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February 6, 2017

***VIA: Electronic Mail***

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

**Re: Docket No. LC 65 – Avista Utilities 2016 Natural Gas Integrated Resource Plan  
Comments on Staff’s Final Recommendations**

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 2016 Natural Gas Integrated Resource Plan (IRP) and the common goal of seeking the most reasonable resource plan for Avista’s customers in Oregon. The following comments are in response to the final comments and recommendations filed by Staff on January 9, 2017 in Docket No. LC 65.

Within their final comments Commission Staff made six recommendations, which are the following:

1. Staff recommends in Avista’s 2018 IRP update that Avista pursue an updated methodology, wherein the low/high gas price curves continue to be based on low (high) historic prices in a Monte Carlo setting, but are inflated to match the growth rate (yr/yr) of the expected price curve. The resulting curves would be based on historic prices and also produce symmetric risk profiles throughout the time horizon.

2. Staff recommends that Avista forecast its number of customers using at least two different methods and to compare the accuracy of the different methods using actual data as a future task.
3. Staff recommends that Avista replace its proposed 2016 Action Item:

“Avista’s 2018 IRP will contain a dynamic DSM program structure in its analytics. In prior IRP’s, it was a deterministic method based on Expected Case assumptions. In the 2018 IRP, each portfolio will have the ability to select conservation to meet unserved customer demand. Avista will explore methods to enable a dynamic analytical process for the evaluation of conservation potential within individual portfolios.”

With the following:

Avista’s 2018 IRP will contain a dynamic DSM program structure in its analytics. In prior IRPs, it was a deterministic method based on Expected Case assumptions. In the 2018 IRP, each portfolio will have the ability to select conservation to meet unserved customer demand. Avista will explore methods to enable a dynamic analytical process for the evaluation of conservation potential within individual portfolios and will work with Energy Trust of Oregon in the development of this process and in producing any final results for its 2018 IRP for Oregon customers.

4. Staff recommends that Avista provide Staff and stakeholders with updates regarding its discussions and analysis regarding possible regional pipeline projects that may move forward.
5. Staff recommends that in its 2018 IRP process Avista work with Staff and stakeholders to establish and complete stochastic analysis that considers a range of alternative portfolios for comparison and consideration of both cost and risk.
6. Staff recommends Commission Acknowledgement of Avista’s 2016 Action Plan only with the completion of the following revisions to the Action Plan, which should include:
  1. Carbon Policy including federal and state regulations specifically those surrounding the Washington Clean Air Rule and federal Clean Power Plan;
  2. Weather analysis specific to Avista’s service territories;
  3. Stochastic Modeling and supply resources; and
  4. Updated DSM methodology including the integration of ETO.

The Company does not agree with all of Staff’s recommendations; however, it does not object to the recommendations and looks forward to working with Staff on the recommendations in the 2018 Natural Gas IRP process. The Company would like to note that for recommendation #2 it will work with Staff on their recommendation to use at least two different methods to forecast its number of customers, however, this may not be possible due to data and resource constraints.



Per recommendation #6, the Company has updated its Action Plan in Chapter 8 to include the following activities for the 2018 Natural Gas IRP:

1. Carbon Policy including federal and state regulations specifically those surrounding the clean air rule and clean power plan;
2. Weather analysis specific to Avista's service territories;
3. Stochastic Modeling and supply resources; and
4. Updated DSM methodology including the integration of ETO.

The update Action Plan is attached to these comments.

Please contact Tom Pardee with any questions regarding these comments at 509-495-2159 or [tom.pardee@avistacorp.com](mailto:tom.pardee@avistacorp.com), or myself at 509-495-2782 or [shawn.bonfield@avistacorp.com](mailto:shawn.bonfield@avistacorp.com).

Sincerely,

*Shawn Bonfield*

Shawn Bonfield  
Sr. Regulatory Policy Analyst  
Avista Utilities



## 8: Action Plan

The purpose of an action plan is to position Avista to provide the best cost/risk resource portfolio and to support and improve IRP planning. The Action Plan identifies needed supply and demand side resources and highlights key analytical needs in the near term. It also highlights essential ongoing planning initiatives and natural gas industry trends Avista will monitor as a part of its planning processes.

