

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

LC 61

In the Matter of

AVISTA CORPORATION dba AVISTA  
UTILITIES

2014 Integrated Resource Plan

Staff's Initial Comments

Following are the initial comments and recommendations of Staff of the Public Utility Commission of Oregon (Staff) on the Avista Corporation dba Avista Utilities (Avista) 2014 Integrated Resource Plan (IRP). Staff's comments are grouped by subject. Before filing final comments and recommendations, Staff will further review Avista's filed plan, responses to recent data requests (DRs) and parties' comments.

**Demand Side Management**

In Commission Order No. 13-159 from Docket No. LC 55, Avista's 2012 IRP, the Commission adopted a modified action plan which included Staff's recommendation that Avista be required to continue demand side management (DSM) programs in Oregon and achieve a minimum savings of 225,000 therms in 2013 and 250,000 therms in 2014. The Commission also adopted Staff's recommendations that Avista continue certain DSM measures and programs for a two-year period, by exception, before substantively downsizing or suspending programs. This is consistent with the approach the Commission took with gas programs operated by Energy Trust of Oregon. Staff recommended and the Commission approved exceptions based on Order No. 94-590 (Docket No. UM 551 exceptions) for the following residential measures and programs:

- Windows, standard residential and low income
- Floor insulation
- Residential gas program at the program level
- Residential low income program at the program level

At that time, Staff noted that attic insulation, wall insulation and duct sealing continued to be cost effective and should be continued, as well as the mandated measures of insulating water pipes, weather stripping and caulking.

Relative to commercial programs, Staff recommended and the Commission approved that commercial measures should remain prescriptive rather than site-specific. Staff proposed Docket No. UM 551 exceptions for:

- Gas fryers
- Gas griddles
- Convection ovens
- Single rack ovens
- Dish washer measures
- R0 and R11 attic insulation

In addition, Order No. 13-159 required 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.

Order No. 13-159 also required that within six months of the date of acknowledgement, Avista would develop a potential mechanism for allocating funding for a separate low income energy efficiency program, and would submit a report to Staff outlining the mechanism. Avista followed through on this item and provided the report to Staff within the six month period and filed a new tariff to implement the low income program. The low income program is operated under Schedule 485 Avista Oregon Low Income Energy Efficiency Program. The docket number for the new tariff was Advice No. 14-01G. The tariff went into effect March 1, 2014.

Staff notes and is concerned that Avista did not include the Commission's requirements described above and contained in Order No. 13-159 in its 2014 IRP document. Nor did Avista report on how it is doing to achieve the targets of 225,000 therms in 2013 and

250,000 therms in 2014. Staff has issued data requests and plans to follow up on these items.

Staff notes that in Chapter 3 of Avista's IRP document, natural gas savings targets for Oregon for 2015 and 2016 are 161,000 therms and 111,000 therms, respectively. This represents a 36 percent reduction in 2015 from what was required in 2014, under Order No. 13-159, and then an additional reduction of 31 percent from 2015 to 2016. It does not appear that Avista assumed any cost effectiveness exceptions would be applied going forward, as allowed for in Docket No. UM 551, Order No. 94-590. Staff plans to work with Avista to evaluate which Docket No. UM 551 exceptions should be considered and would like Avista to propose where it would make sense to apply exceptions.

Staff is also looking at ramp rate assumptions and how Avista's third party Conservation Potential Assessment (CPA) savings projection ramp rates were adjusted to "better align with Avista's recent program accomplishments," as described by Avista on page 44 of the IRP.

Page 49 of Avista's 2014 IRP states: "In Oregon, some conservation measures are legally required and therefore their costs and benefits become part of the portfolio without being subject to cost-effectiveness testing. These measures, for example, include energy audits that do not in and of themselves generate energy savings absent customer action and the timing and cost-effectiveness of the action(s) taken by the customer are uncertain." Staff has submitted data requests and is looking into how these measures impact the potential assessments and program level cost effectiveness evaluations.

