

# Resource Adequacy Steering Committee Meeting NOTES

February 24, 2006

## I Introductions and Council's Issue Paper on the Energy Metric and Target

Wally Gibson reviewed the Council's process to adopt the Energy Metric and Target.

Paul Norman reviewed the timeline for the Regional Dialogue (RD). The RD Policy Proposal is under development and expected to be finalized this summer. By August, BPA would need the Resource Adequacy (RA) Forum process to have resulted in consensus on the approach for how to assess and implement RA in order to allow for a nexus to the long-term contracting process.

Dick Adams reviewed PNUCC's traditional Northwest Regional Forecast (NRF) projections since the early 1990's and compared the NRF to the proposed Energy Metric and Target projections. The proposed regional RA energy metric and target shows on the order of 4,000 aMW more annual energy than the NRF. The difference is that the NRF does not count any out-of-region non-firm resources nor does it include the uncontracted Independent Power Producers' within Region generation. Dick summarized the discussion on this issue at the last PNUCC meeting. Utilities use a variety of approaches, a lot of which focus on the level of risk the utility is willing to take. Questions were raised at the PNUCC meeting regarding west coast adequacy to support the Council's proposed metric and target. John Fazio mentioned the linkage of the Council's metric and target to the GENESYS LOLP analysis. The LOLP analysis assumes 3,000 MW of surplus capacity available in California in the winter-time. (Please note that the Technical Committee recently reviewed that assumption and concluded it is an appropriate assumption.) Dick said this new RA standard is moving the Region off critical hydro. Dick also questioned how this standard and assessment will affect the siting processes. Will Public Utility Commissions approve power plant construction if the Region is surplus? Mary Johannis mentioned that the Council's proposed standard is a minimum standard only sufficient to "keep the lights on." Both the Technical and Steering Committee participants have recognized in past meetings that individual utility may wish to plan to a more conservative standard, i.e. an economic standard that satisfies the utilities' desired level of risk for their operations. Jim Litchfield said that despite this clarification, utilities are concerned that they may not be able to get approval for resources they feel are necessary for their utility if the Regional RA Standard shows the Region is surplus. Howard Schwartz asked if the Forum needs to do more outreach to PNUCC to answer the questions Dick summarized

from the last PNUCC meeting? Dick agreed more discussion is needed, not just to address the appropriate RA metric and targets, but also how these will be used. The group agreed to the need for further discussion in forums other than just the PNW RA Forum in order to achieve true regional consensus.

## **II Discussion of Resource Adequacy Implementation Options** (Refer to PowerPoint and Paper)

Wally introduced a PowerPoint presentation, which summarizes a paper on implementation options developed by a subgroup of the Steering Committee. Wally summarized the assumptions and goals underlying all the alternatives.

The first alternative relies on transparency of information and market discipline to ensure resource adequacy going forward. A question was asked whether this alternative is only in the operational timeframe. Wally clarified that the transparency of information piece involves RA assessments over the planning timeframe, which should indicate to the Region whether we are heading toward resource insufficiency. There was much discussion regarding the penalties associated with utilities placing uncontracted load on Bonneville, especially the additional penalty when Bonneville has to declare a power emergency and violate the biological opinion in order to “keep the lights on.” It was mentioned that even with the stated penalties, it might be most cost-effective for utilities to plan on incurring these penalties rather than building new facilities. Dick mentioned that many more actions were taken in 2000-01 to ensure lights would not go out, e.g. public appeals, demand-response, purchase of diesel generators. Howard said that the possibility of a repeat of the 2000-01 energy crisis due to insufficient resources is the biggest con to this alternative. Jim stated that the likely market prices and penalties would incentivize utilities to plan sufficiently to meet their load.

Wally then introduced the first of three alternatives that involve backstop mechanisms to ensure sufficient resources in place to assure RA. This first alternative involves binding contractual mechanisms in Bonneville’s contracts and in the PUC-utility processes, which trigger resource or reserve contracting actions if the regional assessment three years out indicates resources insufficiency. Emails from Bill Gaines and Bill Drummond, both of whom were unavailable to attend today’s meeting, were read. These Emails indicated opposition to this alternative. Both Mary and Paul clarified that this alternative is not Bonneville’s preferred approach to assuring RA. Rather it is Bonneville’s fallback position, if this Forum is unsuccessful in addressing RA.

The second of these three alternatives involves establishing a regional reserve to serve as a backstop. The reserve could be funded in different ways including a regional tax, or could be limited to Bonneville establishing a reserve for its

customers, or the Region. Howard indicated that this alternative has only been fleshed out at a very high level. Jeff Atkinson suggested a version of this concept whereby utilities could voluntarily fund a pool of reserves available to the funding utilities.

