

**Avista Corp.**

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November 24, 2014

Public Utility Commission of Oregon  
Attn: Filing Center  
PO Box 2148  
Salem, OR 97308-2148

**RE: LC 61 – Avista’s Response Comments**

Avista Utilities 2014 Integrated Resource Plan. Avista Corporation, dba Avista Utilities or (“Avista” and/or the “Company”), appreciates the participation of Commission Staff (Staff) and the Citizens’ Utility Board of Oregon’s (CUB) in the investigation of the Company’s 2014 Natural Gas Integrated Resource Plan (IRP) and their common goal of seeking the most reasonable resource plan for Avista’s customers in Oregon. The following comments are in response to the comments filed by both Staff and CUB filed on October 30, 2014 in Docket No. LC 61.

Please direct any questions regarding this filing to Jennifer Smith at (509) 495-2098.

Sincerely,

A handwritten signature in cursive script, appearing to read "Paul Kimball".

Paul Kimball  
Senior Regulatory Analyst

Enclosure

cc: See attached service list

## CERTIFICATE OF SERVICE

I **HEREBY CERTIFY** that I have this day served the Company's Response Comments in the Integrated Resource Plan Filing of Avista Utilities, a division of Avista Corporation, (LC-61) upon the parties listed below by electronic mail.

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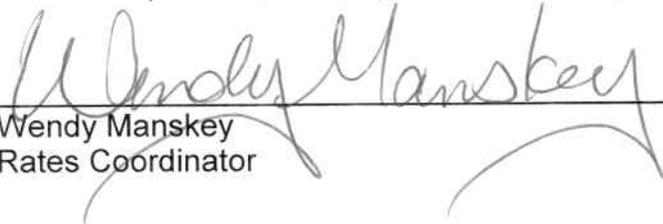
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I declare under penalty of perjury that the foregoing is true and correct.

Dated at Spokane, Washington this 24th day of November 2014.

  
Wendy Manskey  
Rates Coordinator



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November 24, 2014

***VIA: Electronic Mail***

Public Utility Commission Oregon  
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550 Capitol St. N.E. Suite 215  
Salem, OR 97308-2551

**Re: Docket No. LC 61 – Avista Utilities 2014 Natural Gas Integrated Resource Plan Response Comments**

Avista Corporation, dba Avista Utilities or (“Avista” and/or the “Company”), appreciates the participation of Commission Staff (Staff) and the Citizens’ Utility Board of Oregon’s (CUB) in the investigation of the Company’s 2014 Natural Gas Integrated Resource Plan (IRP) and their common goal of seeking the most reasonable resource plan for Avista’s customers in Oregon. The following comments are in response to the comments filed by both Staff and CUB filed on October 30, 2014 in Docket No. LC 61.

**Demand Side Management**

**Demand Forecasts**

In Commission Order No. 13-159 in Docket No. LC 55, Avista’s 2012 IRP, Staff recommended and the Commission acknowledged the following:

*Two years from the date of acknowledgement of the 2012 IRP (which was April 30, 2013), Avista will provide the results of the following:*

- *Savings and cost effectiveness of DSM programs*

- *Actions taken to reduce delivery costs, including administration costs and audit costs*
- *Actions taken to increase the number of cost effective efficiency measures in the portfolio*
- *An analysis of non-natural gas benefits of existing and proposed DSM measures*
- *An analysis of measure lives for all measures*

*Staff would like to see the above information, to the extent possible, during our analysis of this IRP rather than waiting until April 30, 2015.*

The following information represents the Company's most recent information relevant to the request above.

***“Savings and cost effectiveness of DSM programs”***

The Company's 2013 combined Demand Side Management (DSM) portfolio had a Total Resource Cost ratio of 1.16. Total savings were 217,177 therms, which was 97% of goal. The 2014 year to date savings are 157,943 therms.

***“Actions taken to increase the number of cost effective efficiency measures in the portfolio”***

The Company evaluates all viable measures for cost effectiveness on a continual basis.

***“Actions taken to reduce delivery costs, including administration costs and audit costs”***

The Company believes that the efficient administration of the natural gas DSM portfolio is a critical element of fielding a cost-effective portfolio in a low avoided cost environment.

Towards that end the Company is:

- aggressively leveraging the technical, evaluation and analytical resources of the overall Avista Utilities' Energy Efficiency team,
- applying the conclusions of publically available research to Avista's Oregon programs where appropriate,
- working cooperatively with the Energy Trust of Oregon to evaluate customers with both electric and natural gas savings potential, and
- seeking to identify and implement administrative efficiencies in the implementation process.



