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January 31, 2013

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

Dear Chairman Bradbury:

The NW Energy Coalition is pleased to offer comments on the Northwest Power and Conservation Council's (Council) Draft Sixth Power Plan Mid-Term Assessment Report (Draft Assessment) of December 14, 2012.

The Coalition is an alliance of more than 115 environmental, civic and human service organizations, electric and natural gas utilities and clean energy businesses from Oregon, Washington, Idaho, Montana and British Columbia. We promote energy conservation and renewable energy resources, consumer and low-income protection and fish and wildlife restoration in the Columbia River Basin.

Coalition staff and members engaged with the Council throughout the process of drafting the mid-term assessment. Our organization provided comments on the draft situation scan that preceded the Draft Assessment discussed herein. We also provided comments on the Draft Assessment to the Council at the January meeting in Portland.

On behalf of the Coalition, we would like to commend the Council, and particularly Power Committee Chair Jim Yost, as well as Power Services Director Charlie Black, for the thorough and inclusive process implemented to produce the Council's Draft Mid-Term Assessment. Diverse stakeholders throughout the region are praising the Draft Assessment contents and process. There seems to be general agreement that the Draft Assessment does an excellent job of reviewing progress on implementing the 6th Plan as well as identifying key topics for further research and analysis in the 7th plan. This agreement among diverse stakeholders is testament to the excellent rigorous and participatory work of the Council.

The next section highlights some of the issues that the Coalition considers of paramount importance looking forward to the 7th Plan. Following this, we provide more detailed comments on particular topics covered in the Draft Assessment.

Summary of Recommendations for 7th Plan Analysis

- Examine energy efficiency service infrastructure to better understand the dynamics between conservation acquisition and the energy efficiency industry to enhance the region's understanding about how to maximize energy efficiency resource acquisition.
- Conduct analysis to better understand how energy efficiency helps with peaking capacity and system flexibility needs.
- Expand research and understanding of variability in utility conditions to optimize functional implementation of the Council's regional goals.
- Consider how innovation in energy efficiency implementation and demand response measures can help address regional needs using clean energy and low cost resources.
- Proceed with the research process to gain better data regarding the patterns of consumer electricity end use.
- Highlight the need to diversify renewable energy geographically and by resource type and include in a meaningful way the rapid technological progress being made in solar, geothermal and wave energy.
- Expand the Council's analysis of carbon risk to thoroughly examine the social costs of carbon and other environmental values from a broad state and federal policy perspective.
- Ensure that the Council's modeling and analysis adequately capture the inherent volatility in natural gas pricing.

Energy Efficiency

The Council is to be congratulated for its leadership on energy efficiency resource assessment and planning in the region. In the 6th Plan, the Council laid out an aggressive vision for what was possible and the region is rising to meet those efficiency targets. The fact that the region is on track to meet or possibly even exceed the Council's 6th Plan conservation targets at expected costs is exciting news. As you well know, low cost conservation acquisition saves the region money by aggressively implementing the least cost resource and spurs economic growth by creating and sustaining local jobs.

Maintaining momentum on the 6th Plan energy efficiency goals is critical in light of the recent findings from the updated Resource Adequacy analysis which shows that, with the medium case for energy efficiency set forth in the 6th Plan, the region's adequacy will fall short of the desired level by 2017. Meeting the high case for energy efficiency in the 6th Plan would almost close that gap.

Looking forward to the 7th Plan, the Council should include consideration of the energy efficiency services infrastructure and its contribution to the region's economy. Maintaining momentum on energy efficiency acquisition during the entire 6th Plan period and into the 7th Plan period is also important to sustain and grow the considerable

workforce and expertise we have built in the region to accomplish this work. It is through explicit examination of this workforce infrastructure that we can begin to influence the rate and scale of energy efficiency acquisition into the future.

The Coalition also urges innovative analysis during the 7th Plan development that examines the ways in which energy efficiency acquisition addresses capacity and system flexibility needs in the region.

Variability of Utility Conditions

Balancing the Council's regional analysis with the ability of each utility to acquire targeted savings given their staffing and operational budgets is an ongoing challenge. The Draft Assessment provides a brief examination of the variability from utility to utility across the region during the first half of the 6th Plan period. The 7th Plan should expand this examination of the differences between utilities to better understand how incentives and technical and program support can be structured to ensure that we are optimizing results for individual utilities in concert with regional outcomes.

Peaking Capacity and System Flexibility

As pointed out in the Draft Assessment, the character of the region's power system is changing. Needs for peaking capacity and system flexibility are fast emerging. In other parts of the country energy efficiency plays a critical role in meeting capacity demands and the Council should examine how efficiency is viewed in East coast power markets. The evaluation of efficiency's contribution to capacity is very important because some utilities assign zero capacity value to efficiency and the Council knows this is not the correct value. It is similar to saying that the risk of future carbon regulation is zero.

Updating Energy End-Use Data

The Coalition strongly agrees that updated information is needed about patterns of consumer uses of electricity and how they affect power system needs for energy, peaking capacity and system flexibility. This information will not only serve to inform the energy demand components of the 7th plan, but will also help the Council understand how energy efficiency measures could help meet these needs.

Renewable Resources

The Coalition appreciates the thorough review of recent renewable energy development in the Northwest. First, we want to note the tremendous record of success and substantive value, both on an economic and environmental basis, renewable energy is now providing to the region. The question going forward is how to build on that success in a period of significant change.

