



## Department of Energy

Bonneville Power Administration  
P.O. Box 3621  
Portland, Oregon 97208-3621

January 31, 2013

In reply refer to: DKR-7

Mr. Bill Bradbury, Chair  
Northwest Power and Conservation Council  
851 S.W. Sixth Avenue, Suite 1100  
Portland, OR, 97204

Re: Sixth Power Plan Draft Mid-Term Assessment Report

Dear Bill:

Attached are comments from the Bonneville Power Administration on the Sixth Power Plan Draft Mid-Term Assessment Report. Thank you for the opportunity to share our thoughts.

As I mentioned in my public testimony, Bonneville appreciates the hard work of the members and staff in producing the report. We found the process to be very valuable in leading us to consider how the region has evolved since the Sixth Power Plan was adopted.

Our comments mostly identify issues we want to continue to work with the Council on. We look forward to participating on advisory committees and in other sessions with members, staff, utilities and other stakeholders to achieve our mutual goals of ensuring the Pacific Northwest enjoys a clean, reliable and cost-effective energy system.

Sincerely,

A handwritten signature in blue ink, appearing to read "Peter Cogswell". The signature is stylized and written over a horizontal line.

Peter Cogswell  
Manager, Regional Relations  
Bonneville Power Administration

**Comments of the Bonneville Power Administration on the 6<sup>th</sup> Power  
Plan Draft Mid-Term Assessment Report  
January 31, 2013**

General Comments

- The report references California in several sections and it certainly is worth monitoring and exploring the different issues in more detail in developing the Seventh Plan. For example, Bonneville believes that there is no question that changes in California's renewable policies slowed the pace of renewable energy development in the Pacific Northwest over the short term. At the same time, the limited extension of the federal production tax credit, recent conversations indicating that California may be interested in expanding its RPS requirement from 33 percent to 40 percent and California's implementation of a cap and trade program to reduce carbon emissions all have interesting implications for California and surrounding states. It is not unreasonable to question how long California can maintain its preference for developing renewable resources in-state or at the distributed generation level and still achieve its clean energy goals.
- Bonneville also is interested in the type of renewable resources being developed in California. Currently, it appears that large amounts of solar generation may be developed as solar costs are decreasing. The generation profile of this resource could have a marked impact on the wholesale electricity market and resource adequacy. If, and how, California replaces lost generation due to the once through cooling rule also is an important factor to monitor. We are not as bullish as the Council in observing that "a majority of the retiring capacity is being replaced."
- As noted by Bonneville Administrator Steve Wright in his recent presentation, it is important for the Council to continue its leadership role on the issue of flexibility adequacy. This includes working with PNUCC, Bonneville, regional utilities, regulators and others to quantify flexibility capabilities and deficits and to support long-term adequacy. As part of this effort, the Council should also be sure to consider the impacts of work at the NW Power Pool Market Assessment and Coordination Initiative on regional markets for flexibility services and coordinated system operations.
- Consistent with the narrative in Situation Scan #14 on Power and Transmission Planning, Bonneville believes it is increasingly important to coordinate these two planning areas. We welcome the Council's increased interest and engagement in this effort and look forward to working with the Council on it. Likewise, we appreciate the context for Situation Scan #15 on Power and Natural Gas System Convergence. We have worked closely with PNUCC and other organizations on this issue recently and we believe it should be discussed and understood more in developing the Seventh Plan.

- Beginning with Section III, the report does a nice job summarizing the different issues associated with energy efficiency, renewable resources and natural gas fired generating resources, including associated costs. However, there doesn't appear to be any place in the report where the current, updated levelized costs of all the different resources are compared directly against one another. We recommend expanding Figure 6 to compare the current costs of all resources, including energy efficiency and renewable generation, and that the Council provide its perspective or observations on any changes from the Sixth Plan.

