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January 8, 2006

## MEMORANDUM

**TO:** Power Committee

**FROM:** Jeff King

**SUBJECT:** Status Report for Northwest Wind Integration Action Plan

The first phase is closing in on specific conclusions regarding the following:

- The amount of wind capacity that can be operationally integrated using the existing system
- The amount of integrating capacity required per megawatt of wind capacity
- The cost per average megawatt of these integrating services
- Wind capacity that can be accommodated by the existing main grid transmission system
- The years remaining until transmission upgrades are required
- The nature and cost of these upgrades

The draft Wind Integration Action Plan report will be presented to the Policy Steering Committee on January 22. We plan to send the complete report out to the members on January 16. The report consists of three sections: introduction and background; a primer on wind as a power supply resource in the Northwest; and findings and recommendations for action. The latter are (currently) organized into the following issue areas:

- I. Capability of the current power system to integrate expected wind capacity and the estimated cost of these integration services. Recommendations regarding refinement of these conclusions.
- II. Need for and timing of upgrades to the main transmission grid to accommodate longer-term wind development. Activities needed to ensure transmission capacity is available when needed.
- III. Benefits of securing limited operational control of wind projects; recommendations on how to achieve this equitably.
- IV. Benefits of sharing regulation and load-following capability among control areas; recommendations on how to achieve this.
- V. Need to formally assess the sustained peaking capacity value of wind.
- VI. Conclusions and recommendations regarding integration cost allocation.
- VII. Need for improved regional wind data and a proposal to develop this.
- VIII. Need to better understand interactions between wind integration and other uses of the power system.
- IX. Preliminary assessment of the role of technologies that might be used to expand system flexibility.
- X. A call for an assessment of proactive strategies to maximize the economic and environmental fuel displacement value of wind.
- XI. Recommendations for a Northwest Wind Integration Forum to carry out these recommendations.

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