

January 27, 2003 Resource Adequacy Forum Meeting Report

Gene Derfler, Oregon member of the Northwest Power Planning Council, welcomed the participants to the meeting and introductions were made. The list of attendees is attached. The agenda was reviewed by Dick Watson of the Northwest Power Planning Council staff.

Reasons for the Meeting

The Adequacy Forum rose out of discussion among representatives of the Northwest Power Planning Council, BPA, the Northwest Power Pool and PacifiCorp. These discussions identified several factors that argued for a regional meeting focused on the question of resource adequacy.

They were:

- Problems and inconsistencies with the ways in which we currently assess resource adequacy;
- Concern that the regulatory and/or economic incentives for resource adequacy may still be inadequate such that we risk a repeat of the experience of 2000-2001 sometime in the future;
- Renewed interest in integrated resource planning on the part of utilities, both public and investor-owned, and their regulators;
- The desire to be able to make a credible argument to the Federal Energy Regulatory Commission (FERC) that the Northwest and West is dealing with resource adequacy issue on its own.

Goal

The goal for the meeting was:

- Establish whether there are problems with how we assess, report, plan for, and implement to assure resource adequacy that need to be addressed collectively and, if so, determine how to address them.
- Establish what will help regional decision-makers address adequacy issues.

Assessing and Reporting on Resource Adequacy

Presentations were made on how we currently assess and report resource adequacy. Jerry Rust of the Northwest Power Pool described how the Power Pool collects load and resource data from the control areas and reports the information up through the Western Electricity Coordinating Council (WECC) and on to the North American Electrical Reliability Council (NERC). One issue concerned the lack of common, consistent assumptions for the data reported by the control areas. For example, are peak loads based on normal weather? One in ten weather? One in twenty? Is it an instantaneous peak or a sustained peak? If sustained, what period? Although the Power Pool reported a 39 percent reserve margin for the Winter of 2000-2001, if severe weather had come in as predicted, the Pool would have had closer to a zero reserve margin. He also pointed out that the WECC, while stipulating that participants report generation under "adverse hydro," does not define adverse hydro. These load and hydro issues are central to any meaningful assessment of resource adequacy.

Concern was also expressed with regard to the increasing difficulty of access to data that may have commercial sensitivity. Examples were maintenance schedules for generators and import and export commitments.

Dick Watson described the loss of load probability assessments that the Northwest Power Planning Council makes for the four-state Northwest area. In contrast to the Power Pool approach, the

Council's assessment is a "top-down" simulation of the Northwest power system and its interactions with the rest of the Western system. The strengths of this approach are that it is a probabilistic approach that is appropriate to the highly variable Northwest hydroelectric system; it more accurately represents how the hydroelectric system would be operated in the event of an energy emergency; and it explicitly simulates, at least in a simplified form, the interactions of the Northwest region with the rest of the WECC. Its drawbacks include its complexity (a computer model with tens of thousands of lines of code) and, to some extent, some of the same data access problems mentioned by the Power Pool. Also of concern is the question of what the criteria should be. The Council uses a loss of load probability of 5 percent as the maximum acceptable. Should it be greater? Less?

Greg Delwiche of BPA and Dick Adams of the Pacific Northwest Utilities Coordinating Committee (PNUCC) also described the assessments put out by their organizations (the BPA "White Book" and the PNUCC Northwest Regional Forecast). BPA forecasts regional and federal system loads and resources. PNUCC collects forecast load and resource forecasts from its utility members and compiles the results. There was agreement that multiple looks at the adequacy issue from different perspectives is useful. Dick Adams stated that he felt that PNUCC had successfully dealt with the issue of consistent assumptions in the submittals it receives from its member utilities.

Issues

Ensuing discussion identified a number of issues.

- Issues of consistency of assumptions and criteria
- Issues of information availability
- Is there a standard or several standards?
- What is the appropriate geographical footprint for considering adequacy?
- Perspectives, assumptions and uses differ -- may not be a problem as long as differences are understood. Strength in a variety of tools and approaches?
- FERC is interested in a "delivered" standard of adequacy, which means consideration of transmission constraints.
- While not everyone uses the WECC/NWPP information, it has important implications for generator investment decisions
- Critical water planning could be too stringent given Western market diversity

Regulator Perspectives on Planning for Resource Adequacy

The next section focused on the views of regulators on the question of resource adequacy. Roy Hemmingway, Chair of the Oregon Public Utilities Commission began by noting that the biggest problem is dealing with the variability of the hydroelectric system that is characterized by occasional periods in which hydro generation can be significantly reduced. Agreement on how hydro is treated is needed. He raised the question of how much utilities could rely on the market to meet load during periods of reduced hydro generation. Bringing demand response into the equation is important. The role the DSIs could play is changing due to the situation of the industry. We are still under-investing in efficiency. Noted that the Oregon Commission is committed to revisiting its assumptions about retail access. Retail access complicates the picture of planning for resource adequacy if loads can come and go. It is up to the PUCs to determine who has load serving responsibility.

Marilyn Showalter, Chair of the Washington Utilities and Transportation Commission noted that she is looking for ways to link the "general," i.e., a regional or even West-wide look at resource adequacy, to the particular, the accountability associated with local planning and load service

obligations. While regional assessments of adequacy provide useful information, the action and accountability is at the state and local level.

Larry Nordel of the Office of the Montana Consumer Counsel noted that resource adequacy isn't the primary goal. The goal is a well-functioning market. We can tolerate some high prices. We need demand response to moderate prices spikes and market monitoring to prevent manipulation of the market. The solution is a three-legged stool -- resource adequacy + demand response + market monitoring.

