

Work Plan for Avista's

2025 Gas Integrated Resource Plan

For the
Technical Advisory Committee,
Washington Utilities and Transportation Commission,
&
Idaho Public Utility Commission

Updated on March 25, 2024

2025 Gas Integrated Resource Planning (IRP) Work Plan

This work plan, as required in Washington pursuant to Washington Administrative Code (WAC) 480-90-238(4), outlines the process Avista will follow to develop its 2025 Gas IRP, which will be filed by April 1, 2025. Avista uses a transparent public process to solicit technical expertise and stakeholder feedback throughout the development of the IRP through a series of Technical Advisory Committee (TAC) meetings and public outreach to ensure its planning process considers input from all interested parties prior to Avista's decisions on how to meet future customer gas needs. All meeting announcements, meeting minutes, meeting recordings, and IRP related documents and data will be posted on the Company's website at https://www.myavista.com/about-us/integrated-resource-planning. Avista will communicate with its TAC members through email and/or Microsoft Teams for any meeting information and data shared outside of TAC meetings, and all information related to TAC presentations will be provided prior to each TAC meeting.

The 2025 IRP process will use the new modeling techniques referred to as CROME¹. Avista is making this change due to the steadily increasing costs of 3rd party models, which necessitated the evaluation of alternative modeling options to help contain costs while providing the same level of analysis and considerations necessary in an IRP. Avista may also use the PRiSM² model for certain resource selection options as an alternative to CROME.

Avista contracted with Applied Energy Group (AEG) to assist with key activities including the energy efficiency and demand response potential studies. AEG will also provide the IRP with a long-term energy forecast using end use techniques to improve estimates for building and transportation electrification scenarios. Avista also intends to align the IRP's load forecast and resource options with this study. The Energy Trust of Oregon (ETO) will continue to provide results for the Avista Oregon territories and will be directly input into the model as a cost and load savings.

Avista intends to use both detailed site-specific and generic resource assumptions in the development of the 2025 IRP. The assumptions will utilize Avista's research of similar gas producing technologies, engineering studies, vendor estimates and market studies. Avista will rely on publicly available data to the maximum extent possible and provide its cost and operating characteristic assumptions and model for review and input by stakeholders. The IRP may model certain resources as purchase agreements in lieu of Company ownership if it is a lower cost. Future Requests for Proposals (RFP) will ultimately decide final resource selection and ownership type based on third party resource options and potential self-build resources specific to Avista's service territory.

Avista intends to create a Preferred Resource Strategy (PRS) using market and policy assumptions based on final rules from the Climate Commitment Act (CCA) for Washington. In Oregon, the Climate Protection Program (CPP) will be included as a scenario as the Department of

¹ CROME is Avista's proprietary model it uses to select new resources and was developed to replace PLEXOS at a daily level. CROME is the Comprehensive Resource Optimization Model based in Excel paired with optimization software.

² PRiSM is Avista's proprietary model it uses to select new resources in the Electric IRP process. Avista first developed this tool for use in the 2003 IRP.

Environmental Quality moves to re-establish the CPP through rulemaking beginning in Q1 2024. Because the timing and outcome of the CPP rulemaking is unknown, a scenario is the most appropriate way to consider Oregon's potential future climate policies in the IRP. Conversations with the TAC as to methods and logic to include in scenarios will be discussed including beginning the program in 2025 for the PRS. Final CPP rules, that may or may not be the same, will not be known until after the modeling and process of the 2025 IRP is completed. A similar outcome is possible with the CCA due to a public initiative to repeal the CCA being submitted to the Legislature where it can be repealed, altered, or sent to the ballot in the November 2024 election. In the 2024 legislative session, a bill is being considered to link Washington's program with California and Quebec's programs, where the CCA program rules would be altered to conform to the other programs. Finally, a least cost planning methodology will be used in Idaho. For Washington resource selection, Avista will solve its PRS to include least reasonable cost for meeting state building codes and energy policies including energy costs, societal externalities such as Social Cost of Greenhouse Gas, and the non-energy impacts of resource on public health (air emissions), safety, and economic development. Resource selection will solve for state clean energy requirements and Avista's energy and capacity planning standards. Avista will track certain customer metrics the PRS creates to assist in measuring customer equity.

