



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

**For the
Washington Utilities and Transportation Commission**

January 28, 2020

2020 Natural Gas Integrated Resource Planning Work Plan

This Work Plan is submitted in compliance with the Washington Utilities and Transportation Commission's Integrated Resource Planning (IRP) rules (WAC 480-90-238). It outlines the process Avista will follow to develop its 2020 IRP for filing with Washington, Idaho and Oregon Commissions by August 31, 2020. Avista uses a public process to solicit technical expertise and feedback throughout the development of the IRP through a series of public Technical Advisory Committee (TAC) meetings. Avista will hold its first TAC meeting for the 2020 IRP on June 17, 2020.

The 2020 IRP process will be similar to those 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 development of the 2020 IRP. The assumptions combine Avista's research of similar supply-side resources, engineering studies and two third-party consultant analyses. This IRP will study environmental costs, weather planning standard, peaking requirements and resource adequacy, energy efficiency programs, and renewable resources.

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 IRP process is very technical and data intensive; public comments are welcome but timely input and participation will be necessary for inclusion into the process so the plan can be submitted according to the tentative schedule identified in this Work Plan.

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 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 in Exhibit 1.

The following 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 follows:

- **TAC 1: Wednesday, June 17, 2020:** TAC meeting expectations, actions from 2018 IRP, 2020 IRP process and schedule, demand forecasts, updated avoided cost methodology and energy efficiency update, and a Winter of 2018-2019 review.
- **TAC 2: Thursday, August 6, 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: Wednesday, September 30, 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: Wednesday, November 18, 2020:** DSM results, final modeling results, portfolio risk analysis and 2020 Action Plan.
- **TAC 5: February 2021:** 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 IRP studies are completed and input from the TAC has been received.

- 0. Executive Summary**
 - a. 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 Timeline

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

- August 31, 2019 – Initial Work Plan filed with WUTC
- June - November 2020 – Technical Advisory Committee meetings
- December 2020 – Prepare draft of IRP
- January 4, 2021 – Draft of IRP document sent to TAC
- February 1, 2021 – Comments on draft due back to Avista
- February 2021 – TAC final review meeting (if necessary)
- March 2021 – Final editing and printing of IRP
- April 1, 2021 – File IRP submission to Commissions and TAC

Exhibit 1: Avista's 2020 Natural Gas IRP Modeling Process

