



Journal

December 2009

Science Bowl wins award

Calling it an “obvious success on all counts,” judges for the Portland chapter of the Public Relations Society of America lauded BPA’s Science Bowl. The agency received a merit award in the organization’s annual competition that highlights achievements in the public relations field.

BPA began sponsoring the Regional Science Bowl in 1992 to encourage students to excel in math and science, and the event has become the agency’s biggest and longest-running community relations project. Close to 10,000 students have participated since BPA began its sponsorship.

Each winter, more than 500 middle and high school students from Oregon and Washington match wits in a quiz show competition about math, science and technology. Some 140 volunteers from BPA and other agencies help with the event.

The Science Bowl continues to grow, attracting more participants from a more diverse range of schools. The 2010 Science Bowl will be held in Portland Jan. 30 and Feb. 6, 2010.

BPA among smart grid grant awardees

BPA is among the utilities and laboratories that recently received \$620 million in funding for smart grid projects through the American Recovery and Reinvestment Act.

Battelle Memorial Institute, Pacific Northwest Division, was the lead applicant for the Pacific Northwest Smart Grid Demonstration Project proposal to the Department of Energy. BPA is one of more than a dozen utility partners in the project, which will span five states and affect more than 60,000 consumers. The project also includes multiple technology partners and two universities.

The region received the full amount of matching funds requested, about \$89 million. This will cover half of the \$178 million five-year demonstration project. Project participants are providing the rest; BPA contributed \$10 million.

The aim is to demonstrate and validate smart grid technologies and inform business cases; provide two-way communication among distributed generation, storage, demand assets and the existing grid infrastructure; quantify smart grid costs and benefits; and advance interoperability standards and cyber security approaches.

This is the second smart grid award in which BPA has been involved recently. In October, the Western Electricity

Coordinating Council received \$53.9 million in ARRA smart grid funds to deploy a large-scale synchronized phasor measurement system with selected smart grid functions. Benefits of this system will include avoiding large scale outages and faster restoration of the system, increased transfer capability, better congestion management and improved use of intermittent renewable generation and reduced costs.

BPA is a major part of this project, which is a collaboration of public and private partners throughout the U.S. portion of the Western Interconnection.

BPA signs contract with Port Townsend

BPA has moved forward with a 14-month contract with Port Townsend Paper Company, a direct-service industry, after taking comments in October. A few modifications were made to the final contract. Power deliveries to the company began Nov. 15 under the new contract and will go through Dec. 31, 2010. This is expected to help maintain 300 plant jobs.

The new contract reflects a recent court ruling by applying a conservative approach that has the forecast benefits exceeding the costs. In June, BPA had proposed a 24-month contract. BPA reduced the term to 14 months to ensure the agency meets this conservative test. For information, go to www.bpa.gov/power/pl/regionaldialogue/implementation/documents/.

New wind protocols working

Wind power producers have adapted quickly to BPA protocols designed to help incorporate increasing amounts of wind energy into the grid. BPA is now exploring fine tuning options that would give wind plants more flexibility in meeting grid reliability standards.

The protocols, which took effect Oct. 1, are designed to keep sudden fluctuations in wind generation from exhausting BPA’s ability to absorb these changes. When wind picks up and unscheduled generation threatens to deplete BPA’s reserves, BPA dispatch now automatically sends an electronic signal to wind plants. The plants must then reduce their generation to scheduled levels.

Dispatchers also can curtail wind transmission schedules if wind generation drops off abruptly and BPA is close to exhausting the reserves available to make up the difference between scheduled and actual energy deliveries. Curtailing



wind power transmission schedules relieves the demand for more reserves from BPA.

BPA dispatchers have so far applied the protocols, known as Dispatchers Standing Order 216, several times. These included instances when the wind fleet has over-generated and when it has under-generated.

Intra-hour Scheduling Pilot begins

On Dec. 1, BPA is taking its first step to schedule power within each hour, rather than just on the hour, as it begins an Intra-hour Scheduling Pilot. This effort is one of five projects under way to improve techniques for managing large amounts of wind power in BPA's balancing authority area.

All North American utilities historically schedule power by the hour. Changing to intra-hour scheduling will allow wind generators an opportunity to minimize generation imbalance charges, and the half-hour schedules will make it possible for wind projects to sell excess generation that might otherwise be limited. This first pilot is limited to wind generation that might otherwise trigger protocols (described in the previous story) to avoid exhausting balancing reserves.

