Comments of the NW Energy Coalition on the Sixth Power Plan Mid-Term Assessment - Situation Scan October 26, 2012

The NW Energy Coalition appreciates the opportunity to provide comments on the draft Situation Scan related to the Mid-Term Assessment of the Sixth Power and Conservation Plan. We appreciate all of the hard work that staff and Council members put into providing the region with an updated look at the assumptions, information and analysis of the Sixth Plan.

In particular, the findings regarding regional conservation are tremendous – demonstrating that the region, despite continuing economic challenges, is aggressively acquiring cost-effective energy efficiency that lowers bills, maintains and grows employment, and reduces carbon dioxide and other environmental pollutants.

In all, the Situation Scan demonstrates the relative accuracy of the Sixth Plan analysis and its findings speak volumes regarding the depth and breath of the Council's analytical and planning capabilities.

The exercise of a Mid-Term Assessment of the Power Plan should focus on a review of the current Action Plan, assessing progress toward achieving Plan actions and suggesting any modifications to the second half of the Action Plan period. A key piece of that assessment is a broad overview of the major issues we face in the region to understand the big picture context and how accurate the existing plan's assumptions are under existing regional conditions. Information produced through the mid-term review should be summarized in a manner that is accessible and understandable by a large variety of stakeholders interested in our region's power system.

The draft Situation Scan does an excellent job of summarizing existing conditions and comparing them to the information in the Sixth Plan. The narrative presents sophisticated analyses and concepts in a straightforward and succinct manner such that they are accessible and readily understandable. We find that the general content and format hits the mark for a public summary of the main findings of the mid-term review. This analysis will be useful in queuing up issues that may warrant closer scrutiny as we transition into drafting the Seventh Plan.

Below we provide reactions, comments and suggestions for various sections of the draft Situation Scan.

Regional Economic Conditions and Electricity Demand

The narrative describes a slow but steady increase in regional demand and that 81% of that growth was met with new energy efficiency resources. As that growth rate continues to increase it is critical that utility commitments to this lowest cost resource remain strong and that efficiency infrastructure be maintained during low market conditions. Toward the

end of Section B link between loads and resource priorities outlined in the Sixth Plan seems appropriate.

In addition, the statement about the change in the diurnal load shape is very interesting. Can the Council elaborate on what they believe is causing the increase in night-time loads? Is it deliberate load shifting or just new demand (e.g. added night-time shifts).

Natural Gas Markets and Prices

This section provides a clear assessment of ongoing trends in natural gas price and availability. The draft notes, "Another apparent factor [in the current market] is that after the rush to develop new shale gas supplies, gas developers are adjusting their activities in ways that are moving the overall supply-demand equation into better balance." We agree that "the market is working" in whittling down the gas oversupply situation caused by the increase in shale gas production since 2007, the weak economy and generally mild winter weather. The response has been on both the supply and demand sides.

The draft Scan notes the price trends in the past couple of years and the Council's two recent gas price forecast updates. Given the uncertainty it seems appropriate to elaborate on the lay of the land in the gas markets section as it has such an impact on all other aspects of the Mid-Term Assessment.

The debate is over how fast the market will continue to rise from here and where it will level off. Aside from short-term drivers such as whether this coming winter is relatively cool or warm, we think a number of factors will contribute to a steady rise in prices for the next several years.

First, credible evidence is coming in that production costs even in the early and best parts of the new shale plays across North America are quite a bit higher than the market today. An industry survey by University of Texas economist Michelle Foss indicated an average break-even cost for shale gas of above \$6.00.\(^1\) Second, production costs are likely to increase further as the most productive parts of the new shale plays are drilled. In addition, broader evidence is now showing that initial production, decline rates and estimated ultimate recovery (EUR) results from the new shale plays are not as good as anticipated. Third, by the middle of the decade significant additional demand may develop. For example, the Western Canada Sedimentary Basin provides as much as two-thirds of Northwest gas supply. New Asia Pacific export markets may open up via LNG export terminals and demand is increasing from new tar sands processing in northern Alberta. Together these could add over 2 billion cubic feet per day to the competition for WCSB gas.

Finally, the rapid development of shale gas, facilitated by wide implementation of horizontal drilling and hydrofracturing methods, is raising significant environmental,

¹ Michelle Michot Foss, December 2011, "The Outlook for U.S. Gas Prices in 2020: Henry Hub at \$3 or \$10?", Oxford Institute for Energy Studies, December 2011, http://www.oxfordenergy.org/wpcms/wpcontent/uploads/2011/12/NG_58.pdf.

health and greenhouse emissions concerns. The regulatory response is still in the early stages but is likely to lead to tightened procedures. Just as quickly as shale gas and tight gas development has increased, the bloom seems to be coming off the shale bed of roses.

All this points to a likely return to higher prices and volatility risk going forward. Both of which should be expanded on in the text.

