

**Attachment to Commission’s Acknowledgement Letter for Avista Corporation’s
2012 Natural Gas Integrated Resource Plan**

UG-111588

Background

As a gas utility in Washington, Avista Corporation (Avista or company) has a fundamental responsibility to manage the risks and opportunities associated with acquiring and delivering gas on behalf of its customers. This responsibility is particularly important in an era of changing gas supply and demand and requires a long-range planning perspective. The planning requirements specified in WAC 480-90-238 are intended to help each utility develop a strategic approach to address marketplace opportunities and risks based on that utility’s unique attributes. Avista’s 2012 Natural Gas Integrated Resource Plan (Gas IRP or Plan) represents such a strategic approach.

Overview

Commission staff members participate in the development of IRPs through advisory group meetings and through review and comment on the company’s work plan and draft Gas IRP. In this document, the commission highlights issues raised during the development of the Gas IRP and whether the company response resolved the issues satisfactorily. As a result of its review, the commission recommends that Avista incorporate the following improvements in future IRPs.

- Avista should describe more clearly how it derived its customer growth scenarios, including the low growth and high growth scenario. To this end, the company may include a narrative in the demand forecast chapter.
- Avista should use the five-year use-per-customer data set in its demand forecasts.
- Avista should provide a comparative avoided cost analysis in its analysis of conservation.
- Avista needs to include an analysis and narrative describing the “trigger point” avoided cost value, where the conservation programs of the company become cost-effective.
- Between IRPs, Avista should routinely compare its modeling assumptions with actual demand.
- Avista needs to include a Washington-specific city-gate analysis, including a narrative of its conclusions as a result of such an analysis.

Demand Forecast of Retail Gas Requirements (Chapter 3)

Additional Forecasts and Price Elasticity. WAC 480-90-238(3)(a) requires the Plan to include “[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.”

The company worked towards meeting the first component of the rule which calls for a range of forecasts using five scenarios: the average case, the expected case, the high growth/low price case, the low growth/high price case, and the alternate weather standard case.¹

Avista incorporates a price elasticity of negative 0.13 into its current forecast.² This is an improvement over the work which the company conducted for its last Plan, where it looked at a high and low elasticity assumption, omitting a calculation of the expected elasticity. The research that Avista conducted into price elasticity effects meets our expectations.

- Avista should describe more clearly in its next IRP how it derived its customer growth scenarios, including the low growth and high growth scenario. To this end, the company may include a narrative in the demand forecast chapter.

Overly Optimistic Future Demand Assumptions. The commission’s last acknowledgement letter stated that Avista may have been too optimistic in its economic recovery assumptions and its effect on demand in its previous IRP. Avista’s 2012 Gas IRP shows very low growth across its service territory and continued declining use-per-customer.³ The company also indicates that such low to moderate growth in the region is projected for years into the future. The commission agrees with this lower demand forecast.

Use-Per-Customer Timeframe. Commission staff raised concerns during the development of 2012 Avista Gas IRP that the three years of data the company used is not sufficient to establish its use-per-customer values, and using at least five years of data would be more appropriate.

The company stated in its IRP that “five years incorporate some years of higher use-per-customer, which may overstate use due to changes in building codes and investments made in

¹ The alternate weather standard case is based on utilizing the coldest day in the past 20 years, rather than the coldest day on record.

² Gas IRP at 3.11. A price elasticity of negative 0.13 represents a 10 percent price increase causing a 1.3 percent consumption decrease, and a 10 percent price decrease causing a 1.3 percent consumption increase.

³ Gas IRP at 3.15.

conservation initiatives.”⁴ Figure 3.3 of the Plan shows use-per-customer derived from three-year data versus the use-per-customer derived from five-year data on a total system basis, and the difference is minimal.⁵ However, energy efficiency measure implementation and building code change are unlikely to advance rapidly enough in the marketplace to warrant shortening a data set by forty percent for use-per-customer estimation. More data points usually ensure better depictions of data relationships.

Avista responded to commission staff concerns by stating that for Washington State, the strength of the correlation between the data points was not decreased significantly when the company moved from five years of data to three years of data. The driver of the change to three years of data for Washington was the significant difference for the Oregon service territory between using three years of data versus five years. In the company’s desire to maintain consistency, Avista used three years of data for both Washington and Oregon.

Avista’s response is not satisfactory to the commission, despite the high correlation for the Washington service territory for the three-year data set. Given the nature of the IRP as a long-range planning tool, five years of data does a better job of smoothing out any abnormalities that may lie in the shorter data set.

- The company should use the five-year use-per-customer data set in future IRPs.

