



Work Plan for Avista's 2025 Electric Integrated Resource Plan

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

October 1, 2023

2025 Electric Integrated Resource Planning (IRP) Work Plan

This plan outlines the process Avista will follow to develop its 2025 Electric IRP for filing with the Washington and Idaho Commissions by January 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 electric needs. Avista posts all meetings announcements, meeting minutes, videos, final IRP documents and data on its website at <https://www.myavista.com/about-us/integrated-resource-planning>. Avista will communicate with its TAC members through email and Microsoft Teams for any meeting information and data sharing outside of TAC meetings. Avista will provide all information related to TAC meeting content prior to, or shortly after, each TAC meeting if any updates to presentations or data have been made. Final data and documents will be made available upon filing of the IRP.

The 2025 IRP process will be similar to previous IRPs, although Avista intends to include new modeling processes in this IRP cycle. Avista recently acquired the PLEXOS model from Energy Exemplar. PLEXOS will be used to model resource dispatch, resource option valuation, and market risk analysis. Avista plans to continue to use PRiSM¹ for resource selection but intends to investigate PLEXOs' ability to provide this functionality in a timely manner for both jurisdictions while handling energy efficiency selection. IRP modeling with PLEXOS has the potential to handle more complex resource decisions but it may limit transparency and speed compared with the PRiSM model. Avista intends to continue to use Aurora for electric market price forecasting although Avista intends to evaluate options for electric market price forecasting for the 2027 Progress Report/IRP.

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 and peak load forecast using end use techniques to improve estimates for building and transportation electrification scenarios. AEG is also leading a distribution energy resource (DER) potential study for Avista. This study includes locational forecasts for electric vehicles, roof-top solar, energy storage, energy efficiency, and demand response. The Distribution Planning Advisory Group (DPAG) will use this study for its planning process. Avista also intends to align the IRP's load forecast and resource options with this study.

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 generating technologies, engineering studies, vendor estimates, Pacific Northwest National Lab (PNNL), and the Northwest Power and Conservation Council's studies to estimate resource costs. 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 Power Purchase Agreements (PPA) rather than Company ownership if third party ownership is likely to be lower cost. Avista will likely not model potential contracts with existing regional generating resources due to lack of price certainty. Future Requests for Proposals

¹ PRiSM is Avista's proprietary model it uses to select new resources. Avista first developed this tool for use in the 2003 IRP.

(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 Clean Energy Transformation Act (CETA) and the Climate Commitment Act (CCA) for Washington and using the least cost planning methodology in Idaho. For Washington resource selection, Avista will solve its PRS to include least reasonable cost for meeting state 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, capacity requirements using Western Resource Adequacy Program (WRAP)² metrics, and Avista's energy and capacity planning standards.

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 electric market and public policy, such as transportation 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 to meet regulatory deadlines. 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 Technical Advisory Committee 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: Tuesday, September 26, 2023: 8:30am to 12:00 pm (PST)**
 - WA CEIP Biannual Update
 - Available Resource Options Discussion
 - PLEXOS Overview and Backcast Analysis
 - TAC feedback on changes to process, methods, assumptions
 - Work Plan and IRP Process Review

- **TAC 2: March 2024: 8:30 to 12:00 (PST)**
 - Natural Gas Market Overview and Price Forecast
 - Wholesale Electric Price Forecast
 - Variable Energy Resource Integration Study Results
 - Future Climate Analysis Update

² Avista proposes to use the same methodology as described in the 2023 IRP for capacity planning until the WRAP provides estimates for long range resource Qualifying Capacity Credits (QCC) and the WRAP becomes binding for their proposed Planning Reserve Margin (PRM).