### Energy Efficiency and Demand Response

- The report identifies several different issues related to energy efficiency and demand response and Bonneville is interested in all of them. We certainly want to work with the Council to understand how energy efficiency and demand response measures can impact peaking capacity and system flexibility, including the need for updated end use load data. We also agree that there are some changing paradigms for energy efficiency that should be discussed in more detail in developing the Seventh Plan, including the challenges presented by utilities with little to no load growth being required to invest in efficiency measures. Also, in the development of the Seventh Power Plan, we believe the Council should attempt to reconcile its energy efficiency targets, as they apply to I-937 utilities in Washington, with the targets utilities themselves set under I-937. Finally, we would like to discuss more the Council's interest in assessing the cost-effectiveness of energy efficiency measures, which isn't explained much in the report and could have significant implications for the Bonneville program.
- In the discussion about the region's utilities facing varying circumstances (Situation Scan paper #8), there is a pretty definitive statement in the third paragraph that utilities face price signals under tiered rates that reduce short-term economic incentives to acquire new efficiency resources. This seems a little too strong. At least, if some efficiency measures are less expensive than Tier 1, which they certainly could be, there is still an economic incentive to invest in energy efficiency. In addition, the end of this paper discusses the challenges faced by small and rural utilities and the need for policies to address their 'unique needs,' but does not make any reference to the regional work group that formed to address this significant issue. We believe it is worth mentioning.
- The Energy Efficiency section raises two important points for further study, efficiency/demand response program relationships to flexibility/peaking capacity and the importance of a continued focus on emerging technologies. Yet only the relationship between energy efficiency and flexibility/peaking capacity is called out as a major conclusion of the report. As it relates to regional energy efficiency programs and goals, the need for emerging technologies is also important and should be emphasized as a major conclusion. We therefore propose adding something to the Conclusions section along the lines of:

*“Due to economic conditions, the region has focused on retrofit savings to compensate for diminished opportunities in new construction and appliance and equipment replacements. Despite this shift, the costs to acquire efficiency have remained very low. Progress made on federal appliance efficiency standards and state building codes will significantly reduce future load growth. As a result, continued focus on emerging technologies will be increasingly important.”*

- A few sections in the Appendix reference a reduced annual energy efficiency budget for BPA in the latter years of the 6<sup>th</sup> Plan. In fact, the budget to acquire public power’s share of the 6th Plan target was reallocated to achieve increased savings earlier in the time period. The original total capital budget has not been reduced over the five years of the 6<sup>th</sup> Plan.

### Renewable Resources

- Overall, the report does a nice job of describing renewable resource development and summarizing the various issues that accompany it. However, Bonneville believes this section would benefit from a more detailed summary that pulls the key issues together and describes in more detail how the regional energy landscape has changed. In addition, as the Council moves into development of the Seventh Plan, the summary could identify issues around regional resource planning for the future that will likely be different than the past.
- In this section, there are occasional references to ‘problems’ and ‘issues’ (for example, in section C, ‘Individual utilities face local problems to their distribution system and operations due to solar and biomass generation.’). It would be useful in these cases to go into more detail about the nature of the problems/issues being referenced.
- In Section C(2), the report discusses operating reserves and some of the different actions that are being explored, but as written, it reads as if some of them are hypothetical. It may be worth reworking this section a bit to make it more declarative in discussing what exactly is being explored, including an acknowledgement that the long term efficacy of each alternative it still being evaluated. Also, at the end of the first paragraph in Section C(2), people aren’t concerned that we ‘**may be**’ approaching the hydro system’s limits, we ‘**are**’ in fact approaching the hydro system’s limits.
- In the discussion about Oversupply in Section (C)(3):
  1. In the second paragraph, oversupply conditions are not necessarily limited to spring runoff conditions or during light load hours. That is when they have tended to occur, but they could occur any time of the year or any time of the day.
  2. Some of the examples listed in the discussion of the OTOC work were actually determined not to be viable (for example, passing water through navigation locks), so it seemed a little bit off to list them in the report when they were ruled out fairly quickly in the OTOC process.
  3. Section C(4) on projections for future renewable generation discusses the scope of wind likely to be developed in the region. As it relates to oversupply, the scope of

future development is important, but so is that rate at which it is developed. If new renewable generation is added in big amounts ahead of load growth, it will present a bigger challenge than if the new renewable generation is added smoothly and tracks with increasing regional loads.

- We propose an addition to the concluding sentence of the section on renewable resources so that it reads: “The region is likely to be dealing with the challenges of integrating renewable generation for some time to come **and will continue to need a thoughtful and coordinated response to the issue**’

#### Other odds and ends

In the situation scan on Implementation of BPA’s Tiered Rates, we propose adding new (in bold) language to the following sentence: “For example, only 34 of BPA’s public utility customers are projected to exceed their tier 1 allocations by 2015 **and the aggregate above high water mark load is expected to be less than one percent of the total load of all of Bonneville’s power customers.**” In addition, later in this section there is a reference to length of time that the tiered rate methodology has been in force; it should be less than ‘two’ years.

Page 6 “The diurnal shape of regional” – This paragraph could use some more context – why will there be an increase in load in graveyard hours?

Page 15 “It is the first new hydropower plant to come on line in Washington in 20 years.” The 70 MW Cowlitz Falls Hydro Plant came on line in June of 1994, and the 13.8 MW Tieton Hydro Plant came on line in July 2006 (at an existing USBR dam).