Conservation and Demand Side Management (Chapter 4)

Conservation Potential Assessment and Avoided Costs. In the commission’s prior acknowledgment letter, the company was directed to conduct a new Conservation Potential Assessment (CPA) study for the next Gas IRP. The commission concluded an assessment was necessary to fulfill WAC 480-90-238(3)(b), which requires the Plan to include “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.” The letter further directed the company to separate Washington and Idaho conservation goals in this Gas IRP.

The company developed a Conservation Potential Assessment (CPA) as part of its 2012 Gas IRP process. The avoided cost calculations focused on direct resource costs such as the price of gas, storage and transmission, and included the cost of environmental externalities and other unquantifiable benefits with the inclusion of a 10 percent conservation adder. The company also includes a CO₂ adder which it embeds into its expected price curve. The CPA

⁴ Gas IRP at 3.4.

⁵ Gas IRP at page 3.5.

made separate assessments for Idaho and Washington. This CPA is based on current low gas prices and Avista states in its Plan that low gas prices reduce the avoided cost that in turn reduces the number of measures that are cost-effective.

In its review of the company's draft Plan, commission staff asked the company to include a comparative avoided cost analysis such as that shown in Chapter 6.2 of NW Natural's 2010 Natural Gas IRP, Docket UG-100245 and to present the results in its final Plan. NW Natural's method incorporates a 10 percent conservation adder which can be seen as a proxy for some of the more qualitative benefits of conservation. NW Natural also incorporates a CO₂ adder which satisfies the need to account for the costs of risks associated with environmental effects including emissions of carbon dioxide.

Avista addressed the other issues commission staff raised about the draft Plan, but it did not provide the requested comparative avoided cost analysis. Stating that the company includes both the 10 percent conservation adder and the CO₂ adder is not a substitute for showing an in-depth analysis of how these components are derived and constructed.

- Avista should provide a comparative avoided cost analysis in future IRPs.
- In future IRPs, Avista needs to include an analysis and/or narrative describing the "trigger point" avoided cost value, where the conservation programs of the company become cost-effective.⁶

On November 16, 2012, the commission conducted a workshop in Docket UG-121207 to review the current methods by which gas conservation portfolios are evaluated. Several elements were discussed at the workshop, including the appropriate inputs to avoided cost calculations, the long-term discount rate as applied to conservation measures, and how the various cost effectiveness tests are currently used by the regulated companies.

The commission intends to provide guidance on the relevance of differences between the company's avoided costs and the avoided costs of the other three gas companies regulated by the commission. If changes to the avoided cost calculations are recommended, the company should immediately update the analysis conducted in its IRP.

Supply-side Resources (Chapter 5)

Monitoring Supply Alternatives. In the commission's acknowledgement letter regarding the 2009 IRP, it was noted that the company was resource sufficient until the 2022-23 heating

⁶ In Docket UG-121119, Avista filed to discontinue its gas conservation programs as described on page 4.11 of the IRP.

season, and the company was monitoring several activities to track gas supply and rates. Some of these activities included monitoring gas production and effects of pipeline expansions on regional gas supply and pipeline rates. The commission acknowledged that these were important areas to monitor, and further encouraged the company to monitor backhauling capacity on the GTN pipeline north from Malin. The company included this resource in its current Plan as a result of these monitoring activities.⁷

The commission further encouraged the company to “pursue its goal of capturing additional value related to existing storage assets as well as Avista’s commitment to analyze its gas procurement practices.”⁸ The company demonstrated appropriate consideration of these items, assessing in its supply-side resources the possibility of an expansion of its Jackson Prairie storage. Avista describes the position of the company relative to major gas supply basins. The company also addresses concern over the recent uncertainty surrounding the practice of hydraulic fracturing and possible implications, such as the potential for longer-term commodity price increases arising from potential future environmental regulation.

Integration of Supply and Demand - Integrated Resource Portfolio (Chapter 6)

Adjustments for Future Gas Demand. Avista’s Washington/Idaho service territory should not experience peak day shortages until the 2030-2031 heating season, eight years further out than the prior IRP. The rapid change in the timing of resource need highlights the importance of continuing reassessment of assumptions made in the company’s models.⁹

- Between IRPs, Avista should routinely compare its modeling assumptions with actual demand.
- Avista needs to include a Washington-specific city-gate analysis in future IRPs, including a narrative of its conclusions as a result of such an analysis.

⁷ Gas IRP at 5.7.

⁸ Commission Acknowledgment Letter Attachment, Avista Gas IRP UG-090015.

⁹ Avista noted that resource lead times were from one to five or more years.