



Department of Energy

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

POWER SERVICES

In reply refer to:

Mr. Mark Walker, Director of Public Affairs
Northwest Power and Conservation Council
851 SW Sixth Avenue, Suite 1100
Portland, OR 97204

Dear Mr. Walker:

Thank you for the opportunity to comment on the Northwest Power and Conservation Council's (Council) Preliminary Draft Demand and Economic Forecasts for the Sixth Power Plan.

The Council staff is to be commended on its comprehensive assessment of the multitude of factors that influence demand for electricity in the region, and for its adoption of an end-use model. While the end use approach is appropriate for the research the Council will be doing, we are concerned that the results as expressed in the draft will lead the Council and the region to the wrong conclusion about the potential need for capacity resources in the region. This is a particular area of concern for the Bonneville Power Administration (BPA) as the capacity of the Federal system becomes more constrained to meet the demands placed on it.

A primary driver of the need for capacity is expected peak loads. Though we have found that the Council's draft energy forecast is a plausible reflection of the future, we are concerned that the peak forecasts are significantly lower than what should be expected. Using our tools we have forecasted regional winter peaks that are approximately 8 gigawatts (GW) higher than the Council values. For example, in 2010 we forecast a winter peak of approximately 36 GW and the Council forecast is approximately 28 GW. BPA staff have discussed this with the Council staff and understand that a revision will be forthcoming with winter peak forecasted values much closer to our forecasts, and they have reported to us that revised values for 2010 should be approximately 35 GW. We very much appreciated the open dialogue and exchange with Council staff on this issue.

The Council's draft forecast serves a valuable service in clearly documenting the numerous choices end-users make and their contributions to regional requirements for electricity. Although the BPA does not use an end-use methodology in estimating future requirements, there is a transparency in the Council's analysis that is easily understood. In the residential sector, the notation about the growth of Information, Communication, and Entertainment (ICE) as an end-use is appreciated because this is a trend that crosses all types of customers and is likely to continue. The increase in residential air conditioning over the past decade may be an artifact of the cheap energy era or represent a long term change in end-user preference in the region.

Saturation rates from the past decade may not be sustained with the price signals inherent in Bonneville's Tiered Rate Methodology. This is an area that could use further research and analysis to further illuminate the path and causes of this end-user choice.

In the industrial sector we agree that the mix of industries is shifting. The aluminum industry requirement will be smaller in the future than it has been in the past. In the out years of the forecast, it may be advisable to account for a potential increase in energy use per firm as commercial and industrial operations substitute technology (the ICE effect) for labor.

Regarding the peak load forecast, the description of the method to produce peaks could be more clearly explained. Specifically, the use of historically defensible load factors does not appear to be incorporated in the methodology. While the end-use method is informative on the specific factors that cause growth, as noted earlier it did not allow parties to arrive at the correct conclusion. We think the method could be improved by adding some additional checks to the Council process. The relationship between energy, peak, and load factor is fundamental to a forecast and deviations from historical norms should be fully explored. If load factors are not included as part of the methodology to monitor reliability of the forecast they should be included as a check to make sure that the peak values maintain a reasonable relationship relative to history. Any significant change in load factor or a changing trend should become obvious due to cause or be identified in actual data before it is implemented in the forecast. Additionally, we are concerned whenever average values are used as they have a tendency to dampen calculations and dampening peak values is one area where this should not occur. As loads continue to grow in the Northwest, forecasting peaks will become as important if not more important than forecasting energy and precision on these values will be essential.

In summary, we have appreciated the constructive and educational dialogue with Council staff that helped inform these comments. The Council's draft demand forecast makes a positive contribution to the region's power planning process and with a few additional enhancements will continue to serve as a valuable contributor to these activities.

Sincerely,

/S/

Suzanne B. Cooper
Manager, Power Policy & Rates