### 2015-2016 Action Plan Review

#### Action Item

Avista will continue to optimize underutilized resources to recover value for customers and reduce their costs until resources are required to meet changing demand needs.

#### Results

Avista optimizes underutilized resources to recover value for customers and reduce their costs until these resources are required to meet demand needs. A new storage optimization program has been developed to help recover costs at our Jackson Prairie facility. This program uses the storage field's intrinsic value to sell natural gas when prices are higher, to sell on a cash to forward basis, or other market opportunities, all while maintaining deliverability on a peak day. Avista sells into the daily market for transport optimization. An example of this optimization is based on the cost difference, or spread, between the AECO and Malin basins and is almost always economic. Avista will sell into this market based on the remaining unused transportation in our portfolio.

#### Action Item

Avista will comply with Commission findings to try to increase the cost effectiveness of DSM measures by reducing administration and audit costs, analyzing non-natural gas benefits and increasing measure lives. Avista will monitor natural gas prices as a signpost for increasing avoided costs. If avoided costs increase, Avista will reevaluate DSM programs for cost effectiveness and submit to resume natural gas DSM programs.

#### Results

Avista continues to build on its history of collaboration with all stakeholders in delivering meaningful cost-effective conservation measures as a way to reduce their energy bills and promote a cleaner environment. The company considered several approaches to improve the amount of cost-effective natural gas DSM measures offered to our customers

since the 2014 IRP. During 2015, the Avista DSM group began to look at the current composition and components of natural gas avoided costs and compare them with other regional and national utilities. The research and proposed additions to Avista's avoided cost were presented to Avista's DSM Advisory Group for feedback on August 19 and 20, 2015 to ensure these were appropriate changes and to seek advice about other avoided cost component analyses the company should perform. The company also changed how non-incentive utility costs (NIUC) were being distributed to the overall DSM portfolio from the ratio of BTUs to ratio of benefits. This helped balance the cost effectiveness between electric and natural gas measures and programs. After the reevaluation of Avista's avoided cost methodology, change in distribution of NIUC, and with an Idaho Commission ruling that allows companies to emphasize the UTC when seeking prudence for their DSM programs, Avista filed for and was approved to reinstate its Idaho Natural Gas DSM programs as of January 1, 2016.

**Action Item**

Complete the gate station analysis to assess resource deficiencies masked by aggregated IRP analysis. Any identified deficiencies and potential solutions will be discussed with Commission Staff. Avista will continue to coordinate analytic efforts between Gas Supply, Gas Engineering and the intrastate pipelines to perform gate station analysis and develop least cost solutions should deficiencies exist.

**Results**

Avista has completed the gate station analysis and communicated the results to TAC members during the third TAC meeting in the Distribution section. The data set was a static set from 2014 so some of the gate station shortages have already received some mitigation fixes. The area of La Grande is one example, where the Ladd Canyon gate station was completed in December 2015 to help offset the flow at the La Grande city gate. Also, a high pressure reinforcement project will begin in 2017 to help ensure a physical limitation at this city gate is not exceeded. As for the remaining city gate deficiencies, the potential fixes will be reviewed between Avista's Gas Supply and Distribution Engineering departments. This review and potential fixes will be addressed in regular meetings between Avista and all three commissions as addressed in the ongoing activities section below.

**Action Item**

As part of its next IRP process, Avista must convene workshops with Staff and stakeholders to explore how best to model major resource acquisitions and major capital investments.

**Results**

Avista reviewed current resources in the second Technical Advisory Committee (TAC) meeting and distribution projects in the third TAC meeting. A shortage in the High Growth and Low Price case was our only case where any demand was unserved. Avista presented to the TAC members a list of resources modeled as well as the chosen resources to best solve the unserved demand. In future IRP processes, Avista will review its assumptions with the TAC members via open dialogue as well as how best to model these potential resources.

**Action Item**

For the next IRP, Avista must work with Staff and stakeholders to resolve forecasting methodology concerns, and seek to identify the most reliable methodology so that future resource needs may be clearly identified.