Concerning California, there is at least some possibility the RPS percentage could be raised again for 2020 or for some future year beyond that. Additionally, the thermal retirements and new California carbon cap-and-trade program that became effective on January 1 will further shift energy markets toward demand side and renewable resources. It is possible that these factors will start to reopen the California market to the Northwest's low cost and diverse renewable resources. This will continue to bring down development costs, while also increasing competition with the Northwest itself for new renewable energy.

Additional issues to examine in the 7th Plan include the need to diversify renewable energy geographically and by resource type. While wind development has been very successful in the area east of the Columbia Gorge, large and high quality resources that will increase the seasonal and daily performance of the wind resource are still mostly untapped in other parts of the region.

In addition, with solar PV module prices coming down dramatically as the world market expands, there are immediate opportunities to significantly ramp up utility-scale and distributed solar east of the Cascades and, not long thereafter, on the west side.

In its 7th Plan, the Council should highlight the rapid progress being made by geothermal and wave energy. The Neal Hot Springs project in eastern Oregon came online last month, providing 22 MW under a PPA with Idaho Power. And the enhanced geothermal system (EGS) demonstration project near Newberry Crater is well underway.

Wave energy development, especially off the Oregon coast, has been making advances as well, including the adoption this month of Oregon's new Territorial Sea Plan for ocean energy development and the ongoing activities of developers, the Oregon Wave Energy Trust and coastal communities to work out the many aspects required to provide a strong development path. As a result, along with Scotland, the Northwest is a world leader in wave energy development.

Resource Adequacy

The recent Resource Adequacy analysis shows the region slightly deficient in 2017. However, the analysis does not take into consideration utility planned resources that are not currently sited and licensed. Taking these planned resources into consideration, the Council's analysis would conclude that the region is on track to meet adequacy goals. This highlights the value of the Council's role in identifying ways to optimize local utility planning and regional outcomes. The Coalition recommends that this area needs serious consideration in the 7th Plan to ensure that the region does not overbuild to meet future demand.

We want to point out one important element that directly affects the adequacy of the Northwest power system during the period that will be covered by the 7th Plan: the upgrade of the Celilo terminal of the Pacific DC Intertie. This critically important project

entails a lengthy upgrade in 2015-17 during which DC Intertie capacity will be reduced and, for a period, completely shut down.

Social Costs of Greenhouse Gases and other Environmental Values

While federal legislation to reduce greenhouse gas emissions failed to materialize in the beginning of the 6th Plan period, the Draft Assessment points out that other state and federal policies have influenced energy policy in a similar manner. This rings true to Coalition staff based on their recent experience engaging in individual utility planning processes. These new policy developments, such as the U.S. Environmental Protection Agency new source standards, California greenhouse gas regulations and cap-and-trade market, and the British Columbia carbon tax, as well as other new and emerging regulations, will be critical influences in the development of the 7th Plan. It will be important for the Council to take broad and comprehensive consideration of emerging state and federal energy policies to sufficiently represent the likely social and environmental costs of energy generation in the Northwest in the coming years.

Coordinating Transmission and Power Planning

The Coalition commends the Council for recognizing the importance of coordinating transmission and power planning, and further, for taking concrete steps to advance this agenda. In particular, the early discussions between the Council and the transmission planning organizations in the region have begun to bear fruit. ColumbiaGrid expects to run the Council's 6th Plan as a study case in its current planning cycle.

This will require data sharing and technical consultations that will help open up long-needed coordination in our region. In turn, this will help improve the reliability and adequacy of the regional power grid as well as lay the long-needed groundwork for coordinating the transmission and generation aspects of new grid-scale renewable energy development. With the fast diminishing availability of surplus transmission capacity and balancing resources provided by Bonneville, these are efforts that must move forward at speed so that we do not end up with stranded clean energy resources.

Natural Gas Price Forecasts and Uncertainty

The Council's ongoing work assessing trends in natural gas prices and forecasts is excellent. However, it is possible that prices are likely to be in the higher range, especially after 2016, for two reasons.

First, the current data from the new shale and tight gas plays in North America, including a recent comprehensive USGS survey, indicates that decline rates and expected ultimate recovery (EUR) values per well are down from early expectations. This means new wells to replace declining production will have to be developed faster, and total production will level off faster than expected.

Second, the current natural gas oversupply will diminish and prices will increase as demand rises. How much demand competition will increase is still unclear. Natural gas

industrial use is rebounding strongly, and there are many other factors including more demand from existing and new power plants, natural gas vehicles, and LNG export facilities.

Further market data is always helpful in making gas price forecasts, but it can't erase the inherent volatility of the market. The Council's current forecast captures price well given current conditions. However, unexpected excursions are a fact of life in gas prices, so fully capturing volatility is very important.


Consequently, the Coalition supports further refinement of the Council's already strong modeling approach. The recent review of the Regional Portfolio Model (RPM) provided some useful suggestions in that regard. The Coalition also echoes suggestions that the Council disseminate its approach to utilities, regulators and the interested public to show how dynamic modeling can more effectively address core drivers like the volatility of natural gas prices and diminish risk in resource decision-making.

Thank you for the opportunity to provide comments on the Draft Assessment. The Coalition members and staff look forward to working closely with the Council on the implementation of the remaining 6th Plan period and the development of the 7th Plan.

Regards,



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