The third of the backstop alternative is based on the Western Electricity Coordinating Council's (WECC's) Reliability Management System agreements. This alternative involves utilities voluntarily entering into contracts with one another and an oversight entity agreeing to procure sufficient resources to satisfy RA metrics and targets at the individual utility level. The discussion highlighted that this approach has worked very well for WECC in ensuring operational grid reliability.

The third overall alternative relies on control areas explicitly assuming the responsibility to assure sufficient resources to meet an RA standard by contracting for planning reserves. The regional standard would be allocated to the control areas. Scott Spettel clarified that this alternative would pin down the question of how to allocate uncontracted IPP resources and out-of-region surpluses to regional sub-entities. Jeff suggested that this alternative might create a planning reserve market. The difficulty is how the control area's planning for reserves would mesh with the utilities' integrated planning processes? Scott clarified that he thinks the control area would enter into short-term planning reserves contracts. Any other type of acquisition on the part of the control area might raise standards of conduct issues, given that long-term resource procurement is typically the responsibility of the power side, rather than the transmission side of the utility.

### **III Narrowing of Implementation Options**

Steve Weiss suggested that RA implementation might take a phase approach starting with a voluntary approach and then evaluating how it works. Specifically, start with Alternative 1 and then implement a voluntary contract approach (Alternative 2(c)). Pete Warnken agreed with Alternative 1, perhaps matched with a public process if a red flag is raised. Jerry Thale also agreed with starting with Alternative 1. Jeff indicated that Alternative 1 is a good start, possibly followed by the creation of a voluntary incentives mechanism, or a reserve pool, comprised of resources developed by regional entities, but funded or co-funded by some type of tax. Howard suggested that RA implementation may have to co-evolve with regional transmission organizations, such as ColumbiaGrid or GridWest. Steve stated that California may be overreacting to the RA question, resulting in additional surpluses that can benefit the PNW. John Prescott also supported the market-based approach of Alternative 1. He asked whether penalties would be 3 years out, or real-time when utility places

uncontracted load on Bonneville. The response was that the penalty would be in real-time.

Wally suggested that Alternative 1 could be fleshed out by adding a contingency to Alternative 1 if the informational transparency/market-based regional approach does not work. The contingency could be in the form of some backstop or incentive mechanism—which could be rate-based. Wally suggested that the Steering Committee authorize the small group to more fully develop Alternative 1. The reporting process also needs to be further defined. Steve suggested that individual utility assessments could be made public if the regional RA assessment indicates a resource insufficiency. All of these components will be defined in Alternative 1. Paul suggested building into Alternative 1 a public process to examine resource sufficiency problems when the RA assessment indicates a yellow or red light. Paul also stated that a major motivator in Alternative 1 is that the utilities will know if they are resource insufficient, once individual utility metrics and targets are developed.

#### **IV Progress on Developing a Capacity Metric and Target**

##### **A Proposed Methodology**

Mary presented a proposed methodology for a capacity metric and target. If the region is energy constrained, why do capacity at all? A cold snap situation may trigger a capacity need even during times of surplus energy. Also, summer capacity surplus is dwindling from load growth and more fish constraints on the system. Finally, local areas, especially in transmission-constrained areas, may have capacity issues sooner than others.

GENESYS is the likely candidate for a regional model to validate the spreadsheet capacity approach, but it has to be calibrated.

The spreadsheet approach involves the hydro utilities sending data to the Council, which would perform a regional assessment. This may take care of the confidentiality issues. Grant responded that this would be OK for them. Tacoma is a little sensitive about sending data to Bonneville, but is comfortable with the Council. A question regarding Council staff time was raised.

Mary clarified that we would use the 1989 temperatures with the Council's regional load to set up the hourly loads for a cold snap analysis.

The Technical Committee decided that using the 1937 water condition would be appropriate in determining whether capacity is an issue under the most severe conditions. Mary reminded the group that this is just a pilot analysis and that the conditions studied might be too severe to be the basis for a capacity

target. We will look at the winter flows for 1989 and see if they were less than flows in 1937. If so, then some adjustment for freeze up should be done. However, John indicated he didn't think that was going to be the case.

## B Confidentiality Issues

Hydro utilities will provide sustained peaking hydro analyses to Council staff. Council staff will perform the regional assessment to avoid concerns that competing utilities might obtain potentially market-sensitive information.

## V Other Issues and Topics for Next Meeting

The issue was raised that the Technical Committee still needs to benchmark the GENESYS model. So this work becomes even more important if this model is being used to validate both the energy and capacity metrics and targets. How curtailments are counted may need to be redefined in order to use the GENESYS model to validate the capacity spreadsheet analysis.

## VI Schedule next meeting and adjourn

The next meeting will be on March 24 from 10 a.m. – 3 p.m.