, warehouses, and small retail and public assembly buildings will also qualify for incentives.

For more information on the Energy Smart Design™ program, visit www.bpa.gov/Energy/N/projects/ESD/index.cfm.

BPA begins financial plan review

BPA's Long-Term Regional Dialogue Policy commits BPA to reviewing and updating its existing financial plan. A workshop on Nov. 26 initiated this review, and BPA sought stakeholder input on the scope of the project. BPA also outlined the priority issues identified to date and took comments from stakeholders about other issues to include in discussions concerning BPA's financial plan.

The updated financial plan will provide a foundation of policies and practices that identify long-term financial issues BPA faces, provide strategies that address these issues and provide sound financial policies that guide BPA's decisions over time. BPA intends to address high-priority issues in the updated plan, which is scheduled to be completed by the end of fiscal year 2008.

For information and updates regarding the plan, visit BPA's Web site at www.bpa.gov/corporate/Finance/financial_plan/. Information on ways to participate will also be posted to this site as it becomes available.

Hickok to chair NERC Representatives Committee

Deputy Administrator Steve Hickok has been elected chair of the Member Representatives Committee of the North American Electric Reliability Corporation (NERC) for 2008. Hickok is currently the committee's vice chair and will take over the position of chair in February.

For most of the past nine years, Hickok has been heavily involved in the transformation of NERC from a voluntary industry coordinating council to the nation's designer and enforcer of mandatory reliability standards under the 2005 National Energy Policy Act.

Members of NERC include users, owners, operators and other stakeholders of the integrated bulk generation and transmission system of the United States and Canada.

Winter weather safety tips

With colder weather and winter storms on the horizon, BPA is prepared to care for its network of high-voltage transmission lines. Should an outage occur on its system, BPA's goal is to repair the line and return it to service as safely and quickly as possible. Even if BPA lines are in service, certain utility customers may experience outages because of problems with distribution power lines operated by their local utility.

Here are tips for consumers if a storm knocks out power:

- Keep an emergency kit ready. Include flashlights, a battery-powered radio, extra fuses, a wind-up clock, canned foods that require no cooking, a manual can opener and fresh batteries.
- Report power outages to your utility. Report an outage even if neighbors have already called to report it; you may be served on a different circuit than your neighbors and the utility may not be aware of the problem on your line.
- Assume fallen electrical wires are “live” and stay clear. Contact your local utility immediately and report the location of the downed lines. If a wire falls on your car, don't try to get out until help arrives. Stay in your car and ask a passerby to call the local utility. The car maybe energized and it could be fatal to touch the ground and the car at the same time.
- Be careful around trees during wind and ice storm events. Tree limbs become heavier during a storm from water and can sag on power lines. Anything touching a power line can be energized and dangerous.
- Know how to use your generator before an outage occurs. Proper installation of generators is essential to prevent fires and avoid electricity feeding back into utility lines, endangering the lives of repair crews.

NEW PROJECTS

CPN Cascade vs. Bonneville Power Administration

BPA is considering settlement of a lawsuit with CPN Cascade Inc., and is seeking public comment. The lawsuit concerns a geothermal project at Telephone Flats in northern California. The proposed settlement agreement is to pay CPN Cascade \$1.5 million in exchange for dismissal of the lawsuit. The final decision of whether to accept or reject this settlement rests with the authorized representative of the Attorney General at the U.S. Department of Justice. However, BPA will make a recommendation to the authorized representative of the Attorney General. BPA is seeking public comment through Dec. 10, 2007 on whether to recommend the settlement proposal be accepted or rejected. (See close of comment)

FISH AND WILDLIFE – PROJECTS UNDER REVIEW

Chief Joseph Hatchery Program - Okanogan County, Wash

The Northwest Power and Conservation Council recommended that BPA study a program sponsored by the Confederated Tribes of the Colville Reservation to assist in conservation and recovery of summer/fall chinook salmon in the Okanogan subbasin and the Columbia River below Chief Joseph Dam. This program would include a new hatchery near the base of Chief Joseph Dam and acclimation ponds throughout the Okanogan River subbasin. The use of the proposed facilities to reintroduce spring chinook salmon to historical habitats in the Okanogan subbasin is also being considered. The program would augment the ceremonial and subsistence harvest of salmon for the Colville Tribe. This program would be designed to have no effect on the operational flexibility of Chief Joseph Dam. Comments on the draft EIS were accepted through June 18. Public meetings were held in Okanogan and Bridgeport, Wash. A final EIS is planned for February 2008 and a ROD is expected by April 2008. For more information, see BPA's Web site: www.efw.bpa.gov/environmental_services/Document_Library/Chief_Joseph/.

