

LEGAL REQUIREMENTS APPENDIX B



2023 Gas Utility Integrated Resource Plan

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1. Introduction

Puget Sound Energy (PSE) is a gas and electric utility regulated by the Washington State Utilities and Transportation Commission (Commission). As part of a regulated industry, PSE must comply with specific requirements and laws. The 2023 Gas Utility IRP follows the regulatory requirements codified in WAC 480-90-238¹. This chapter walks through the laws and regulations related to the gas utility and explains how PSE meets these requirements through this IRP document. This document also updates the action plan for the 2021 Integrated Resource Plan (IRP).

2. Regulatory Requirements

Table B.1 lists the regulatory requirements currently in effect in WAC 480-90-238¹ that apply to natural gas integrated resource plans. Table B.2 details additional natural gas utility requirements according to RCW 80.28.380² and 80.28.405³. Finally, Table B.3 details relevant conditions from the Commission's approval of PSE's 2021 natural gas conservation potential assessment, as outlined in Order 01, dated October 14, 2021, in Docket UG-210461. These tables identify the chapters and appendices of PSE's 2023 Gas Utility IRP that address each requirement.

Table B.1: Natural Gas Utility Integrated Resource Plan Regulatory Requirements Codified in WAC 480-90-238¹

Statutory or Regulatory Requirement	Chapter and/or Appendix
WAC 480-90-238(3)(a) 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.	 <u>Chapter Four: Key Analytical</u> <u>Assumptions</u> <u>Chapter Five: Demand Forecast</u> <u>Appendix D: Demand Forecasting</u> <u>Models</u>
WAC 480-90-238(3)(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.	 <u>Chapter Six: Gas Analysis</u> <u>Appendix F: Gas Methodology and</u> <u>Results</u> <u>Appendix C: Conservation Potential</u> <u>Assessment</u>
WAC 480-90-238(3)(c) An assessment of conventional and commercially available nonconventional gas supplies. WAC 480-90-238(3)(d)	 <u>Chapter Four: Key Analytical</u> <u>Assumptions</u> <u>Chapter Six: Gas Analysis</u> <u>Appendix F: Gas Analysis Results</u> <u>Chapter Six: Gas Analysis</u>
An assessment of opportunities for using company-owned or contracted storage. WAC 480-90-238(3)(e)	<u>Appendix F: Gas Methodology and</u> <u>Results</u> <u>Chapter Six: Gas Analysis</u>

¹ WAC 480-90-238



² RCW 80.28.380

³ RCW 80.28.405

Statutory or Regulatory Requirement	Chapter and/or Appendix
An assessment of pipeline transmission capability and reliability and opportunities for additional pipeline transmission resources.	<u>Appendix F: Gas Methodology and</u> <u>Results</u>
 WAC 480-90-238(3)(f) 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. WAC 480-90-238(3)(g) 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 	 <u>Chapter Six: Gas Analysis</u> <u>Appendix F: Gas Methodology Results</u> <u>Appendix C: Conservation Potential</u> <u>Assessment</u> <u>Chapter Two: Resource Plan</u>
and future needs at the lowest reasonable cost to the utility and its ratepayers.	
WAC 480-90-238(3)(h) 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.	<u>Chapter One: Executive Summary</u>
WAC 480-90-238(3)(i) A report on the utility's progress towards implementing the recommendations contained in its previously filed plan.	<u>Appendix B: Legal Requirements (this</u> <u>document)</u>
WAC 480-90-238(4) 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.	 <u>2023 Gas Utility Integrated Resource</u> <u>Plan Work Plan (April 1, 2022)</u> <u>Updated Gas Utility Integrated Resource</u> <u>Work Plan (October 21, 2022)</u> <u>Updated Gas Utility Integrated Resource</u> <u>Work Plan (December 15, 2022)</u>
WAC 480-90-238(5) 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.	<u>Appendix A: Public Participation</u>

Table B.2: Additional Natural Gas Utility Integrated Resource Plan from RCW 80.28⁴

Statutory or Regulatory Requirement	Chapter and/or Appendix	
RCW 80.28.380	<u>Chapter Six: Gas Analysis</u>	

⁴ RCW 80.28



Statutory or Regulatory Requirement	Chapter and/or Appendix
Each gas company must identify and acquire all conservation measures that are available and cost-effective. Each company must establish an acquisition target every two years and must demonstrate that the target will result in the acquisition of all resources identified as available and cost-effective. The cost-effectiveness analysis required by this section must include the costs of greenhouse gas emissions established in RCW <u>80.28.395</u> . The targets must be based on a conservation potential assessment prepared by an independent third party and approved by the commission. Conservation targets must be approved by order by the commission. The initial conservation target must take effect by 2022.	 <u>Appendix F: Gas Methodology and</u> <u>Results</u> <u>Appendix C: Conservation Potential</u> <u>Assessment</u>
RCW 80.28.405 For the purposes of section 11 of this act, the cost of greenhouse gas emissions resulting from the use of natural gas, including the effect of emissions occurring in the gathering, transmission, and distribution of natural gas to the end user is equal to the cost per metric ton of carbon dioxide emissions, using the two and one-half percent discount rate, listed in table 2, Technical Support Document: Technical update of the social cost of carbon for regulatory impact analysis under Executive Order 12866, published by the interagency working group on social cost of greenhouse gases of the United States government, August 2016. The commission must adjust the costs established in this section to reflect the effect of inflation.	 <u>Chapter Four: Key Analytical</u> <u>Assumptions</u> <u>Chapter Six: Gas Analysis</u> <u>Appendix F: Gas Methodology and</u> <u>Results</u>

