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May 3, 2007

MEMORANDUM

TO: Power Committee

FROM: John Fazio, Senior System Analyst

SUBJECT: Status Report: Northwest Resource Adequacy Forum

The Forum's primary goal for this year is to reevaluate the energy and pilot capacity adequacy standards adopted last year. The current work plan shows an end-of-year target date to present a final proposal to the Council for consideration. Many milestones must be passed in order to achieve that goal. Some of the major remaining tasks include:

- Finalizing a resource reporting protocol, including a method to count wind generation and conservation
- Benchmarking analytical tools used to assess the adequacy
- Developing a rule-of-thumb process to provide guidance to individual utilities and to public utility commissions
- Developing an economic adequacy target (as implied in the Council's Fifth Power Plan)

Much progress has been made but work is still ongoing. A wind sub-committee has been established to collect and analyze wind data to determine how wind generation should be counted in both the energy and capacity metrics. The benchmarking process is moving slower than anticipated but no serious deficiencies have been observed as yet. The development of a tool that would provide guidance to individual utilities is progressing well. Discussions regarding an economic target are scheduled for the summer but some work has already been done (i.e. converting the Council's 5th Power Plan resource strategy into economic targets).

In July of this year the Forum is scheduled to present its power supply assessment (3 and 5 years out) to the Council. That assessment will be compared to the PNUCC's tally of loads and resources. Preliminary calculations show that the region's power supply remains in the "green light" status -- that is, well above the current energy and capacity standards. It should be noted, however, that although the region's supply is adequate, resource acquisition activities are still warranted in order to capture cost-effective conservation and to promote renewable resource development. In addition, the adequacy status of individual utilities may warrant planning actions on their part.

Appendix A provides the Forum's 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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