Lyle Falls Fish Passage Project – Klickitat County, Wash.

BPA is preparing an EIS for the proposed Lyle Falls Fish Passage Project. The project addresses the modification and upgrade to the existing fishway in order to improve fish access to spawning habitat in the upper reaches of the Klickitat River and meet state and federal fish passage standards. The project would also facilitate the collection of valuable biological information. The draft EIS is being finalized with a scheduled release in winter 2007/2008. A public meeting to take comments will follow. For more information, see BPA's Web site: www.efw.bpa.gov/environmental_services/Document_Library/Lyle_Falls/.

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

BPA has conducted value engineering, land acquisition and final design according to the initial ROD signed March 11, 2005. A ROD authorizing construction is planned for winter 2007/2008. For more information, see BPA's Web site: www.efw.bpa.gov/environmental_services/Document_Library/Grand_Ronde/.

POWER – PROJECTS UNDER REVIEW

Regional Dialogue Policy Implementation – Regionwide

BPA released the Long-Term Regional Dialogue final policy and ROD in July and began a series of implementation workshops focused on product development. Those workshops are concluding in early December and BPA will begin to focus on drafting the Tiered Rate Methodology. More information on the Regional Dialogue Policy Implementation calendar is available on www.bpa.gov/power/pll/regionaldialogue/implementation/.

TRANSMISSION – PROJECTS UNDER REVIEW

Albeni Falls-Sand Creek Transmission Line Project – Bonner County, Idaho

BPA will replace poles on a section of the Albeni Falls-Sand Creek transmission line in northern Idaho and perform other upgrades to improve the reliability of the line. Approximately 340 wood poles will be replaced along about 25 miles of the existing transmission line. The project area is on an existing right-of-way from the Albeni Falls Dam to one mile north of BPA's Sandpoint Substation. In addition, 17 miles of the line will be reconducted to a larger conductor. Although construction would not begin until 2008 or 2009, BPA employees or contractors will be in the area through the summer performing various activities in support of the project, such as surveying for cultural resources and noxious weeds as well as reviewing the area for dangerous trees. An informational open house was held Aug. 16. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Transmission_Projects/.

Caribou-Lower Valley Project (includes Hooper Springs Substation) – Caribou County, Idaho

BPA is proposing to build, own, operate and maintain the new Hooper Springs 138/115-kV substation near a proposed PacifiCorp substation near Soda Springs, Idaho. BPA would connect to PacifiCorp's new substation (Threemile Knoll) to improve service to Lower Valley Energy. Lower Valley Energy would construct, own and operate a new 20-mile double-circuit 115-kV transmission line from BPA's new substation to a tap on the Lower Valley Energy transmission system between Lanes Creek and Valley Substations. BPA is proposing to help fund this transmission line with a third-party financing arrangement. BPA held a public scoping meeting Nov. 1 to discuss the proposed project. For more information, see BPA's Web site: www.efw.bpa.gov/environmental_services/Document_Library/Caribou/.

Cascade Wind Interconnection Project – Wasco County, Ore.

BPA has been asked by UPC Oregon Wind, LLC to interconnect up to 50-MW of electricity generated from UPC's proposed Cascade Wind Project. UPC would independently build, own and operate the wind project and its associated facilities. The Oregon Energy Facility Siting Council has siting and approval jurisdiction over the proposed wind project. If UPC's project is approved, BPA proposes to construct a new switchyard and tap beneath BPA's existing Hood River-The Dalles 115-kV transmission line. Comments were accepted through Aug. 10, 2007. BPA is preparing an environmental review. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Wind/default.cfm?page=cascade.

Chehalis-Centralia Transmission Line Rebuild – Lewis County, Wash.

BPA is proposing to rebuild a portion of its 69-kV transmission line to a 115-kV design to address increased industrial loads and other load growth in the area. The line extends from the Chehalis Substation about 15 miles north to the Centralia Substation. The portion to be rebuilt under this project would include only the first 12 miles from Chehalis to Ford's Prairie Tap. Proposed activities include upgrading segments of existing access roads, removing and replacing existing structures and installing new conductor (wires). A minor reroute of less than one mile will likely be needed near Ford's Prairie Substation to accommodate planned Port of Centralia developments. BPA will conduct field surveys and an environmental review in 2007 and 2008. Once the environmental review is complete, BPA will decide whether and how to proceed with the project. If BPA decides to proceed, construction would likely begin in spring 2008 with scheduled completion in November 2008.

Columbia-Ellensburg Transmission Line Upgrade – Kittitas County, Wash.

