



**Work Plan for Avista's
2020 Natural Gas Integrated Resource Plan**

**For the
Washington Utilities and Transportation Commission (UTC)**

Submitted August 30, 2019

2020 Natural Gas Integrated Resource Planning Work Plan

Overview:

This Work Plan is submitted in compliance with the Washington Utilities and Transportation Commission's Integrated Resource Planning (IRP) rules (WAC 480-90-238). The Work Plan, must outline the content of the IRP to be developed by Avista for informal review by the Commission.

Avista uses a public process to obtain technical expertise and feedback throughout the development of the Natural Gas IRP through a series of public Technical Advisory Committee (TAC) meetings. Avista will hold its first TAC meeting for the 2020 IRP on January 23, 2020.

Process:

The 2020 IRP process will be similar to that used to produce the previous IRPs. Avista will use SENDOUT® (a PC based programming model widely used to solve natural gas supply and transportation optimization questions) for peak day demand, resource valuation and for conducting Monte-Carlo style risk analyses. SENDOUT® modeling results will be used to select the Preferred Resource Strategy (PRS).

Avista will use both detailed site-specific and generic resource assumptions in the development of its 2020 Natural Gas IRP. The assumptions combine Avista's research of similar supply-side resources, engineering studies and two third-party consultant analyses. This Natural Gas IRP will study environmental costs, weather planning standards, peaking requirements and resource adequacy, energy efficiency programs, and renewable resources.

Participation:

Avista will test the PRS against a range of scenarios and potential futures. The TAC meetings will help to develop and determine the underlying assumptions used in the scenarios and futures. The Natural Gas IRP process is very technical and data intensive; public participation is essential to the development of an effective plan, and the Company encourages the participants to provide timely input in order to be able to submit its plan identified further below.

Additionally, Avista intends to incorporate action plan items identified in the 2018 Natural Gas IRP, including methodology discussion for stochastic analysis, inclusion of distribution as a supply side resource and distribution in our avoided costs, and further showing how optimization of supply side resources is of benefit. Further details about Avista's process for determining the risk adjusted least-cost resource mix is shown later in this Work Plan.

Timeline:

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

- **TAC 1: Thursday, January 23, 2020:** TAC meeting expectations, actions from 2018 Natural Gas IRP, 2020 Natural Gas IRP process and schedule, demand forecasts, updated avoided cost methodology and energy efficiency update, and a review of the 2018-2019 Winter.
- **TAC 2: Thursday, February 20, 2020:** Market Analysis, Price Forecasts, Cost Of Carbon and Environmental Policies, Emissions, Weather Analysis, Weather Planning Standard, Stochastic Modeling Overview, Procurement Plan and Resource Optimization.
- **TAC 3: Thursday, March 26, 2020:** Distribution, Avista’s current supply-side resources overview, supply side resource options, renewable resources, overview of the major interstate pipelines and projects, and sensitivities and portfolio selection modeling.
- **TAC 4: Thursday, April 30, 2020:** DSM results, final modeling results, portfolio risk analysis and 2020 Action Plan.
- **TAC 5: July 2020:** TAC final review meeting (if necessary)

2020 Natural Gas IRP Draft Outline

This section provides a draft outline of the major sections in the 2020 Natural Gas IRP. This outline may change as Natural Gas IRP studies are completed and input from the TAC has been received.

- 0. Executive Summary**
 - a. Natural Gas IRP Overview
 - b. Action Plan
- 1. Introduction**
- 2. Demand Forecasts**
 - a. Economic Conditions
 - b. Weather Standard
 - c. Avista Energy & Peak Load Forecasts
 - d. Load Forecast Scenarios
- 3. Demand-Side Resources**
 - a. Conservation Potential Assessment
- 4. Supply-Side Resources**
 - a. Avista Resources
 - b. Incremental Supply-Side Resource Options
- 5. Market Analysis**
 - a. Marketplace

- b. Price Forecasts
- c. Scenario Analysis
- d. Emerging Markets
- e. Procurement Plan
- 6. Policy Considerations**
 - a. Environmental Concerns
 - b. State and Federal Policies
- 7. Integrated Resource Portfolio**
 - a. Resource Selection Process
 - b. Preferred Resource Strategy
- 8. Alternative Scenarios, Portfolios & Stochastic Analysis**
 - a. Portfolio Scenarios
 - b. Stochastic modeling
- 9. Distribution Planning**
 - a. Avista's Distribution System
 - b. Distribution System Planning Methodology
 - c. Planning Results
 - d. Significant Distribution Planning Capital Projects
- 10. Action Plan**

2020 Natural Gas IRP Draft Plan Timeline

The following is Avista's tentative 2020 Natural Gas IRP Plan timeline:

- August 31, 2019 – Work Plan filed with UTC¹
- January through April 2020 – Technical Advisory Committee meetings
- May 2020 – Prepare draft of Natural Gas IRP
- June 1, 2020 – Draft of Natural Gas IRP document sent to TAC
- June 19, 2020 – Comments on draft due back to Avista
- July 2020 – TAC final review meeting (if necessary)
- August 2020 – Final editing and printing of Natural Gas IRP
- August 31, 2020 – File IRP submission to Commissions and TAC

¹ A courtesy copy of the Work Plan will be provided to both Idaho and Oregon Commission.

Process for Determining the Risk Adjusted Least-Cost Resource Mix:

