



Puget Sound Energy  
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November 25, 2015

*Via Web Portal and Federal Express*

Steven V. King, Executive Director and Secretary  
Washington Utilities and Transportation Commission  
P.O. Box 47250  
1300 S. Evergreen Park Drive S.W.  
Olympia, Washington 98504-7250

**Re: 2015 Integrated Resource Plan  
UG-141169 and UE-141170  
WAC Required Report, WAC 480-100-238 and  
WAC-Required Report, WAC 480-90-238**

Dear Mr. King:

Enclosed for filing, please find an original and six copies of Puget Sound Energy's ("PSE" or the "Company") 2015 Integrated Resource Plan ("2015 IRP" or "IRP") Chapters 1-7 and the Appendices A-O. This document presents information and analysis to comply with both the electric utility integrated resource planning requirements under WAC 480-100-238 and the natural gas utility resource planning requirements under WAC 480-80-238. It also meets the requirements under RCW 19.280.030.

*Regulatory Requirements*

As noted in Appendix B, this IRP meets all the requirements of WAC 480-100-238 and WAC 480-90-238. The following table is a summary of the electric requirements under WAC 480-100-238 and the corresponding chapter(s) or appendices in the PSE IRP that address that requirement:

Statutory or Regulatory Requirement	Chapter and/or Appendix
<p><b>WAC 480-100-238 (3) (a)</b> A range of forecasts of future demand using methods that examine the effect of economic forces on the consumption of electricity and that address changes in the number, type and efficiency of electrical end-uses.</p>	<p>Chapter 4, Key Analytical Assumptions            Chapter 5, Demand Forecasts            Appendix E, Demand Forecasting Models</p>
<p><b>WAC 480-100-238 (3) (b)</b> An assessment of commercially available conservation, including load management, as well as an assessment of currently employed and new policies and programs needed to obtain the conservation improvements.</p>	<p>Chapter 6, Electric Analysis            Appendix J, Demand-side Resources</p>
<p><b>WAC 480-100-238 (3) (c)</b> An assessment of a wide range of conventional and commercially available non-conventional generating technologies.</p>	<p>Chapter 6, Electric Analysis            Appendix D, Electric Resources and Alternatives            Appendix K, Colstrip            Appendix L, Electric Energy Storage            Appendix M, Distributed Solar</p>
<p><b>WAC 480-100-238 (3) (d)</b> An assessment of transmission system capability and reliability, to the extent such information can be provided consistent with applicable laws.</p>	<p>Appendix I, Regional Transmission Resources</p>
<p><b>WAC 480-100-238 (3) (e)</b> A comparative evaluation of energy supply resources (including transmission and distribution) and improvements in conservation using the criteria specified in WAC 480-100-238 (2) (b), Lowest reasonable cost.</p>	<p>Chapter 2, Resource Plan Decisions            Chapter 6, Electric Analysis            Appendix I, Regional Transmission Resources            Appendix N, Electric Analysis            Appendix J, Demand-side Resources</p>
<p><b>WAC 480-100-238 (3) (f)</b> Integration of the demand forecasts and resource evaluations into a long-range (e.g., at least ten years; longer if appropriate to the life of the resources considered) integrated resource plan describing the mix of resources that is designated to meet current and projected future needs at the lowest reasonable cost to the utility and its ratepayers.</p>	<p>Chapter 2, Resource Plan Decisions</p>
<p><b>WAC 480-100-238 (3) (g)</b> A short-term plan outlining the specific actions to be taken by the utility in implementing the long-range integrated resource plan during the two years following submission.</p>	<p>Chapter 1, Executive Summary</p>

Statutory or Regulatory Requirement	Chapter and/or Appendix
<p><b>WAC 480-100-238 (3) (h)</b> A report on the utility's progress towards implementing the recommendations contained in its previously filed plan.</p>	<p>Appendix B, Legal Requirements and Other Reports</p>
<p><b>WAC 480-100-238 (4)</b> Timing. Unless otherwise ordered by the commission, each electric utility must submit a plan within two years after the date on which the previous plan was filed with the commission. Not later than twelve months prior to the due date of a plan, the utility must provide a work plan for informal commission review. The work plan must outline the content of the integrated resource plan to be developed by the utility and the method for assessing potential resources.</p>	<p>2015 Integrated Resource Plan Work Plan filed with the WUTC May 29, 2014, and Updated Work Plan filed July 31, 2015</p>
<p><b>WAC 480-100-238 (5)</b> Public participation. Consultations with commission staff and public participation are essential to the development of an effective plan. The work plan must outline the timing and extent of public participation. In addition, the commission will hear comment on the plan at a public hearing scheduled after the utility submits its plan for commission review.</p>	<p>Appendix A, Public Participation</p>
<p><b>RCW 19.280.030 (e)</b> An assessment of methods, commercially available technologies, or facilities for integrating renewable resources, and addressing overgeneration events, if applicable to the utility's resource portfolio.</p>	<p>Appendix H, Operational Flexibility  Overgeneration events are not applicable to PSE.</p>

The following is a summary of the natural gas requirements under WAC 480-90-238 and the corresponding chapter(s) or appendices in the PSE IRP that address that requirement:

Statutory or Regulatory Requirement	Chapter and/or Appendix
<b>WAC 480-90-238 (3) (a)</b> A range of forecasts of future natural gas demand in firm and interruptible markets for each customer class that examine the effect of economic forces on the consumption of natural gas and that address changes in the number, type and efficiency of natural gas end-uses.	Chapter 4, Key Analytical Assumptions Chapter 5, Demand Forecasts Appendix E, Demand Forecasting Models
<b>WAC 480-90-238 (3) (b)</b> An assessment of commercially available conservation, including load management, as well as an assessment of currently employed and new policies and programs needed to obtain the conservation improvements.	Chapter 7, Gas Analysis Appendix J, Demand-side Resources
<b>WAC 480-90-238 (3) (c)</b> An assessment of conventional and commercially available nonconventional gas supplies.	Chapter 7, Gas Analysis
<b>WAC 480-90-238 (3) (d)</b> An assessment of opportunities for using company-owned or contracted storage.	Chapter 7, Gas Analysis Appendix O, Gas Analysis
<b>WAC 480-90-238 (3) (e)</b> An assessment of pipeline transmission capability and reliability and opportunities for additional pipeline transmission resources.	Chapter 7, Gas Analysis Appendix O, Gas Analysis
<b>WAC 480-90-238 (3) (f)</b> A comparative evaluation of the cost of natural gas purchasing strategies, storage options, delivery resources, and improvements in conservation using a consistent method to calculate cost-effectiveness.	Chapter 7, Gas Analysis Appendix O, Gas Analysis Appendix J, Demand-side Resources
<b>WAC 480-90-238 (3) (g)</b> The integration of the demand forecasts and resource evaluations into a long-range (e.g., at least ten years; longer if appropriate to the life of the resources considered) integrated resource plan describing the mix of resources that is designated to meet current and future needs at the lowest reasonable cost to the utility and its ratepayers.	Chapter 2, Resource Plan Decisions
<b>WAC 480-90-238 (3) (h)</b> A short-term plan outlining the specific actions to be taken by the utility in implementing the long-range integrated resource plan during the two years following submission.	Chapter 1, Executive Summary
<b>WAC 480-90-238 (3) (i)</b> A report on the utility's progress towards implementing the recommendations contained in its previously filed plan.	Appendix B, Legal Requirements and Other Reports

Statutory or Regulatory Requirement	Chapter and/or Appendix
<p><b>WAC 480-90-238 (4)</b> Timing. Unless otherwise ordered by the commission, each natural gas utility must submit a plan within two years after the date on which the previous plan was filed with the commission. Not later than twelve months prior to the due date of a plan, the utility must provide a work plan for informal commission review. The work plan must outline the content of the integrated resource plan to be developed by the utility and the method for assessing potential resources.</p>	<p>2015 Integrated Resource Plan Work Plan filed with the WUTC May 29, 2014, and Updated Work Plan filed July 31, 2015</p>
<p><b>WAC 480-90-238 (5)</b> Public participation. Consultations with commission staff and public participation are essential to the development of an effective plan. The work plan must outline the timing and extent of public participation. In addition, the commission will hear comment on the plan at a public hearing scheduled after the utility submits its plan for commission review.</p>	<p>Appendix A, Public Participation</p>

### Importance of Regional Load/Resource Balance and Implications for Timing RFP Filing

It is important to note that recent changes in the regional resource adequacy projections from the Northwest Power and Conversation Council (NPCC) will impact PSE’s resource needs assessment and the timing of a Request for Proposal (RFP). The extent of that impact will be determined after further meetings with the NPCC in early 2016.

PSE relies on short-term wholesale markets to meet over 1,600 MW of its customers peak capacity needs. In this IRP, PSE has incorporated the regional resource adequacy outlook from the NPCC Resource Adequacy Advisory Committee. In May 2015, that report showed the region would fall short of the established resource adequacy target by 1,150 MW of capacity by 2021 due mostly to the closure of the Boardman and Centralia Unit 1 coal plants. Then, in late August 2015, the NPCC’s Draft 7<sup>th</sup> Power Plan reported a different conclusion—it suggests the region will not be deficit capacity by 2021. There has not been time for the NPCC to work with regional stakeholders to fully understand which assumptions were changed, why, and the implications. PSE will join with others early next year, working with the NPCC staff on the details of what assumptions changed, along with the basis for those changes, and how those changes impact the resource adequacy assessment.

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The changes in the NPCC's finding on resource adequacy could have a significant impact on PSE's assessment of its resource needs. The Company anticipates the NPCC process will be completed in the second quarter of 2016. Therefore, the Company plans to file for a waiver of the RFP rule, under WAC 480-107, to extend the timing of the Request for Proposals ("RFP") filing, to allow PSE to reassess capacity needs before issuing an All-Source RFP.

Note, as described in the 2015 IRP (Executive Summary, page 1-10), PSE will be developing a separate acquisition process for demand response resources. Analysis in the IRP demonstrates that changes to the load forecast—thus resource need—do not reduce the level of demand response that appears cost effective. Therefore, PSE does not plan to delay the demand-response RFP process. The Company will endeavor to work with WUTC Staff, Public Counsel, and other stakeholders as the demand-response acquisition process is developed in the first quarter of 2016.

*Conclusion*

The Company looks forward to presenting the 2015 IRP to the Commissioners, when it is most convenient for the Commission. The Company looks forward to a dialogue and receiving feedback in order to improve and refine its resource planning process. If you have any questions about the information contained in this filing, please contact Phillip Popoff, Manager, Integrated Resource Planning, at 425-462-3229 or myself at (425) 456-2110 for additional information about this filing.

Sincerely,

A handwritten signature in black ink, appearing to read "Ken Johnson", with a long horizontal flourish extending to the right.

Ken Johnson  
Director, State Regulatory Affairs

cc: Sheree Carson