BPA's Columbia-Ellensburg 115-kV transmission line needs upgrades to address line overloads in the area. The portion of line that needs to be upgraded extends from the Ellensburg Substation about 10 miles north to the Schultz Substation and then approximately four miles east toward the Columbia Substation. All existing wood poles and associated hardware would be replaced. Most new poles would be located in or as close to existing holes as possible. A portion of the existing conductor may be replaced to meet current industry standards. Three switches would also be replaced. Some existing access roads may need improvements and additional access routes may need to be purchased. BPA will conduct environmental field surveys to complete the environmental review. If BPA decides to proceed with the project, construction would likely begin in spring 2008 with scheduled completion in June 2009.

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

BPA is proposing to rebuild a 17-mile section of the Libby-to-Bonnars Ferry 115-kV transmission line to improve reliability and meet future load growth in Lincoln County, Mont. BPA issued a draft EIS on July 20 and held a public meeting Aug. 15. Comments were accepted through Sept. 4. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Transmission_Projects/.

McNary-Badger Canyon Transmission Line Rebuild – Benton County, Wash.

BPA is proposing to rebuild its McNary-Badger Canyon 115-kV transmission line outside of Kennewick, Wash. The line extends 18.3 miles from the river crossing north of McNary Substation northeast and then west toward Badger Canyon. The line was built in 1949 and many of the wood poles and cross arms are in need of replacement. In addition, BPA was requested by Energy Northwest to interconnect 32 MW from the Nine Canyon wind farm near Kennewick, Wash. BPA needs to upgrade the McNary-Badger Canyon transmission line to provide the wind farm adequate transmission capacity and prevent overload on the line. Construction activities would include adding a new transformer at the Nine Canyon Tap, replacing most of the wood poles with new wood poles that are five to 10 feet taller than the originals and replacing the wire. BPA is currently

conducting an environmental review, including cultural resource surveys of the proposed project area. If BPA decides to proceed with the project, construction could begin in spring 2008.

Olympic Peninsula Reinforcement Project – Thurston and Mason Counties, Wash.

BPA is proposing to replace a 14.5 mile portion of an existing 115-kV transmission line between Olympia and Shelton Substations with a double-circuit 230-kV line. This project would also require adding equipment at the two substations. This would improve voltage stability during winter-peak load conditions on the Olympic Peninsula. BPA expects to release a preliminary EA in fall 2007. If BPA decides to proceed with this project and no significant impact is found in the EA, construction could begin in late 2007. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Transmission_Projects/.

Palisades-Goshen Transmission Line Rebuild – Bonneville and Bingham Counties, Idaho

The Palisades-Goshen 115-kV transmission line was built in 1949. The line extends from Palisades Dam in eastern Idaho approximately 52 miles west to BPA's Goshen Substation south of Idaho Falls, Idaho. The majority of the wood poles and cross arms are in need of replacement. BPA proposes to rebuild this line due to its age and deteriorated condition to ensure safe and reliable transmission service. Field work has been completed and BPA expects to issue an EA in early 2008. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Transmission_Projects/.

Port Angeles Juan de Fuca Transmission Project – Port Angeles, Wash.

BPA released the final EIS Oct. 4. The EIS evaluates the request from Sea Breeze Olympic Converter LP to interconnect a 550-MW transmission cable to the Federal Columbia River Transmission System. The cable would run from Vancouver Island, B.C., across the Strait of Juan de Fuca to Port Angeles, Wash. BPA expects to issue a ROD in December to determine if it will allow the interconnection. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Transmission_Projects/.

Summer Falls/Main Canal Interconnection Project – Grant and Douglas Counties, Wash.

BPA proposed to interconnect 122 MW of generation from Summer Falls and Main Canal hydropower projects to the federal transmission grid. The proposal includes constructing a new 230-kV substation (Pinto Ridge) in Grant County and a new communications site (Banks Lake) in Douglas County. It also includes construction of six miles of new 115-kV transmission line between Main Canal and the new Pinto Ridge Substation, three miles of new 115-kV transmission line between Summer Falls and Pinto Ridge and a new 115-kV substation adjacent to the proposed substation. Seattle City Light and Tacoma Power requested the interconnection, but are currently evaluating other alternative actions. This project is on hold. For more information, see BPA's Web site: www.transmission.bpa.gov/PlanProj/Transmission_Projects/.

CALENDAR OF EVENTS

To view BPA's Public Involvement calendar, visit this link: www.bpa.gov/corporate/public_affairs/Calendar/.

CLOSE OF COMMENT

Dec. 10 – CPN Cascade vs. Bonneville Power Administration

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.