Residential energy audit costs are managed through a verification process that determines whether a home is likely to have qualifying measures. Homes with previous audits on file are updated in-house to minimize costs associated with performing a new field audit. All commercial audit requests are evaluated to determine if a proposed efficiency project is likely to be cost effective before an actual audit is commissioned.

Avista evaluates all commercial natural gas use, whether used for process or space heat, as potentially viable on a site-specific project. Residential measures are evaluated at a high level through the Company's Conservation Potential Assessment (CPA). In addition, Avista evaluates, on a routine basis, both new and existing measures for inclusion in its DSM portfolio.

***“An analysis of non-natural gas benefits of existing and proposed DSM measures”***

The most significant non-natural gas benefit arising from the Company existing portfolio, as well as other potential natural gas efficiency measures, is related to electric efficiencies. In the past the Company's audit tool was unable to adequately quantify these savings. Beginning in 2014 the Company transitioned to the CakeSystems audit tool, which generates natural gas and electric savings as well as the carbon impact of installed measures. These newly quantified savings will be included in future cost-effectiveness calculations.

***“An analysis of measure lives for all measures”***

Avista develops a full compilation of measure lives used for purposes of calculating cost-effectiveness. The measure lives that Avista applies are based upon consideration of the physical life of the end-use, savings degradation and technological obsolescence. The Company maintains a dialogue with utilities, program administrators and the Northwest Power and Conservation Council on this issue. Avista has and will continue to adjust measure life when it is appropriate to do so.

**Demand-Side Resources**

The Company did not assume that the exceptions granted in Docket No. UM 551, Order No. 94-590 would persist for the 20-year horizon of the IRP process, and thus did not incorporate them into that full time period. The Company looks forward to working with Staff, and other



interested parties, to further clarify the nature and duration of these exceptions and how they should be incorporated into the IRP and planning process.

Regarding ramp rate assumptions, Avista's CPA, Applied Energy Group (AEG, formerly EnerNOC), mapped each of the measures to the appropriate Sixth Plan supply curve ramp rates from the Council. AEG then reviewed the results and compared to the recent program accomplishments to see if adjustments were needed. For example, if a program had already been running for a particular measure, the ramp rate started in year two of the Council ramp rates, while a measure that was not part of any program would begin with year one.

AEG's approach for estimating conservation potential typically uses the following progression: technical potential, economic potential, achievable potential, while other studies in the Northwest use a different order. AEG's typical approach is consistent with National Action Plan for Energy Efficiency's *Guide for Conducting Energy Efficiency Potential Studies*<sup>[1]</sup>. In the AEG approach, the order in which the ramp rates and cost-effectiveness screening are applied are reversed compared to the Northwest approach. According to the *Guidebook for Potential Studies in the Northwest* by EES Consulting, "Achievability criteria can be applied either to technical potential or to economic potential. The Council applies achievability criteria prior to the economic cost-effectiveness tests."<sup>[2]</sup> Either way, the outcome, and the amount of achievable economic potential is mathematically equivalent in either approach. AEG used this approach for Avista's natural gas CPA, as well as using it in numerous other studies in the Northwest.

Using AEG's approach of developing economic cost-effectiveness before applying ramp rates, the exceptions can still be included by providing a TRC benefit adder. For example, once Avista develops electric savings from the CakeSystems simulations, we will add the electric benefit-cost ratio to the natural gas benefit-cost ratio. The additional electric savings will likely make the natural gas measure pass the economic screen. Once the measure passes the economic screen, the ramp rates are applied to develop achievable potential.

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<sup>[1]</sup> [http://www.epa.gov/cleanenergy/documents/suca/potential\\_guide.pdf](http://www.epa.gov/cleanenergy/documents/suca/potential_guide.pdf)

<sup>[2]</sup> [http://www.bpa.gov/EE/Utility/toolkit/Documents/Guidebook\\_for\\_Potential\\_Studies\\_in\\_the\\_Northwest\\_V1.0.pdf](http://www.bpa.gov/EE/Utility/toolkit/Documents/Guidebook_for_Potential_Studies_in_the_Northwest_V1.0.pdf)  
Page 7.



### **DSM Action Items**

Although, action items specifically related to DSM were not identified in the 2014 Natural Gas IRP, Avista has identified two action items in DSM acquisition over the next two to four years related to resource targets and regional market transformation as discussed below. In addition, the Company will identify DSM related action items in the 2016 Natural Gas IRP as necessary.

- The Company commits to pursuing the achievement of the numeric demand-side management resource target as part of a portfolio composed of cost-effective or otherwise authorized measures. The Company will also continue to work towards the development of a demand-side management portfolio that is optimized for a lower avoided cost environment.
- The Company will work with the Northwest Energy Efficiency Alliance to develop an approach to pursuing regional market transformation activities that will bring value to our customers and feed a pipeline of efficiency opportunities suitable for future development through local programs.