- TAC Scenarios or Feedback
- **TAC 3: April 2024: 9:00am to 3:00pm (PST)**
 - Economic Forecast and Five-year Load Forecast
 - Long run Load Forecast (AEG)
 - Conservation Potential Assessment (AEG)
 - Demand Response Potential Assessment (AEG)
 - Review Planned Scenario Analysis
- **TAC 4: May 2024: 8:30am to 12:00pm (PST)**
 - IRP Generation Option Transmission Planning Studies
 - Distribution System Planning within the IRP & DPAG update
 - T&D Modeling in the IRP
 - Load & Resource Balance and methodology
 - New Resources Options Costs and Assumptions
- **TAC 5: Technical Modeling Workshop: June x, 2024: 9:00 am to 12:00pm (PST) (Virtual Only)**
 - PLEXOS Tour
 - PRiSM Model Tour
 - New Resource Cost Model
- **TAC 6: July 2024: 9am to 4pm (PST)**
 - Preferred Resource Strategy Results
 - Washington Customer Benefit Indicator Impacts
 - Resiliency Metrics
 - Portfolio Scenario Analysis
 - Market Risk Assessment
 - QF Avoided Cost
- ***Virtual Public Meeting- Natural Gas & Electric IRP (September 2024)***
 - Recorded presentation
 - Daytime comment and question session (12pm to 1pm- PST)
 - Evening comment and question session (6pm to 7pm- PST)

2025 Electric IRP Report Outline

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

Executive Summary

- 1. Introduction, Stakeholder Involvement, and Process Changes**
- 2. Economic and Load Forecast**
 - a. Economic Conditions
 - b. Avista Energy & Peak Load Forecasts
 - c. Load Forecast Scenarios
- 3. Existing Supply Resources**
 - a. Avista Resources
 - b. Contractual Resources and Obligations
 - c. Customer Generation Overview
- 4. Long-Term Position**
 - a. Regional Capacity Requirements
 - b. Energy Planning Requirements
 - c. Reserves and Flexibility Assessment
- 5. Distributed Energy Resources Options**
 - a. Energy Efficiency Potential
 - b. Demand Response Potential
 - c. Generating and Energy Storage Resource Options and Potential
 - d. Named Community Actions
 - e. DER Study Conclusions
- 6. Supply-Side Resource Options**
 - a. New Resource Options
 - b. Avista Plant Upgrade Opportunities
 - c. Non-Energy Impacts
- 7. Transmission Planning & Distribution**
 - a. Overview of Avista's Transmission System
 - b. Transmission Construction Costs and Integration
 - c. Merchant Transmission
 - d. Overview of Avista's Distribution System
- 8. Market Analysis**
 - a. Wholesale Natural Gas Market Price Forecast
 - b. Wholesale Electric Market Price Forecast
 - c. Scenario Analysis
- 9. Preferred Resource Strategy**
 - a. Preferred Resource Strategy
 - b. Market Exposure Analysis
 - c. Avoided Cost
- 10. Portfolio Scenarios**
 - a. Portfolio Scenarios
 - b. Market Scenario Impacts
- 11. Washington Clean Energy Action Plan (CEAP)**
 - a. Decision Making Process
 - b. Resource Need
 - c. Resource Selection
 - d. Customer Benefit Indicators
- 12. Action Plan**

Draft IRP will be available to the public on August 30, 2024, and the final draft filed with Idaho and Washington Commissions on January 2, 2025. Comments from TAC members are expected back to Avista by November 15, 2024, or through Washington’s 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 Electric IRP Assumption Timeline

<u>Task</u>	<u>Target Date</u>
Market Price Assumptions	December 2023
CCA/Other GHG Pricing Assumptions	
Natural gas price forecast	
Regional resources and roads forecast	
Electric price forecast	March 2024
New Resource Options Cost & Availability	March 2024
AEG Deliverables	April 1, 2024
Final Energy & Peak Load Forecast	
Energy Efficiency and Demand Response Potential Assessment	
Locational Energy Efficiency and Demand Response Potential	
Transmission & distribution studies complete	April 2024
Due date for study requests from TAC members	March 20, 2024
Determine portfolio & market future studies	May 2024
Finalize resource selection model assumptions	June 1, 2024

Preliminary 2027 Progress Report/IRP Outline

Avista intends to replicate the 2025 IRP process for the 2027 Progress Report/IRP. Avista intends to file this IRP on January 2, 2027, with a public draft available October 15, 2026, Avista will file a complete workplan for this process by October 1, 2025.