The plan will also include a chapter outlining the key components of the PRS, with a description of which state policy is driving each resource need. The IRP will include a limited number of scenarios to address alternative futures in the gas market and public policy, such as limited RNG and building electrification. TAC meetings help determine the underlying assumptions used in the IRP, including market scenarios and portfolio studies. Although, Avista will also engage customers using a public outreach and an informational event, as well as provide transparent information on the IRP website. The IRP process is technical and data intensive; public comments are encouraged as timely input and participation ensures inclusion in the process resulting in a resource plan submitted according to the proposed schedule in this Work Plan. Avista will make all data available to the public *except* where it contains market intelligence or proprietary information. The planned schedule for this data is shown in Exhibit 1. Avista intends to release slides and data five days prior to its discussion at TAC meetings and expects any comments within two weeks after the meeting.

The following topics and meeting times may change depending on the availability of presenters and requests for additional topics from TAC members. The timeline and proposed agenda items for TAC meetings follows:

- TAC 1: Wed. February 14, 2024: 9:00 am to 12:00 pm (PTZ)
 - January Peak Event
 - Work Plan
 - RNG Acquisition
 - Customer Impacts
 - Modeling Update
 - State Policy Update

- Planned Scenarios for Feedback
- TAC 2: Wed. April 24, 2024: 10:30 am to 12:00 pm (PTZ)
 - Feedback from prior TAC
 - Action Items from 2023 IRP
 - Chosen Model Methodology and modeling overview
- TAC 3: Wed. 15 May 2024: 10:30 am to 12:00 pm (PTZ)
 - Feedback from prior TAC
 - Distribution System Modeling
 - Non-Pipe Alternatives (NPA) in Distribution Planning
 - Oregon Staff Recommendation on NPA
- TAC 4: Wed. 5 June 2024: 10:30 am to 12:00 pm (PTZ)
 - · Feedback from prior TAC
 - Future Climate Analysis Update
 - Historic weather comparison
 - · Peak Day Methodology
- TAC 5: Wed. 26 June 2024: 10:30 am to 12:00 pm (PTZ)
 - Feedback from prior TAC
 - · GHG assumptions and Climate pricing
 - Current natural gas resources
- TAC 6: Wed. 17 July 2024: 10:30 am to 12:00 pm (PTZ)
 - Feedback from prior TAC
 - Load Forecast AEG
- TAC 7: Wed. 7 Aug. 2024: 10:30 am to 12:00 pm (PTZ)
 - Feedback from prior TAC
 - Natural Gas Market Overview and Price Forecast
 - Avoided Costs Methodology
- TAC 8: Wed. 28 Aug. 2024: 10:30 am to 12:00 pm (PTZ)
 - Feedback from prior TAC
 - Conservation Potential Assessment (AEG)
 - Demand Response Potential Assessment (AEG)
 - Conservation Potential Assessment (ETO)

- TAC 9: Wed. 18 Sep. 2024: 10:30 am to 12:00 pm (PTZ)
 - Feedback from prior TAC
 - NEI Study
 - New Resource Options Costs and Assumptions
 - All assumptions review
- TAC 10: Wed. 6 Nov. 2024: 9:00 am to 12:00 pm (PTZ)
 - Scenario Results
 - Scenario Risks
 - PRS Overview of selections and risk
 - Per Customer Costs by Scenario
 - Cost per MTCO2e by Scenario
 - Open Questions
- Sep. 2024
 - Virtual Public Meeting- Natural Gas & Electric IRP
 - · Recorded presentation
 - Daytime comment and question session (12pm to 1pm- PTZ)
 - Evening comment and question session (6pm to 7pm- PTZ)

2025 Gas IRP Report Outline

This section provides a draft outline of the expected major sections in the 2025 Gas IRP.