### **Portfolio Analysis**

An updated graphic depicting sensitivities, scenarios and portfolios will be included in the 2016 IRP, however Avista believes the methodology used in its analysis of portfolios is practical for the varying array of cases modeled in the IRP. Avista welcomes input and looks forward to working with Staff to enhance our processes surrounding portfolio analysis and further discussion on the development of our portfolio analysis will be included in the 2016 IRP Technical Advisory Committee (TAC) process.

Bringing together demand and supply into different sensitivities and scenarios requires careful consideration, and for this reason we prefer the TAC process to help decide these factors. The major factors considered and approved by the TAC for the 2014 IRP Expected Case include the following:

- Weather: coldest day on record and an average 20 year rolling NOAA temperature



- Coefficients: A three-year Base and Heat coefficient
- Pricing: A mix of two consultants' fundamental forecasts
- Demand: expected growth for customer count for our five major territories (WA-ID; Klamath Falls, OR; Medford, OR; Roseburg, OR; La Grande, OR).

The TAC process provides an opportunity to develop planning criteria used to build our Expected Case. The above elements are grouped into a scenario and loaded into the SENDOUT model. These results help to provide the most reasonable methodology around expectations of a peak day scenario based upon direct input from our TAC members. A stochastic model was not used in the 2014 Natural Gas IRP as no resource deficiencies occurred throughout the 20-year planning horizon in the Expected Case. The only deficiency occurred in the High Growth & Low Prices case. In the future, all scenarios will be solved for when a resource deficiency occurs during the 20-year horizon. Avista welcomes further discussion on the development of our use of stochastic analysis within the context of the 2016 Natural Gas IRP, and this will be discussed with the TAC.

### **Natural Gas Procurement and Risk Management**

Avista does not agree with Staff's representation that Avista's hedging strategy has resulted in "substantial losses for its customers", and that "Yet, Avista intends to continue its current hedging strategy". The purpose of any hedging program is not to precisely predict the market or take a market position; rather it is to mitigate the risk of unanticipated pricing fluctuations by providing some level of price certainty for customers. Further, the Company pursuant to Docket UM-1286 holds quarterly meetings with Staff and other parties where it discusses, among other things, the "bidding practices for gas supply and transportation". Staff and interested parties also review the results of the Company's procurement strategies in annual Purchased Gas Cost Adjustment (PGA) filings. In a review of the past three Staff memos, adopted by the Commission, related to the Company's annual PGA filings, the staff found the following:

#### **2012 Staff PGA Memo:**

"Avista's portfolio preparation and planning process meets the Standards in Section III of the Portfolio Guidelines, as do Avista's physical gas contracts and financial transactions relating to natural gas pricing. Avista has demonstrated its adherence to the guidelines with regard to natural gas supplies and financial hedges." Page 5 of Appendix A (Approved in Order No. 12-432)



2013 Staff PGA Memo:

“Avista’s portfolio preparation and planning process meets the Standards in Section III of the Portfolio Guidelines, as do Avista’s physical gas contracts and financial transactions relating to natural gas pricing. Avista has demonstrated its adherence to the guidelines with regard to natural gas supplies and financial hedges.” Page 4 (Approved in Order No. 13-392)

Further, footnote 13 on Page 4 of Staff’s memo states:

Accepted “best practices” for the purchase of natural gas supply by local distribution companies (LDCs) is portfolio construction that balances the objectives of reliability, cost, and price volatility using the tools of diversity, flexibility, and balance. The “Natural Gas Portfolio Development Guidelines” (Portfolio Guidelines) implement these “best practices for Oregon LDCs. The Portfolio Guidelines require gas utilities to include certain information related to their gas supply portfolio with their annual PGA filing. This information allows the Commission to determine the prudence of the utility’s costs. Staff’s analysis of and conclusions regarding Avista’s natural gas supply portfolio and related purchasing strategies and actions are based on Portfolio Guidelines. (emphasis added)

2014 Staff PGA Memo:

Avista’s 2014 PGA Filing meets the PGA Filing Guidelines and the Natural Gas Portfolio Guidelines. Avista has demonstrated its adherence to these guidelines with regard to natural gas supplies and financial hedges. (footnote omitted) Page 3 of Appendix A (Approved in Order No. 14-373)

It is important to note that Staff included the same footnote from the 2013 Staff Memo in the 2014 Staff memo as well.

