

**Comments of the NW Energy Coalition and Renewable Northwest Project
Regarding Docket Nos. UE-100961 and UG-100960:
Puget Sound Energy 2011 Integrated Resource Plan**

In response to the Commission's June 28, 2011 Notice of Opportunity to File Written Comments, the NW Energy Coalition (Coalition) and Renewable Northwest Project (RNP) offer the following comments regarding Puget Sound Energy's (PSE) 2011 Integrated Resource Plan (IRP).

The Coalition and RNP actively participated in PSE's IRP Advisory Group. We praise PSE staff for its solid public process, rigorous analysis, and willingness to explore issues in new ways. We recommend the Commission acknowledge this IRP. We also make recommendations for PSE's 2013 IRP, including a proposal to modify PSE's analysis of the renewable energy standard "cost cap."

Our comments focus on four issues: PSE's analysis of the cost cap that applies to the state's renewable energy standard; PSE's "No Northwest Coal" sensitivity analysis; PSE's analysis of its wind capacity credit; and PSE's conservation potential assessment.

Cost Cap Analysis

RCW 19.285.050(1)(a) provides that a qualifying utility shall be considered in compliance with an annual target within Initiative 937's renewable energy standard "if the utility invested four percent of its total annual retail revenue requirement on the incremental costs of eligible renewable resources, the cost of renewable energy credits, or a combination of both..." We refer to this provision in I-937 as the cost cap.¹

In its annual report beginning June 2012, each qualifying utility must include "the percent of its total annual retail revenue requirement invested in the incremental cost of eligible renewable resources and the cost of renewable energy credits."²

We believe PSE's cost cap analysis in this IRP is timely, and should be scrutinized closely because it represents the utility's first effort at calculating the cost cap, and because other private and public utilities are looking to PSE's efforts as a possible model for their own calculations.

First, the good news. PSE's analysis shows that the utility expects to meet I-937's renewable energy standard without being constrained by the cost cap as they have calculated it.³ Further, PSE's acquisitions of Hopkins Ridge, Hopkins Infill, and Lower Baker Upgrades come in at less than the cost of equivalent non-renewable resources.⁴ PSE appropriately included the savings from these investments in its overall cost cap calculation. PSE also appropriately assessed the

¹ A separate "1% cost cap" exists in RCW 19.285.040(2)(d) for qualifying utilities with flat or declining load, often referenced as the load growth provision.

² RCW 19.285.070(1)

³ PSE 2011 IRP, p. I-53.

⁴ Id.

costs of each of its acquisitions based on contemporaneous data (rather than making any ex-post adjustments).⁵

PSE's analysis of the cost of an equivalent non-renewable resource⁶ contains three primary components: capacity cost, energy cost, and imputed debt. While we appreciate the effort to craft an analytical framework that tries to reflect the definition of "incremental cost" in the law, we believe PSE's analysis misses the mark. We are primarily concerned about the use of market price forecasts as the basis for PSE's cost cap analysis.

According to the law, "the incremental cost of an eligible renewable resource is calculated as the difference between the levelized delivered cost of the eligible renewable resource, regardless of ownership, compared to the levelized delivered cost of an equivalent amount of reasonably available substitute resources that do not qualify as eligible renewable resources, where the resources being compared have the same contract length or facility life."⁷

In writing that section of the law, the authors intended an apples to apples comparison be made between an eligible renewable resource and an equivalent substitute supply-side resource. For example, in previous IRPs, PSE's resources of choice were wind and combined cycle natural gas (CCCT). In those years, we would expect the cost cap comparison to be based on a differential between the cost of a CCCT and the cost of the eligible renewable resource. The current IRP selects natural gas peakers as the primary resource choice, and we would expect a cost cap comparison for a new eligible renewable resource acquisition to be based on the cost differential between a peaker and the eligible renewable. From our perspective, that would be an appropriate, contemporaneous, apples to apples analysis. In contrast, forecasting market prices seems unreliable and not in keeping with the requirement for resources to have the same contract length or facility life. (For example, we are not currently aware of and don't envision a 25-year contract to purchase energy on the market.)⁸

We recommend the Commission require PSE in its next IRP to modify its cost cap analysis to compare the costs of eligible renewable resources to the costs of reasonably available substitute resources in lieu of, or at least in addition to, its market price comparison.

No Northwest Coal Sensitivity

In its "No Northwest Coal" sensitivity,⁹ PSE examined potential impacts on its portfolio from the shutdown of the Centralia, Boardman, and Colstrip coal plants. We commend the utility's

⁵ Id., p. I-47.

⁶ We note that the law requires a comparison between the cost of the eligible renewable resource and the cost of a reasonably available substitute resource that is not an eligible renewable resource. The law does not specify a comparison with a non-renewable resource.

