

Wind Study Workshop March 15, 2007

List of Action Items

- 1. Windlogics to address concerns regarding west to east diversity of wind modeling (re: INL data).**
- 2. What additional reserves is Idaho Power carrying to meet 98% compliance with CPS 2?**
- 3. Can Idaho Power utilize existing natural gas-fired combustion peaking facilities to provide reserves and load following capability more economically than using the hydro system?**
- 4. Can Idaho Power utilize the regional markets to integrate wind more economically?**
5. Moving wind remotely has built in a very high transaction cost. Needs to be investigated.
6. Can Idaho Power modulate its coal-fired projects in order to integrate wind?
7. The capacity factors used in the modeling appear to be low. Would going to a different power curve reduce variability?
8. Need to review data behind wind variability and scaling issues (re: RNP question #3).
9. Does the study double-count regulation requirements?
- 10. Need to investigate using an “all down-reg” methodology as proposed by RNP.**
- 11. Market prices from year 2000 should not have been used. Need to investigate other pricing alternatives?**
- 12. Can the analysis be re-run at the 300 MW penetration level to account for the recently approved Elkhorn contract being in eastern Oregon rather than southern Idaho?**
13. Can a further breakdown of the costs associated with the \$10.72 be shown in regards to the amount attributed to the hour ahead forecast, the wind forecast error, reserves and transmission costs (delta between flat and variable case)?
14. Include the new Evander Andrews unit when investigating the use of combustion units to integrate wind.
15. Investigate “what-if’s” associated with expanding the size of the control area.
- 16. The flat wind HL/LL bias should be removed from the model.**
17. Can Idaho Power calculate the reg-down component of reserves? What about spilling wind? What about the impacts of using a 20-minute ahead forecast?
18. Run just a combustion turbine analysis (possibly using Aurora).

As discussed at the workshop, Idaho Power intends to begin working on highlighted items (1-4, 10-12 & 16) prior to addressing the non-highlighted items.