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January 30, 2007

MEMORANDUM

TO: Power Committee

FROM: John Fazio, Senior System Analyst

SUBJECT: Review Work Plan for the Resource Adequacy Forum

In 2006, the Council adopted a resource adequacy standard for the Northwest's power supply. That standard is designed to assess the adequacy of the system to meet both the energy needs (Council document 2006-05) and capacity needs (Council document 2006-23) of the region. The standard, which is based on recommendations from the Resource Adequacy Forum (Forum), uses the balance between resources and load, as a measure of the power supply's adequacy.

In 2007 the Forum will reassess assumptions used to develop the resource adequacy standard and make recommendations for a final standard to the Council. The Forum's major milestones to complete this task include:

- Finalizing a resource counting standard, including a method to address wind generation and conservation
- Benchmarking (and calibrating) analytical tools (computer programs) used to assess the adequacy of the power supply
- Translating the regional standard into useful guidelines for individual utilities and public utility commissions
- Developing an alternative adequacy target that addresses economic risk (as the Council's Fifth Power Plan does)

Attachment A provides a more detailed work plan for 2007.

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Attachment A

Resource Adequacy Forum Work Plan 2007

This work plan is primarily intended to identify remaining tasks required to finalize a capacity standard for the northwest. The schedule is tentative and will likely change over the course of the next year.

January 2007 through May 2007

- Technical Committee begins to explore economic targets for both the energy and capacity standards. This process will include examining the impacts to cost and to economic risk of changing adequacy targets.
- Technical Committee works to finalize capacity adequacy standard
 - **a.** Council staff finalizes temperature/load relationships using the 50-hour duration rather than daily average temperatures for assessing the adverse temperature reserve requirement.
 - **b.** BPA staff briefs the Technical Committee on suggested peak period durations for both winter and summer.
 - **c.** Technical Committee works with others to develop assumptions regarding wind resources.
 - **d.** Technical Committee reevaluates Planning Reserve Margins
- Technical Committee begins developing guidelines for interpreting regional energy and capacity adequacy standards for individual utilities.
- Technical Committee reassesses the availability of surplus out-of-region resources to be used in the analyses.
 - a. Fine-tune transmission assumptions
 - b. Evaluate economic factors, which might dictate imports/exports depending on magnitude of shortages
- Technical Committee refines assumptions regarding the inclusion of uncontracted Independent Power Producer generation in resource adequacy assessments.
- Technical Committee refines assumptions regarding the availability of hydro flexibility
- Technical Committee begins to explore the use of a "loss of fish operation probability" (LOFP) metric to assure that fish and wildlife operations are not unduly curtailed.
- Technical Committee checks that PNW Resource Adequacy Standards are consistent with NERC/WECC guidelines/standards.

June 2007

- Council assesses the region's resource adequacy (from a top-down perspective).
- PNUCC publishes its Northwest Regional Forecast, assessing adequacy from a bottomup perspective.
- Results of the top-down and bottom-up assessments are compared.
- If necessary, Council evokes actions called for in the implementation approach.

July 2007 through August 2007

- Steering Committee considers guidance for interpreting regional energy and capacity standards for individual utility resource planning.
- Steering Committee decides on economic adequacy targets for energy and capacity.

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- Steering Committee decides on assumptions regarding the peak duration period.
- Steering Committee decides on assumptions for out-of-region spot market availability, uncontracted IPP generation, wind generation and hydro flexibility for the top-down regional resource adequacy assessments.
- Steering Committee considers the use of a fish-operation reliability index to assure that PNW resource adequacy standards do not impose unreasonable risk to required fish operations.

September 2007

- Technical Committee prepares the final capacity adequacy standard and forwards it to the Steering Committee.
- Suggested changes to resource and load reporting are incorporated into PNUCC's process.
- Technical Committee reviews the energy adequacy standard to incorporate any revised assumptions adopted for out-of-region spot market availability, uncontracted IPP generation, wind generation and hydro flexibility as well as revisions to the LOLP analyses.

October 2007

- Steering Committee decides on a final capacity adequacy standard to forward to the Council.
- Council votes to release the final capacity adequacy standard for public comment.
- Technical Committee recommends revisions to the energy adequacy standard, if any, to Steering Committee for consideration.

November 2007

- Council takes comments on the final capacity adequacy standard.
- Steering Committee forwards any revisions to the energy adequacy standard it approves to the Council for adoption.

December 2007

- Council votes to adopt final capacity adequacy standard.
- Council requests public comment on revised energy adequacy standard, if needed.
- Technical committee completes background documentation in support of the Northwest regional resource adequacy standard.

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