Executive Summary

1. Introduction and Planning Environment

- a. Customers
- b. Integrated Resource Planning
- c. Planning Model
- d. Planning Environment

2. Demand Forecasts

- a. Demand Areas
- b. Customer Forecasts
- c. Electrification of Natural Gas Customers
- d. Use-per-Customer Forecast
- e. Weather Forecast
- f. Peak Day Design Temperature
- g. Load Forecast
- h. Scenario Analysis
- i. Alternative Forecasting Methodologies
- j. Key Issues

3. Demand Side Resources

- a. Avoided Cost
- b. Idaho and Washington Conservation Potential Assessment
- c. Pursuing Cost-Effective Energy Efficiency
- d. Washington and Idaho Energy Efficiency Potential
- e. Demand Response
- f. Building Electrification

4. Current Resources and New Resource Options

- a. Natural Gas Commodity Resources
- b. Transportation Resources
- c. Storage Resources
- d. Incremental Supply-Side Resource Options
- e. Alternative Fuel Supply Options
- f. Project Evaluation Build or Buy
- g. Avista's Natural Gas Procurement Plan
- h. Market-Related Risks and Risk Management

5. Policy Issues

- a. Avista's Environmental Objective
- b. Natural Gas Greenhouse Gas System Emissions
- c. Local Distribution Pipeline Emissions Methane Study
- d. State and Regional Level Policy Considerations
- e. Idaho
- f. Oregon
- g. Washington
- h. Federal Legislation
- i. Key Takeaways

6. Preferred Resource Strategy

- a. Planning Model Overview
- b. Stochastic Analysis

- c. Resource Integration
- d. Carbon Policy Resource Utilization Summary
- e. Resource Utilization
- f. Demand and Deliverability Balance
- g. New Resource Options and Considerations
- h. Energy Efficiency Resources
- i. Preferred Resource Strategy (PRS)
- j. Monte Carlo Risk Analysis
- k. Estimated Price Impacts

7. Alternate Scenarios

- a. Alternate Demand Scenarios
- b. Deterministic Portfolio Evaluation and Scenario Results
- c. Demand
- d. PRS Scenarios
- e. Electrification Scenarios
- f. Supply Scenarios
- g. Other Scenarios
- h. Washington Climate Commitment Act Allowances
- i. Oregon Community Climate Investments
- j. Natural Gas Use
- k. Methanation
- 1. Renewable Natural Gas
- m. Emissions
- n. Cost Comparison
- o. Regulatory Requirements

8. Distribution Planning

- a. Distribution System Planning
- b. Network Design Fundamentals
- c. Computer Modeling
- d. Determining Peak Demand
- e. Distribution System Enhancements
- f. Conservation Resources
- g. Distribution Scenario Decision-Making Process
- h. Planning Results
- i. Non-Pipe Alternatives

9. Equity Considerations

- a. Overview
- b. Equity Metrics

10. Action Plan

- a. Avista's 2025 IRP Action Items
- b. 2025-2026 Action Plan

Draft IRP will be available to the public on Friday, January 10, 2025, and the final draft filed with Idaho, Oregon, and Washington Commissions on April 1, 2025. Comments from TAC members are expected back to Avista by Friday, February 7, 2025, or through each states public comment timeline. Avista's IRP team will be available for conference calls or by email to address comments with individual TAC members or with the entire group if needed.

Exhibit 1: Major 2025 Gas IRP Assumption Timeline	
<u>Task</u>	Target Date
CCA/Other GHG Pricing Assumptions	June 2024
Due date for study requests from TAC members	July 30, 2024
Demand Side Management Deliverables	
Final Energy Forecast (AEG)	July 2024
Energy Efficiency (AEG & ETO)	August 2024
Demand Response (AEG)	August 2024
Natural Gas price forecast	August 2024
New Resource Options Cost & Availability	September 2024
Finalize resource selection model assumptions	September 2024