⁷ RCW 19.285.050(1)(b)

⁸ We note, for comparative purposes, the limitations on comparison to market purchases in the Oregon renewable standard's incremental cost analysis. There, only short-term renewable purchases (*i.e.*, contracts of less than five years) can be measured against market purchases. OAR 860-083-0100(1)(e). Long-term renewable energy—owned resources or contracts for more than five years—must be compared to a proxy plant, OAR 860-083-0100(1)(c), with the cost of hedging fuel price risk included, OAR 860-083-0100(7).

⁹ PSE 2011 IRP, p. 2-6.

foresight -- during the course of developing its IRP, negotiations between various parties and the owners of two of those plants concluded with specific dates for transitioning away from coal.

On April 29, Governor Gregoire signed ESSB 5769, providing that a Washington utility under certain circumstances may enter into a long-term financial commitment for the purchase of coal transition power within the context of the state's emissions performance standard. The IRP does not appear to expressly recognize this option (perhaps because the IRP draft was near completion at the time of bill passage). *In its electric resource action plan, PSE proposes to "use the formal RFP process, seek market opportunities, and consider self-build alternatives for base-load and peaking resources"* for thermal resource acquisitions.¹⁰ We encourage the utility and the Commission to ensure that PSE's upcoming RFP for new power resources is structured appropriately to enable full evaluation of opportunities for coal transition power contracts. That evaluation should include recognition of the State's greenhouse gas reduction goals as well as the near-term benefits of coal transition power (e.g., grid stability, family wage jobs, economic health in distressed areas of the state) as outlined by the Legislature in ESSB 5769.

We also recommend that PSE continue refining its No Northwest Coal analysis in its next IRP, in particular examining the costs associated with impending environmental regulations and potential other future regulatory costs, transmission implications, and market heat rates. Further, we recommend that the Commission request a robust analysis in PSE's next IRP to evaluate whether continued investment in Colstrip makes economic sense for ratepayers when compared with alternatives. This should include a risk analysis that comprehensively compares the regulatory compliance costs for PSE's share of the four Colstrip units with alternative power supply options and examines the possibility that regulatory compliance costs will be greater than those forecasted. If the planning process does not give regulators a broader, forward-looking context within which to view continued requests for cost recovery for pollution control upgrades, it will be more difficult to make informed decisions when individual investments come before the Commission in rate cases.

Wind Capacity Credit

We commend PSE for its wind capacity credit methodology whose sophistication exceeds regional standards. By evaluating the variable generators' system benefit on a yearly basis, and not simply at the forecasted moment of peak demand, PSE more accurately captures the value that variable generators add to an integrated power system. We are encouraged that PSE's results indicate that wind generators can contribute much more capacity to planning margins than is typically assumed.

By acting on its wind capacity credit analysis, PSE avoids over-building capacity resources. The analysis can accordingly shield ratepayer rates while providing the same level of reliable service. We suggest PSE regularly update this analysis with each IRP cycle. Further, we encourage PSE to perform its wind capacity credit analysis when evaluating bids to fulfill its generic wind need. PSE may find it prudent to pay a premium for a more diverse resource with a greater effective capacity contribution.

¹⁰ Id., p. 1-17.

Conservation Potential Assessment

We note that the IRP not surprisingly reaffirms the cost and risk reduction benefits of demand side resources (DSR): “DSR is the only resource that reduces cost and risk – and the sooner it’s acquired, the more cost-effective it is.”¹¹ PSE’s analysis accelerates its conservation acquisition, applying a 10-year ramp rate for retrofit measures.¹² We look forward to seeing a similar accelerated acquisition path in PSE’s filing of its 2012-2013 biennial electric conservation target under I-937, and in PSE’s upcoming biennial target for gas conservation. As noted in the IRP, experience from the 2010-2011 DSR acquisition programs demonstrates that accelerated conservation ramp rates are feasible. We support PSE’s intent to continue investigating ramp rates for gas energy efficiency programs in future IRPs.¹³

DSR decreases the amount of supply-side resources needed by PSE to meet its customers’ needs, but it is also important to recognize the linkage between conservation acquisition and the state’s renewable energy standard. Appendix I shows a need for 400 MW of wind and 50 MW of biomass by 2031 in the Base Case¹⁴ compared with 700 MW of wind and 75 MW of biomass in the “Base plus no DSR” scenario.¹⁵ According to a July 12, 2011 presentation of the IRP to the Northwest Power and Conservation Council, PSE showed that its DSR acquisition will significantly reduce its renewable standard obligations over time – e.g., by 866,000 MWhs (99 aMW) in 2031. We believe this is a useful analysis to explicitly include in future IRPs.

Thank you for the opportunity to provide these comments. Coalition staff also plans to attend the Recessed Open Meeting on August 11.

¹¹ Id., p. 5-42.

¹² Id., p. 5-43.

¹³ Id., p. 6-50.

¹⁴ Id., Fig. I-20, p. I-39.

¹⁵ Id., Fig. I-34, p. I-46