Bill Eastlake of the staff of the Idaho PUC noted that market monitoring was a key since we will still be relying on the broader market to some degree. However, thinks we should be moving closer to a critical water planning standard rather than away.

Kirby Lampley of the Nevada PUC staff noted that they are trying to understand how state regulatory and planning processes relate to broader regional efforts.

Becky Wilson of the Utah Public Service Commission noted that Utah still has traditional utility regulation. They feel they need a more credible information base in working with utilities.

Utility Perspectives

Representatives of Idaho Power, Puget Sound Energy, PacifiCorp, Avista, BPA, Tacoma Power, Portland General, Pacific Northwest Generating Cooperative, Benton County PUD, and Sierra Pacific gave brief descriptions of their planning processes and the treatment of adequacy in those processes. Some key points were as follows:

- Individual Load Serving Entities (LSEs) should be held accountable, but cannot solve the adequacy/reliability problem in isolation. They can plan and build for critical water but that will impose additional costs over some level of reliance on the market. There need to be broader solutions and sharing of accountability with regulators.
- Resource decisions are interdependent. "If we know everyone else is doing critical water planning, we won't."
- Several cited uncertainty with respect to how much load would be served by BPA as a major issue for them.
- More generally, several noted that they could take care of themselves if load service responsibility is clarified and data is available.
- Some believe there needs to be some kind of adverse (not necessarily critical) water planning standard.
- Most are considering demand response mechanisms in their planning as well as conservation and renewable resources.
- Risk management is increasingly an explicit purpose of planning for several. The lowest expected cost strategy may result in being exposed to excessive risk.

Discussion

In the discussion that ensued, there were several points raised. They included:

- The footprint. The issue of adequacy has a broader footprint than the Northwest or even the Northwest Power Pool area. It is a West-wide issue that ultimately needs to be addressed at the level of the WECC. However, starting level of the Northwest Power Pool with the aim of expanding to the WECC may make some sense.

- Establishing common definitions and assumptions for assessing adequacy would be a step in the right direction.
- Sharing information on the evolving practice of integrated resource planning in the wake of the 2000-2001 experiences would be helpful. How has and should IRP change to be a more useful tool in avoiding or better managing situations like 2000-2001. How should demand response be treated in IRP? What are best practices? It was noted that some recent IRPs have wrestled with the question of resource adequacy but did not reach clear conclusions.
- Concern was expressed that failing to assure adequacy resulted in unacceptable environmental costs.
- What kind of a story can we tell FERC? Does the Northwest and the West have a compelling argument that we are adequately handling the question of resource adequacy without federal intervention?

Areas of Apparent Agreement

While perhaps not explicitly stated, there appeared to be general agreement regarding the following (characterized as either policy or technical issues):

- There is a need for one or more regional adequacy indices (Technical);
- There is a need to explore the options for the geographical scope (footprint) for analysis (Technical);
- There is a need to improve the quality and consistency of information used in analyses (Technical);
- There is a renewed interest in IRP and regional dialog is needed (Technical and policy);
- There needs to be clarification of the obligation to serve loads (Policy);
- There is a strong need to communicate to FERC that the NW region and its utilities have a long history of addressing resource adequacy and is reviewing the methods used in the area in light of recent experience

Next Steps

The following action items were agreed upon:

- The Northwest Power Pool and the Northwest Power Planning Council will initiate a process to establish common definitions and assumptions for the reporting of data for the assessment of resource adequacy with the utilities that report this information and other interested stakeholders.
- The Northwest Power Planning Council will organize a forum involving utilities, regulators, planning agencies to focus on the question of best practices in integrated resource planning. Have the objectives of IRP changed since 2000-2001? If so, in what ways? How should IRP be approached in light of our current understanding?

Necessary but Not Sufficient?

The organizers of the Adequacy Forum believe that the action items described above are necessary to improving the assessment and reporting of and planning for resource adequacy. However, we question whether they are sufficient to allow the responsible entities in the region to tell a convincing story to FERC that we have the issue of resource adequacy in hand and, more importantly, assure ourselves that we will successfully manage resource adequacy issues in the future.

We agree with the goal of maintaining responsibility and accountability for action at the state and local levels. However, individual entities' decisions about resource adequacy can affect not only their own reliability, costs and risks, but those of others in the region as well. How much is not

clear. Consequently, we believe there needs to be more conversation about the need for an agreed upon adequacy standard for the region (however that region might best be defined) and whether some form of compliance mechanism compliance is necessary. Some of the questions that should be addressed are:

- Are the “spill over” effects of individual resource adequacy decisions enough to be concerned about?
- At the forum, there were several different views on the appropriate treatment of hydro variability in planning. How should this be addressed?
- Is an “information standard” sufficient? (i.e., all agree to provide certain specific information regarding their respective power supply situations)?
- If not, is a “process standard” sufficient (i.e., all agree to use a common planning framework but how individual entities choose to manage risk is up to them)?
- Do we need a “substantive standard” (e.g., a requirement to have resources or forward contracts in place to cover loads at critical water or carry a 15 percent reserve margin, etc.)?
- If agreement were to be reached on a standard, is voluntary compliance sufficient or does concern about equity in meeting resource adequacy requirements among the load serving entities imply the need for some sort of enforcement?

For the reasons expressed earlier, we propose an additional meeting to address these questions. We will be in contact to see if you are willing to participate in such a meeting.

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