The pilot is scheduled to run through March 2010. Results of the pilot will be used to determine the next steps in BPA's work to explore and expand into intra-hour scheduling.

BPA Annual Report available

"Despite a tough year financially, fiscal year 2009 was a year of notable achievements, all connected by a common theme — building for the future." That's the theme statement in Administrator Steve Wright's message to the president,

Congress and the financial community in BPA's fiscal year 2009 Annual Report.

In his annual letter, Wright calls out several key agency achievements. In FY 2009 BPA:

- Signed long-term wholesale power sales contracts through FY 2028 with all of its preference customers;
- Achieved more than 70 average megawatts of energy efficiency, exceeding its target;
- Increased the amount of wind power integrated into its transmission system to more than 2,200 megawatts;
- Broke ground on the new 500-kilovolt McNary-John Day Line; and
- Received administration support for the biological opinion on endangered salmon and steelhead runs in the Columbia River Basin.

The 2009 Annual Report is now available on line at BPA's Web site under Publications at www.bpa.gov/corporate/Finance/A_Report/.

Libby-Troy line completed

Residents of northwestern Montana and northern Idaho can breathe easier as the threat of severe winter weather approaches. BPA recently completed a rebuild of the Libby-Troy section of its Libby-to-Bonnars Ferry 115-kilovolt line. The line was energized on Nov. 18.

The line had been steadily deteriorating and was increasingly susceptible to damage and the threat of outages from wind, ice and falling trees during winter storms. The urgency for a



More than 1,600 people turned out to provide feedback and learn about BPA's proposed I-5 Corridor Reinforcement Project at open house meetings last month. Due to the interest, BPA has extended the public comment period to Dec. 14 as part of the process to develop an environmental impact statement prior to a decision on whether to build a new 500-kilovolt transmission line.

rebuild was underscored as far back as 2003 when, after an equipment failure, a portion of the line fell to the ground starting a fire. BPA conducted public and environmental review of its proposal to rebuild the line from 2005-2008.

Getting to the finish line proved challenging. The rebuild team instituted numerous mitigation measures outlined in the environmental impact statement. Highlights included measures to protect several wildlife species, including postponing work on certain structures during spring and summer to avoid disturbing an osprey nest. The team also dealt with issues regarding preservation of Indian cultural artifacts in the area and did not use helicopters to string conductor near neighborhoods running along the line to avoid disturbing residents.

Customers make resource choices

For the first two years under the Regional Dialogue contracts, BPA's publicly owned utility customers have elected to get

about 25 percent of the power they need to serve loads above the output of BPA's existing federal system from BPA and about 75 percent from other sources.

That's the result of the first customer election under Regional Dialogue contracts for fiscal years 2012-2014. This translates to about 25 average megawatts of additional load on BPA in fiscal year 2012 and 50 average megawatts in fiscal year 2013. Amounts for 2014 will be determined later, based on updated BPA load and resource projections. Rates for fiscal years 2012-2013 will be established in a rate case beginning in 2010.

A major goal of the Regional Dialogue effort was to clarify who — BPA or individual utilities — will be responsible for meeting utility power needs beyond what the agency can supply from the base federal system.

For information, go to www.bpa.gov/power/pl/regionaldialogue/implementation/meetings/.

Public Involvement [Updates & Notices]

NEW PROJECTS

I-5 Corridor Reinforcement Project – Oregon and Washington

BPA has extended the scoping comment period by three weeks to Dec. 14, 2009, on the proposed 500-kilovolt transmission line from a new substation near Castle Rock, Wash., to a new substation near BPA's Troutdale Substation, Troutdale, Ore. This project would help ease transmission congestion in the northwest Oregon and southwest Washington area. It would allow BPA to fulfill existing and new transmission service requests, improve system reliability and meet continued electric load growth. BPA held six public scoping meetings earlier this fall to receive comments on the scope of the EIS and to help identify other issues and alternatives prior to making a decision on the line. For information, go to www.bpa.gov/go/i5.

Draft Resource Program – Regionwide

BPA accepted comments on its draft Resource Program through Nov. 30. The draft examines the agency's projected power supply needs for 2012-2019 under Regional Contracts power sale contracts. For information, go to www.bpa.gov/power/P/ResourceProgram/Index.shtml.

FISH AND WILDLIFE – PROJECTS UNDER REVIEW

Chief Joseph Hatchery Program – Okanogan County, Wash.