**Results**

Avista provided a Sendout overview following the third TAC meeting on March 30, 2016 to interested TAC members. This overview helped provide a level set on the types of inputs within the model and a general understanding on how the model works. Avista also worked directly with Oregon Staff to produce a more accurate forecasting methodology diagram. This diagram can be viewed in figure 2.5. In addition to this review, Avista added analysis around modeling alternative resources to test the least cost and least risk portion of the Expected Case Portfolio. As described in Chapter 6, Avista modeled three alternative resources and compared PVRR to determine whether a new resource stack may be appropriate. These actions have resolved forecasting methodology concerns.

**Action Item**

In its next IRP, Avista must include a clear presentation of how Avista decides which distribution system projects to include in the IRP, and a clear description of the included projects, along with a justification for recommending or proceeding with the projects.

**Results**

Avista has provided a description of distribution system projects and the most current knowledge and analysis supporting the timeframe for completing each project. Also included is an example to help describe the qualitative versus quantitative analysis for each distribution project and the new decision process flow (Figure 7.1 – Distribution Scenario Process).

**Action Item**

As part of its next IRP process, Avista must convene discussions with Staff and stakeholders to discuss potential impacts associated with: (1) new regulations to reduce methane emissions; and (2) potential increases in natural gas prices stemming from increased demand for natural gas for generation under Section 111 (d) of the Clean Air Act.

**Results**

During the second TAC meeting the company reviewed regulations affecting the natural gas industry at a state or federal level along with an overview of each rule. Avista presented its carbon pricing and methodology in the third TAC meeting. Avista will continue to monitor impacts associated with potential methane emissions and the effects these regulations may have on Avista's jurisdictions.

**Action Item**

In Order No. 13-159, the Oregon Commission documented several demand side actions. These actions included filing specific DSM targets with achievable savings and costs by measure and program for the next two to four years, noting any exceptions by measure, and participate in NEEA's natural gas market transformation program and include the achievable savings in the 2016 IRP.

**Results**

Order No. 13-159 directed Avista to continue DSM programs in Oregon and to achieve at least 225,000 therms in 2013 and 250,000 therms in 2014. In addition, the company needed to provide the following results by April 30, 2015:

- DSM program savings and cost effectiveness;
- Actions to reduce delivery costs, including administration and audit;
- Activities taken to increase the amount of cost effective efficiency measures;
- Analysis of non-natural gas benefits of existing and proposed DSM measures; and
- Analysis of measure lives for all DSM measures.

In addition Avista was directed to do the following:

- Develop a potential mechanism for funding a low-income energy efficiency program and report the mechanism to Staff.
- Determine the possibility of a regional elasticity study through the NWGA or the AGA.
- Evaluate potential demand from NGV/CNG vehicles and other new uses of natural gas.

As described in the 2014 IRP and 2014 IRP update, Avista met the actions in the following manner:

- Avista continued the DSM program in Oregon in 2013 and 2014 and achieved 217,177 therms in 2013 and 192,955 therms in 2014.
- The Commission approved the Company's DSM targets and exceptions on September 22, 2015 in Commission Order No. 15-288 in LC 61. Subsequently, Avista agreed to transition its DSM program to the Energy Trust of Oregon (ETO). In a settlement approved on February 29, 2016 via Order No. 16-076. Avista will transition to the ETO in 2016 with a final transition on January 1, 2017.
- Avista took steps to increase the cost effectiveness of the DSM program. Specifically, measure lives were extended, certain tariff changes were implemented to reduce administration costs, audit costs were separated from other program costs, a new software program is being implemented for calculating savings, and a separate low-income energy efficiency program was created.
- Avista worked with Staff and other stakeholders to develop a low-income energy efficiency program and submitted a report to Staff outlining a proposed mechanism on October 30, 2013. The company filed tariffs to implement the Avista Oregon Low-Income Energy Efficiency (AOLIEE) Program on January 8,

2014 and the tariffs were approved and the AOLIEE Program started on March 1, 2014.