Emissions Regulation and Impacts

The draft notes, "California had been scheduled in 2012 to implement a GHG cap-and-trade program to meet the requirements of Assembly Bill 32; startup has been delayed to 2013."

While this statement is true, we note that the pace of developments for the California AB 32 cap-and-trade program is dramatically picking up. On November 14, the California Air Resources Board is managing the first full auction of emissions permits ahead of the start of the compliance program on January 1, 2013. This follows a successful full "dress rehearsal" test of the auction process in August. Thus, we will soon see a full-blown carbon price affecting the western electricity system indirectly. The statement above seems to soft pedal what could be a significant factor (along with once-through-cooling) in the Northwest energy system.

We are trying to understand the inclusion of the paragraph on coal exports. We certainly agree that it as a major issue but the draft Scan does not tie its reference to anything in particular. Is it included as an indicator of more competition for coal resources and thus will impact coal costs?

Also missing from this section is a mention of the Washington emissions performance standard. The Department of Commerce is in the rulemaking process to update the EPS and lower the standard 1100 lbs/MWh to 975 lbs/MWh. This change could impact the availability of some gas-fired resources for long-term contracts.

Developments Affecting Imports from California

The Northwest has a close relationship with California. In addition to bulk power sales, especially of nonfirm hydro from the FCRPS, and winter sales of surplus capacity and energy from California into the Northwest, each region depends on the other for assistance with reliability.

The Situation Scan lays out the key issues affecting imports but misses one (though may be implicit) – the degree to which the replacement resource mix for the retiring OTC units will continue to provide support for the Northwest. It appears that rather than a monolithic megawatt-for-megawatt replacement with new large frame gas turbines, there will be some of those but also smaller and more flexible (if less efficient and somewhat more polluting) aeroderivative gas turbines, transmission-connected wind and solar, local "rooftop" solar, demand reduction, storage, and energy efficiency in all its forms. This is a welcome development, however, some of these resources may decrease availability of

otherwise surplus capacity for use in the Northwest during off-daily peak and winter seasonal periods.

Implementation of BPA Tiered Rates

The last paragraph in this section appropriately details the opportunity for tiered wholesale rates to be reflected in retail rates. It is worth mentioning examples of inclining block rate structure (like that of Seattle City Light) to support energy efficiency signals to customers. There is strong symmetry between tiered wholesale rates and tiered retail rates.

Energy Efficiency

The region's achievements in energy efficiency during the Sixth Planning period are particularly encouraging. The Sixth Plan goals for energy efficiency were bold; some voices in the region were skeptical that the level of savings called for under the plan could materialize. The savings results reported in 2010-11 indicate that the region actually achieved savings at a faster rate and at a lower cost than anticipated. The draft Scan appropriately surmises that the region may be on the path to achieving the high end of the plan's range for energy efficiency.

We do have a concern with the 4th paragraph under item J. After acknowledging that all four states updated their building energy codes, the Scan cites a NEEA assessment that those code changes produced 1 aMW over the past two years. That type of characterization significantly understates the value of the building codes and should be revised.

In summarizing the state of play with the US DOE regarding efficiency standards the Scan should acknowledge that US DOE and the Office Management and Budget are lagging in adopting new rules and that recently adopted action by Congress could undercut savings from lighting standards.

The Scan should also include an assessment of the energy efficiency services infrastructure that has been built and its contribution to the region's economy. Maintaining momentum on energy efficiency acquisition during the entire Sixth Plan period and into the Seventh Plan period is also important to sustain and grow the considerable workforce and expertise we have built in the region to accomplish this work.

Acquisition of Conventional Generating Resources

A great deal of analysis has occurred recently through the Council's Resource Adequacy Forum and the associated Technical Advisory Committee. The results are still being finalized, and there is still some question as to whether the analysis will indicate an overall need in the region for new resources.

We agree with the draft Situation Scan that the potential need for new conventional resources is a long-term prospect that is better dealt with in the Seventh Plan. .

Additionally, the potential finding that the region may need a modest amount of new resources over the long term to replace output from coal retirements is another reason to emphasize in the near-term the fast paced, low cost of energy efficiency acquisition. While this point is included in the conventional generating resources section of this document, the Council should note that efficiency, new renewables and natural gas may all be a part of the replacement strategy.

The Scan should note as an example of a utility purchasing existing resources, PSE's announced plans to acquire the Ferndale Generation Station.

Conclusion

While the Situation Scan details the surprises of the past few years – including slower than anticipated economic rebound, low natural gas prices, and an absence of long-anticipated federal regulation on greenhouse gases – it also conveys the robustness of the Council's, assumptions, forecasts and modeling tools. Clearly, the conclusions in the Council's Sixth Plan have held up reasonably well. We look forward to continuing to work with the Council to finalize the Mid-Term Assessment and to identify areas of emphasis for the Seventh Plan development. We also note for the record that the draft posted for comment on the website is missing sections M, N & O. We assume these will be posted for future review.

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