As discussed in its natural gas PGA quarterly meetings, the Company’s goal related to natural gas purchases is to provide reliable supply at competitive prices in volatile commodity markets. To that end, the Company utilizes a Procurement Plan which includes hedging (on both a short-term and long-term basis), storage utilization, and index/spot purchases. This approach is diversified by time, component, counterparty, and supply basin. The Procurement Plan is disciplined, yet flexible, and layers in fixed-price purchases to reduce price volatility to customers. A copy of the Company’s Natural Gas Procurement Plan, which is included in the Company’s Risk Management Policy, is provided in each Oregon PGA as a part of its Portfolio Guideline responses.

The Procurement Plan provides a process that fixes prices for a designated portion of the portfolio through the use of hedge windows. The hedge windows are “open” for a predetermined



time period and have upper and lower pricing levels that are set by the market at the time the window becomes effective. In a rising market, this reduces exposure to price spikes. In a declining market, it can facilitate locking in lower prices. These windows can be closed if certain pricing levels are met, or upon time expiration. The Company always maintains some level of discretion and may choose not to execute within a window or to change some aspect of a window given market conditions.

In addition, a portion of the portfolio that is separate from the hedge windows is designated as discretionary. This opportunistic portion of the portfolio allows the Company to hedge additional volumes in gas years beyond the prompt year at potentially favorable pricing levels. In the event those pricing levels are not reached, the unexecuted volumes designated as discretionary hedges will become a part of the prompt year hedging program.

Gas Supply continuously monitors the results of the Procurement Plan, evolving market conditions, variation in demand profiles, and new supply opportunities. Although various windows and targets are established in the initial design phase of the portfolio, the plan provides flexibility to exercise judgment to revise and/or adjust the plan in response to changing conditions. Finally, the Company meets with Commission Staff and other parties, at least on an annual basis to review the current Procurement Plan and make adjustments to that plan as needed.

### **Distribution Planning**

Avista included the chapter on Distribution planning in the IRP as a way to demonstrate the activity inside our city gate. As noted in the IRP, Avista conducts ongoing evaluations of each of our distribution networks to identify the need for distribution system reinforcement or expansion. Evaluations are driven by the ever-changing standards and customer growth. Avista maintains a list of distribution planning projects to be completed however this list can change at any given time as evaluations are completed and needs are reprioritized. In future IRP's, Avista will work to enhance this section to more clearly state the information within this chapter and also to provide a more detailed description of the projects themselves.



### Climate Change Regulation

Per OAR 860-085-0050, Avista submits annually its Greenhouse Gas Emissions Report. The report presents estimates of, analysis methods used, and assumptions made in estimating the impacts to customer rates for meeting the Oregon energy consumption based Greenhouse Gas emission reduction goals by January 1, 2020.

The following table was provided in the Company's 2014 Report:

**Table No. 1 – Avista Utilities GHG Emissions in the State of Oregon**

<b>Avista OR CO2 Emissions (metric tons)</b>	<b><u>2009</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>	<b><u>2013</u></b>	<b><u>Avg.</u></b>
Office Facilities	68	64	76	72	79	72
Fleet	580	581	606	570	516	571
<b>Total CO2 Emissions</b>	<b>648</b>	<b>645</b>	<b>682</b>	<b>642</b>	<b>595</b>	<b>642</b>

Avista does not have historical energy usage information or fuel consumption for its fleet vehicles available in order to calculate its 1990 and 2005 GHG emissions. Therefore, for the purposes of this report, the Company used the average emissions from 2009 through 2011, 658 metric tons, as a proxy for both its 1990 and 2005 emissions levels. The Company believes this to be a reasonable and conservative assumption for the following reasons:

1. Avista has the same number of overall office and operational facilities, however several of the facilities have had energy efficiency upgrades since 1990 and 2005, and have had reduced staffing; particularly as it relates to Contact/Call Center operations.
2. The Company is operating fewer vehicles due to, among other things, the reduction in meter reading with the deployment of Automated Meter Reading (AMR) in 2004.

By using an average emissions proxy of 2009-2011, the baseline is likely lower than it was both in 1990 and 2005.

As it relates to the Company's estimates of CO2 emissions between 2012 and 2020, as noted in Table No. 1, the total emissions in the State of Oregon are very low to begin with. While the Company will continue to seek out energy efficiency measures at its office facilities, and seek out less CO2 intensive fleet vehicles (e.g., CNG, Hybrid), we believe overall emissions between



2012 and 2020 will remain somewhat flat, as any reduced emissions may be offset by increased emissions caused by the Company serving more customers.

If you have any questions regarding these comments, please contact Tom Pardee at 509-495-2159, or myself at 509-495-4975.

Sincerely,

*/s/Linda Gervais/*

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