



November 23, 2004

Ed Hansen, General Manager
Snohomish PUD
2320 California Street
P.O. Box 1107
Everett WA 98206-1107

Dear Ed:

The Northwest Independent Power Producers Coalition (NIPPC) has actively participated in the Regional Representatives Group of Grid West. We are committed to seeing to it that if the Northwest chooses to pursue Grid West that it be capable of solving real problems at affordable cost and in a manner that is fully responsive to the region. We understand that the Snohomish PUD has so far chosen to pursue a different course.

We appreciate the District's offer to accept comments and respond to requests for additional information on the Henwood effort.

NIPPC submits the attached questions in the spirit of peer review. We sincerely hope that you will arrange for Henwood to respond. In addition to us, many of the members of Grid West's Risk and Reward Working Group have expressed interest in reviewing the information we have requested.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert D. Kahn".

Robert D. Kahn, Ed.D.
Executive Director

cc:

Members of the Grid West Risk & Reward Committee
Egil "Bud" Krogh
Karin Bulova

Questions on Henwood's Study of Costs, Benefits and Alternatives to Grid West

1. Analytical Methods

Please describe how Henwood calibrated its Base Case model to be representative of actual system operations. This should include discussion of a test year analysis and variances produced in the Base Case model.

A. Sensitivity to Load Forecast and Export/Import Assumptions

What load forecast model did Henwood use for this study? Please provide load data for each hourly period modeled by zones shown in Figure 3-2. Did Henwood perform any simulations based on light, normal or heavy seasonal loads? Provide hourly schedules used to model exports to loads, and imports from resources outside the region. Detail by source zone and sink zone.

B. Sensitivity to Fuel Prices and Resource Mix Assumptions

What fuel price assumptions were used in the study cases? Please enumerate the fuel prices used in the study highlighting the regional differences in fuel prices (if any). Did Henwood perform any simulations using a range of fuel costs? If so, please provide a description of the fuel price forecasts that includes data about the range of fuel costs assumed. Please enumerate the type (by prime mover and fuel) and capacity of resources for each of the zones in Figure 3-2.

C. Sensitivity to Hydrological Conditions

Please describe the "water year" used by Henwood in its study. Did Henwood attempt to analyze the study cases assuming critical water conditions? How did Henwood shape the hydro in the Northwest and British Columbia (how were export opportunities considered)?

2. Coordinated transmission maintenance analysis

Henwood states that it quantified benefits of RTO coordinated maintenance. Please describe how the impacts of improving coordination of transmission system maintenance were evaluated.

What information was used to establish a baseline for transmission outages in the Base and Grid West cases? Please identify facilities, time periods and type of outage used in each simulation.

3. Application of contract path limits and physical path constraints

Does Henwood's modeling approach assume that the Base Case contract path scheduling approach optimizes use of existing paths? That is, does the Base Case model assume that all transmission owners with rights on jointly owned and/or operated paths make

full utilization of the path capability? Section 2.7 states that “actual data indicates that there is little such congestion” on the cut planes in the Northwest. Please provide references to this actual data and a description of how the conclusion in section 2.7 was reached based on this data. Is Henwood familiar with any regional reports that find congestion is a problem in the Northwest? How were transmission constraints within bubbles modeled (e.g. Tot 4a & Tot 4b within the Western Wyoming bubble; or West of Crossover, West of Broadview, and West of Townsend within the Garrison Bubble)? How many cut planes (flow gates) were modeled in the case topology?

4. Rate Pancaking

Please describe the mechanism used by Henwood’s model-to-model application of pancaked or “incremental transmission rate charges” in the Base Case. On page 3-6, Henwood states that there are a “relatively small number of [pancaked wheeling transactions within the Grid West topology].” Did Henwood attempt to analyze the extent of “existing pancaking for wheeling rates” other than through simulations? If so, what was the source of this information? Does the Henwood simulation approach consider the effects of L-shaped schedules and tagged transactions that include multiple OASIS reference numbers? Does the Henwood simulation approach consider the possibility that transmission requests may be denied in actual practice in spite of the ideal conditions that exist in a simulation?

5. Transmission Topology

Figure 3-2 showed the model topology for WECC and Figure 3-3 for Grid West. Table 3-1 showed wheeling assumptions for selected paths modeled within Grid West and Appendix A gives contract scheduling limits for selected Grid West paths. Please list all modeled wheeling assumptions and contract scheduling assumptions. Why did Henwood assume that Cut Plane O (Idaho to the Northwest) would be capable of 2200 MW in both directions? Cut Plane N (Enterprise to Hells Canyon) was included in Figures 3-2 & 3-3 and Table 3-1 not listed in Cut Plane O or in the MW totals given for Cut Plane O. How was this element of the Idaho to the Northwest path modeled? Appendix C (revised) shows Henwood’s resulting modeled flows. Several of the cut planes show flows that exceed the stated limits (e.g. C-10, COI has the stated limit being 4000 MW, but the graph shows several hours exceeding 4000 MW). Does the model hold flows to the stated limits? Please explain why the simulation resulted in a dispatch that exceeds these path ratings. How do the modeled flows compare to historic flows on COI? And more broadly, did Henwood compare modeled flows with historic flows on all paths to verify that the model was properly calibrated? How were the contractual transmission rights and ownership shares of the joint plants limited to the owners? For example a company might have the firm rights to access a portion of a certain plant. In the event that the plant is down, accessing MWs from a different plant would be subject to a wheeling charge.

6. Losses

How were losses modeled by Henwood? Section 3.2 states that “for purposes of scheduler and trader decisions, losses are the same in both cases.” Does this imply that any effects of eliminated pancaked losses in the Grid West case were not analyzed at all? Please substantiate the statement in footnote 38 that “pancaked loss charges may be a good indicator of the actual incremental cost of dispatch and should be included in the economic dispatch decision.” What will Grid West charge PBL for losses? What will Grid West charge non-grandfathered transmission uses for losses? How much will actual losses increase due to Grid West?

7. Application of Study Results

The cited benefits for the Henwood study on Table 8-2 were limited to the Grid West area. What were the equivalent benefits for the entire WECC region including Grid West? How were regional benefits allocated to sub-regions? In Figure ES-2 the “Henwood Benefits” (\$78 M) are compared with the “Tabors Benefits” (\$410 M). Please provide a specific reference to the study that identifies the “Tabors Benefits” to be \$410 M for the RTO West region. How can the results of the Henwood modeling work be adjusted to get consumer-specific impacts? Is it possible to get Henwood to run new “base cases”? How much would that cost?

8. Analysis of alternatives

The executive summary suggests that “the key players” could solve the problems identified by the Grid West RRG. Henwood should identify who it believes “the key players” are. Are the “key players” different from the parties at the table in Grid West’s RRG?

Which stakeholder groups would Henwood include in studies that Henwood recommends in Section 11? Henwood implies that an independent party is not needed to implement redispatch and run the system planning process. Is Henwood aware of any antitrust concerns that various stakeholder interests have regarding redispatch settlement and provision of resources for planning studies? How would Henwood structure a governance model for the alternative organization that they propose? Please discuss membership classes, voting structures, processes for approving and changing bylaws, processes for adopting study results and allocating costs to beneficiaries.

Submitted by:

Northwest Independent Power Producers Coalition