This program, sponsored by the Confederated Tribes of the Colville Reservation, would assist mitigation and recovery of summer/fall chinook salmon in the Okanogan subbasin and the Columbia River below Chief Joseph Dam. A final EIS was released in November. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Chief_Joseph/.

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.

A ROD authorizing construction is planned for December 2010 or January 2011 to coincide with NOAA Fisheries Service review of the program's Hatchery Genetics Management Plan. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Grande_Ronde/.

POWER – PROJECTS UNDER REVIEW

DSI Service to Aluminum Smelters – Regionwide

BPA is evaluating public comments taken through Nov. 9 on revisions to earlier proposed power sale contracts with Alcoa and Columbia Falls aluminum companies. A letter to the region from Acting Deputy Administrator Allen Burns, PDF versions of the modified contracts, a markup showing modifications and a summary of equivalent benefits analyses are posted on BPA's Web site at: www.bpa.gov/power/pl/regionaldialogue/implementation/documents/#SDSI.

Draft Resource Program – Regionwide

BPA took comments on a draft Resource Program through Nov. 30. The draft examines the agency's projected power supply needs for 2012–2019 under Regional Dialogue contracts. For information, go to www.bpa.gov/power/P/ResourceProgram/Index.shtml.

TRANSMISSION – PROJECTS UNDER REVIEW

Central Ferry Substation – Garfield County, Wash.

BPA accepted comments through Nov. 13 on a proposed 500/230-kilovolt substation to interconnect Puget Sound Energy's Lower Snake River Wind Energy Project in Garfield and Columbia counties, Wash. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Central_Ferry_Substation_Project/.

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

The Bureau of Reclamation has 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 project would help ensure safe and reliable transmission from Grand Coulee. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Grand_Coulee/.

Transmission Services Facility Project – Vancouver, Wash.

BPA is considering building a new three-to-five story office building on its Ross Complex in Vancouver to meet long-standing work space needs. For information, go to www.efw.bpa.gov/pdf/Transmission_Services_September_2009.pdf.

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) that would be under an existing BPA line about four miles northwest of Goldendale, Wash. BPA expects to issue a draft EIS in spring 2010. For information, go to www.efw.bpa.gov/environmental_services/Document_Library/Big_Eddy_Knight/.

Central Ferry-Lower Monumental 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 expects to issue a draft EIS in summer 2010. For information, go to www.bpa.gov/go/centralferry.

Hooper Springs Substation and Hooper Springs-Lower Valley Transmission Line Project – Caribou County, Idaho

This project is on hold as BPA and the customer evaluate the scope of the project. For information, go to www.transmission.bpa.gov/PlanProj/Transmission_Projects/.

Golden Hills Wind Farm Interconnection – Sherman County, Ore.

For information, go to www.transmission.bpa.gov/PlanProj/Wind/.

Invenergy Winds Project – Gilliam and Morrow counties, Ore.

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

Kittitas Valley Wind Project Interconnection – Kittitas County, Wash.

For information, go to www.transmission.bpa.gov/PlanProj/Wind/.

Whistling Ridge Wind Interconnection Project – Skamania County, Wash.

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

FISH AND WILDLIFE – PROJECTS UNDER CONSTRUCTION

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

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/.

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/.

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

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

SUPPLEMENT ANALYSES

- **SA-400** Dworshak Power House-Dworshak #1, Clearwater County, Idaho
- **SA-401** Taft-Bell #1, Mineral County, Mont., and Shoshone and Kootenai Counties, Idaho
- **SA-402** South Tacoma-Cowlitz #1, Pierce County, Wash.
- **SA-403** Cowlitz Tap to Chehalis-Covington #1, Pierce County, Wash.
- **SA-404** Wautoma-Ostrander #1, Klickitat and Skamania counties, Washington
- **SA-405** Keeler-Allston No. 1, Columbia County, Wash. and Multnomah County, Ore.
- **SA-406** Trojan-Allston, Columbia County, Ore.
- **SA-407** Nasselle Tap to Allston-Astoria No. 1, Pacific and Wahkiakum counties, Wash.
- **SA-408** Olympia-Shelton No. 4, Thurston and Mason counties, Washington
- **SA-03** Fish and Wildlife Implementation Program EIS – 2009 Fish and Wildlife Program, nationwide
- **SA-02** Nez Perce Tribal Hatchery Program EIS – Nez Perce County, Idaho.

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.

CLOSE OF COMMENT

Dec. 14 – I-5 Corridor Reinforcement Project

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.

