

Northwest Wind Integration Forum

Action Items Resulting from June 6, 2011 Steering Committee Meeting

- 1) **Examine Potential Reliability Concerns.** Steering Committee members expressed concern over possible impacts on grid stability from the growing wind fleet. BPA will report back to the Steering Committee on the results of its ongoing examination of this concern. As an initial step, BPA's Technology Innovation Program is hosting an August 23 workshop on voltage stability and transient issues associated with large-scale wind integration. Invitations will be mailed to SC members and put out on BPA's Tech Forum listserv in the near future.

- 2) **Examine Balancing Authority Consolidation and Energy Imbalance Markets.** Some Steering Committee members expressed interest in balancing authority consolidation and energy imbalance markets to address wind balancing challenges. BPA will seek to reconvene the NW Power Pool BA Leadership Group by Oct 1 to discuss these interests. In addition:
 - Balancing Authority Consolidation. Grant, Chelan, and Avista are analyzing consolidation of their BA's, in part to enable more efficient wind balancing. An interim review of progress on this analysis will be included in the NWPP meeting by October 1.

 - Energy Imbalance Markets. Several Steering Committee members advocated energy imbalance markets as a means of more efficient wind balancing and as a means of reducing demands on the hydro system. At the BA Leadership meeting there will be a discussion of whether the appropriate analysis is being conducted to consider the benefits of EIM in an environment of 30 minute scheduling (which is set to be widely implemented in the Northwest this summer).. The goal will be to try to complete this analysis by early fall. BPA and other Steering Committee members will encourage NTTG and Columbia grid to work together on this analysis after the expected June 22 release of the WECC report on EIM benefits and costs.

- 3) **Dynamic Transfer Capability (DTC) Increase.** Steering Committee members noted that increasing DTC was essential for addressing the wind balancing challenge. BPA and Columbia Grid have efforts underway aimed at DTC expansion. BPA will work with Columbia Grid to engage in outreach to other parties to ensure that the engagement in this issue is appropriately broad. Brian Silverstein is BPA Lead on DTC. Elliot Mainzer to coordinate with WIST Leads Jeff Miller and Gordon Dobson-Mack to set up briefing for Steering Committee members and technical folk on DTC Study progress.

- 4) **Potential Legislative Initiatives.** Both interest in, and skepticism of, legislative initiatives to address oversupply issues were expressed by Steering Committee members. Some organizations are currently discussing potential initiatives. . Paul Norman will request that those involved in these discussions sponsor a discussion

of these potential initiatives among Steering Committee members.

- 5) **Cost Allocation.** Several Steering Committee members expressed interest in tackling cost allocation issues, which they viewed as an integral part of long term solutions to wind integration challenges. One specific concept was that BPA would make an estimate of what they believe negative priced energy will cost them annually and embed this cost in its wind integration rate. BPA would then pay negative market prices but have a backstop of a cap based on lost PTC and REC values. However this was not the only cost allocation approach of interest. BPA stated that new cost allocation approaches could not be implemented in its currently ongoing rate proceeding, but that it would be willing to facilitate/participate in discussions of the issue as soon as practicable without violating ex parte restrictions associated with the current rate case. Jim Lobdell, Scott Corwin, and Tim Culbertson agreed to organize a discussion of cost allocation approaches.
- 6) **Long Term Physical Solutions to Oversupply.** Steering Committee members advocated consideration of a number of physical solutions to the oversupply challenges. These solutions included interregional transmission reinforcements and additions, increasing the geographic diversity of wind development, more advance arrangements for thermal displacement outside of BPA's BA, and other solutions included in Elliot and Ken's presentation at the meeting. Steve Wright requested that the Council lead a process to examine the feasibility and economics of the alternative physical solutions to oversupply. Tom Karier agreed to explore this within the Council.
- 7) **Flexibility Adequacy, with Focus on Natural Gas.** Steering Committee members noted that though physical resource capability and flexibility looked more than adequate, experience has been that not all resources are actually fully available at times of system stress. And since gas-fired resources are increasingly being looked to for flexibility, the adequacy of gas infrastructure is a concern. Pacific, BPA, PGE, and Avista will attempt to engage the Northwest Gas Association, Northwest Natural and other gas suppliers in advancing a discussion of this issue that has already begun. PNUCC and NWGA recently hosted a meeting for planners and operators across the gas and electric sectors. Other Steering Committee members will be invited to participate. PNUCC and the Resource Adequacy Forum will also be asked to engage in this discussion.

Other Points from the Meeting

- **Recognition of significant progress.** There was recognition of and appreciation for the great strides that had been made over the last several years towards addressing wind integration challenges, in part in response to the 2007 Plan.
- **Commitment to joint effort.** There was a high degree of commitment to working together toward solutions to wind integration challenges, and general optimism that joint efforts could be successful. Several suggested that though

parties may need to defend their interests in court and at FERC, controlling the tenor of public pronouncements about points of disagreement will create the best atmosphere for joint effort.

- **Potential development plateau.** There was recognition that regional wind development is likely to slow down substantially for several years after projects currently under construction are completed. However it was also agreed that substantial uncertainty exists about the future pace of development, and it is still possible that the recent high pace of development will continue. (Brian Silverstein at BPA will lead an effort to verify that a plateau is likely). It was also agreed that such a plateau should not be used as an excuse to slow down efforts to solve integration challenges. It was suggested that it would be prudent to continue some level of preparation for a higher than expected level of wind development. BPA and the Council will explore a suitable forum for that preparation to take place.
- **Relief from transmission commitments.** It was suggested that relieving wind developers of commitments to buy firm transmission that they no longer are likely to use, possibly as part of a revised Network Open Season process, could make sense. BPA said they would look at this possibility.