Table B.3: Natural Gas Utility Conservation Potential Assessment Conditions from Commission Order 01 in Docket UG-210461

Commission Condition	Chapter and/or Appendix
Commission Condition Condition 1, Paragraph 11 Increase the Transparency of Subsequent CPA Filings. The Company will file the full CPA model (confidentially where necessary) with the Commission when seeking approval of the CPA. The Company will coordinate one or more structured, technical discussions as the CPA is developed to discuss the CPA model with Commission staff, other interested stakeholders, and the independent third party performing the CPA. The Company will work with Staff to establish a timeline and additional supporting documentation required for Staff review.	 PSE filed the CPA with the 2023 Gas Utility IRP on March 31, 2023 PSE conducted three structured technical discussions as the CPA was being developed with commission staff and other participants as follows: Jan 12, 2022: Kickoff April 7, 2022: Measure Characterization update
	• July 27, 2022: Draft results of the CPA



3. 2021 Natural Gas Sales Short-term Action Plan

We identified a few areas for PSE to act on in the 2021 IRP. The following sections provide a summary of the commitments we made in the 2021 IRP and an update on our progress.

3.1. Acquire Energy Efficiency

In the 2021 IRP, we committed to developing two-year targets and implementing programs to acquire conservation, with the 2021 plan as a starting point for our goals. The 2021 IRP included adding 12 MDth per day of capacity by 2024 through program savings and savings from codes and standards.

Progress: Puget Sound Energy set a target of 9.726 million therms for the 2022–2023 program cycle. Supply chain disruptions, inflation, and labor shortages from the pandemic have made it challenging to achieve the targets. The residential programs have reached 28.7 percent of the 2022 target, and we forecast them to reach 56.6 percent of the target by the end of 2023. The business programs achieved 20 percent of the target in 2022, and we forecast they will achieve another 16 percent of the savings target in 2023. Overall the programs are forecasted to archive 93.2 percent of the biennial goal.

In addition to the originally planned activities for 2022, we have taken many steps to help customers save more energy, including:

Residential Programs:

- Added Home Energy Report customer groups for gas-only and low-to-moderate income customers.
 - Added limited time offers on:
 - o Foodservice equipment
 - Heat pump water heaters
 - Single-family weatherization
 - o Thermostats with four manufacturer agreements
- Advanced equitable design and implementation empowered by the draft Clean Energy Implementation Plan (CEIP), updated named community dashboard, training, and ongoing program assessments, accelerated by a new Equity Product Manager that started in Q4 2022.
- Conducted outreach and relationship building via community-based organizations for residential and small businesses.
- Implemented low-income weatherization measure cost updates on 9/26/22, with a full suite of measure cost updates for 2023.
- Improved Efficiency Boost customer journeys via an improved website, translated materials, and expanded customer do-it-yourself (DIY) options.
- Partnered with Energy Smart Eastside on their program design and customer education.

Business Programs:

• Added limited-time offers on business lighting contractor performance incentive through 2023.





- Conducted outreach and marketing:
 - o Marketing product and awareness
 - o Outreach and relationship building via new account executives
- Implemented changes to current programs:
 - o Contracted with a vendor for first-year engagement for gas customers
 - o Revised total resource cost threshold
 - o Transitioned virtual commissioning pilot to program

3.2. Renewable Natural Gas

In the 2021 IRP, we committed to meeting customer interest in greenhouse gas (GHG) reduction programs through program development and implementation. We also said we would evaluate and develop strategies and pursue cost-effective opportunities for renewable natural gas (RNG) acquisition to support voluntary customer RNG programs and future GHG reduction.

Progress: Puget Sound Energy launched a voluntary product in December 2021 that allows residential and commercial customers to purchase \$5 blocks of renewable natural gas for their home or business and receive credit on their bill for the conventional natural gas they replaced with RNG. As of the end of October 2022, 4,899 residential and 51 commercial customers participated in the program, and it is on target to have 12,624 participants by May of 2024.

3.3. Emission Reduction Strategy and Planning

In the 2021 IRP, we committed to exploring potential and voluntary GHG reduction opportunities and developing and evaluating implementing strategies. We also said we would closer align the electric and natural gas modeling processes so we could better evaluate future fuel for power and the gas-to-electric end-use conversions. We committed to exploring the potential of blending clean fuels (hydrogen) with existing pipeline infrastructure and customer end-use applications. We said we would investigate a range of appliances that may help reduce GHG emissions and ensure the reliability of the natural gas and electric system on peak load days.

Progress: In the 2023 Gas Utility IRP, we ran an electrification scenario that included gas and electric models. This analysis included alternative fuels, such as blending green hydrogen, and a range of appliances included as conservation measures and forced into the model. The analysis showed the impact on emissions, resource needs, and costs for the gas and electric portfolios.

→ This analysis is in <u>Chapter Six: Gas Analysis</u>, and details are in <u>Appendix E: Existing Resources</u> and <u>Alternatives</u> and <u>Appendix F: Gas Methodology and Results</u>.