- Price elasticity predicts that energy consumers reduce consumption as prices rise, but the amount of a response is debatable. Avista has reviewed research on price elasticity for natural gas. The analysis shows a wide range of results from statistically significant to statistically insignificant and even positive in some cases. Avista contacted the AGA and they are willing to facilitate a process if a regional price elasticity study moves forward. Avista is assessing the costs and benefits of such an undertaking. A regional natural gas price elasticity study will commence if enough interest develops in the project.
- In our assessment of potential demand impact due to NGV/CNG vehicles, modeling results show a direct sensitivity to NGV/CNG vehicles. This results in an increase of 9 MDTh on a February 20<sup>th</sup> peak day compared to the reference case. In the Exported LNG case, price elasticity sensitivity shows a decrease in usage in direct response to higher pricing. The analysis timeframe is over the IRP's 20-year horizon with no shortages on a peak day in either case.
- Avista is participating in NEEA's natural gas market transformation initiative. Details about the status of the initiative are in Chapter 3 – Demand Side Resources.

## 2017-2018 Action Plan

Avista's 2017-2018 Action Plan outlines activities for study, development and preparation for the 2018 IRP.

### New Activities for the 2018 IRP

- The price of natural gas has dropped significantly since the 2014 IRP. This is primarily due to the amount of economically extractable natural gas in shale formations, more efficient drilling techniques, and warmer than normal weather. Wells have been drilled, but left uncompleted due to the poor market economics. This is depressing natural gas prices and forcing many oil and natural gas companies into bankruptcy. Due to historically low prices Avista will research market opportunities including procuring a derivative based contract, 10-year forward strip, and natural gas reserves.
- Avista's 2018 IRP will contain a dynamic DSM program structure in its analytics. In prior IRP's, it was a deterministic method based on Expected Case

assumptions. In the 2018 IRP, each portfolio will have the ability to select conservation to meet unserved customer demand. Avista will explore methods to enable a dynamic analytical process for the evaluation of conservation potential within individual portfolios.

- Monitor actual demand for accelerated growth to address resource deficiencies arising from exposure to “flat demand” risk. This will include providing Commission Staff with IRP demand forecast-to-actual variance analysis on customer growth and use-per-customer at least bi-annually.
- In the 2018 IRP, include a section in the IRP that discusses the specific impacts of the new Clean Air Rule in Washington (WAC 173-441 and 173-442).
- In the 2018 IRP, provide more detail on Avista’s natural gas hedging strategy, including information on upper and lower pricing points, transactions with counterparties, and how diversification of the portfolio is achieved.
- Carbon Policy including federal and state regulations specifically those surrounding the clean air rule and clean power plan.
- Weather analysis specific to Avista’s service territories.
- Stochastic Modeling and supply resources.
- Updated DSM methodology including the integration of ETO.
- In the 2018 IRP, ensure that the entity performing the Conservation Potential Assessment (CPA) evaluates and includes the following information:
  - All conservation measures excluded from the CPA, including those excluded prior to technical potential determination;
  - Rationale for excluding any measure;
  - Description of Unit Energy Savings (UES) for each measure included in the CPA; specify how it was derived and the source of the data; and
  - Explain the efforts to create a fully-balanced TRC cost effectiveness metric within the planning horizon. Additionally, while evaluating the effort to eventually revert back to the TRC, Avista should consult the DSM Advisory Group and discuss appropriate non-energy benefits to include in the CPA.
- In developing the 2018 IRP, discuss with the TAC:
  - Results of Northwest Energy Efficiency Alliance (NEEA) coordination, including non-energy benefits to include in the CPA.
  - The appropriateness of listing and mapping all prospective distribution system enhancement projects planned on the 20 year horizon, and

comparing actual projects completed to prospective projects listed in previous IRPs.

- Discuss the barriers surrounding the uptake of DSM and how Avista can improve an increased level of achievable potential. (percentage of baseline dropped from 1.2 (economic) to 0.3 (achievable))

### **Ongoing Activities**

- Continue to monitor supply resource trends including the availability and price of natural gas to the region, LNG exports, methanol plants, supply and market dynamics and pipeline and storage infrastructure availability.
- Monitor availability of resource options and assess new resource lead-time requirements relative to resource need to preserve flexibility.
- Meet regularly with Commission Staff to provide information on market activities and significant changes in assumptions and/or status of Avista activities related to the IRP or natural gas procurement practices.
- Appropriate management of existing resources including optimizing underutilized resources to help reduce costs to customers.