



**BPA Wind Integration Team Initiatives
Update to WIT E-mail List
February 2010**

This is the regular monthly update on BPA’s Wind Integration Team initiatives for February 2010. If you have questions about any of these initiatives, contact Eric King, WIT project manager, at 503-230-5236.

Intra-hour scheduling pilot continues: BPA continues to accept transmission schedules for wind generation on the half-hour under its [intra-hour scheduling pilot](#). January has been the largest month for intra-hour transactions under this pilot program to date. The pilot continues through the end of March. Customer use of this pilot so far has included:

December	7 intra-hour tags	218 megawatt-hours
January	27 tags	1,024 MWh
February	1 tag (through 2/22)	50 MWh

Intra-hour evaluation pilot underway: As planned based on customer feedback last fall, we have begun evaluating the success of the intra-hour scheduling pilot project. We are asking customers to evaluate BPA’s intra-hour scheduling for ease of use, benefits received, any resulting changes on their systems, roadblocks they perceive and recommendations for the next phase if the pilot is extended and expanded. We expect the evaluation to be complete by late March and intend to share the results in early April, including discussion at a [Customer Forum](#) meeting planned for that month.

Dynamic transfer study finds modest amounts of available capability: The [Dynamic Transfer Limits Study](#) promised by Feb. 15, 2010, was completed on schedule. Dynamic transfers allow a utility to remotely control and manage a power plant in another utility’s transmission system. They require room on the relevant transmission path to ramp the resource up or down or provide balancing generation from a source that is electrically remote from the project it is balancing. The [study results](#) found 90 megawatts to 225 megawatts of available dynamic transfer capability on nine key transmission paths within BPA’s transmission network. These amounts represent capability that could be accessed without significantly changing other system operations. The study found that dynamic transfer capability on northern and southern intertie lines is fully in use. The methodology developed for the study received peer review from members of the Wind Integration Study Group of the ColumbiaGrid and Northern Tier Transmission Group Joint Initiative.

Dynamic transfer pilot launched: Because BPA customers expressed interest in using available dynamic transfer capability as soon as possible, BPA developed a business practice for [Requesting Access to Dynamic Transfer Capability](#) during the dynamic transfer study period. As soon as the study was complete, BPA immediately opened a window for requests for use of the available dynamic transfer capability in a follow-up Dynamic Transfer Pilot Project. The application window closes March 19. The business practice offers use of dynamic transfer capability in one-year increments commencing July 1, 2010, and BPA expects to offer a window for applications twice a year. BPA will monitor how dynamic transfers under this new pilot project affect its transmission operation and reliability and will revise the business practice as appropriate.

The dynamic transfer business practice includes procedures for awarding dynamic transfer capability among competing applicants should demand exceed supply. Top priority will go to dynamic transfers that support the customer-supplied generation imbalance pilot project, which customers gave high priority in developing the WIT Work Plan. Based on the study results, we expect to have enough available dynamic transfer capability to support this pilot project. It is scheduled to begin by October.



Operational Controls for Variable Generators or Dispatcher Standing Order 216 events tallied: Since Oct. 1, 2009, BPA has implemented DSO 216 some 17 times. Of this, six uses have been due to consumption of 90 percent of decremental balancing reserves, and the average limit on total wind generation output in BPA’s balancing authority was for 250 megawatts. Incremental balancing reserves have been 90 percent consumed 11 times, and the average transmission curtailment for the variable generation fleet was 260 MW.

Under DSO 216, when 90 percent of DEC balancing reserves are exhausted, BPA sends dispatch signals to project operators or directly to wind generators to limit their actual wind generation to scheduled generation plus their allocated portion of DEC balancing reserves. When 90 percent of INC balancing reserves are exhausted, BPA curtails the wind generators’ transmission schedules for wind energy to their actual wind generation output plus their allocated portion of balancing reserves.

These operating protocols were created to assure BPA can operate reliably with large amounts of variable generation in its system while relying on the Federal Columbia River Power System for balancing reserves. DSO 216 reduced wind projects’ costs of balancing reserves in the 2010-2011 rate period, because the order assures that BPA can maintain transmission reliability within a set amount of balancing reserves.

DSO 216 emerged from extensive discussions with customers and constituents in the winter of 2008-2009, which resulted in BPA’s [approach to integrating variable generation](#), issued in March 2009, followed by development of the dispatcher standing order. Pricing for the Wind Balancing Service in 2010-2011 rates was based on a 30-minute persistence scheduling assumption after the vast majority of wind operators expressed the view that they would prefer lower rates and more frequent curtailments rather than higher rates and fewer curtailments. For details, see the [Administrator’s Preface to the Record of Decision](#) (pg. 5).

BPA posts the amount of reserves it is carrying on a regular basis to provide transparency. To date, these reserves are:

Month	MW DEC	MW INC
Oct	-863	711
Nov	-859	708
Dec	-897	734
Jan	-929	756
Feb	-1010	811
Mar	-1046	835

BPA is continuing to work with customers to improve and clarify DSO 216.



Wind Integration Team Roadmap and Timeline