In Avista's CPA performed by EnerNOC (now Applied Energy Group) the technical potential is first established, then the economic potential and finally the achievable potential. This is a different order than Staff has previously seen. Typically technical, then achievable, then cost effective potentials are established. Staff is considering how, once exceptions are granted for specific measures, the economic and ultimately the achievable potential will be established and appropriate targets set. Staff will be looking to Avista to include appropriate Docket No. UM 551 exceptions in their savings targets for 2015 and 2016.

On page 57, Avista indicates that the CPA numbers are modified based on the operational business plan. Staff is looking into specifically what changes were made based on the business plan and what impacts these had on savings and ramp rates.

Staff's primary focus is that Avista's customers receive the full benefit of cost effective energy efficiency and that where appropriate, cost effectiveness exceptions from Order No. 94-590 are applied.

Avista lists Oregon DSM targets for 2015 and 2016 in Chapter 3: Demand-Side Resources of this IRP document. In Chapter 8: Action Plan, Avista provides a narrative description of its commitment to DSM and provides an estimate of first year savings for

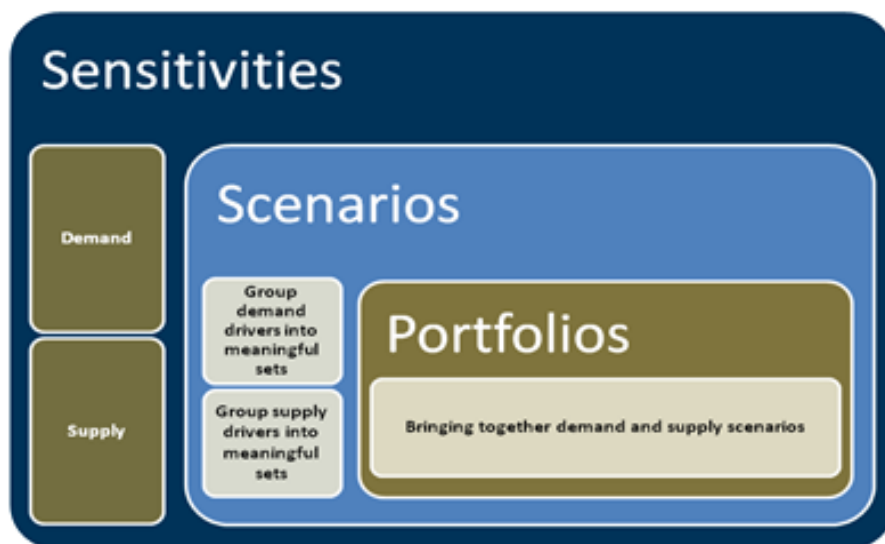
Oregon, however, Avista does not explicitly identify an action item related to DSM as it did in its last IRP. Avista needs to include a specific action item related to DSM acquisition over the next two to four years in its Action Plan in this IRP.

## Portfolio Analysis

Staff recognizes there is no resource deficiency in meeting Avista’s demand forecast during this IRP planning period. Staff is concerned however that Avista’s IRP is using a flawed portfolio analysis approach. To avoid difficulty in future IRPs when there may be a need to identify additional resources to meet forecasted demand, Staff offers the following clarifications and suggestions.

Consider the following graphic, which Avista used in the IRP preparation public involvement meetings as well as in its presentation to the Commission to depict its approach to portfolio analysis.

## Sensitivities, Scenarios, Portfolios



Embedded in this graphic is what Staff considers the flaw. In the “Portfolios” box are the words “Bringing together demand and supply scenarios.” The “Portfolios” box, however, is within the “Scenarios” box. Staff contends that the portfolios are to be alternate combinations of resources that meet the forecasted demand under each of the scenarios, not alternate evaluation scenarios. Each alternate combination of resources (portfolios) has its unique present value revenue requirement (PVRR) calculation result, which are directly comparable for portfolio selection. The flaw that concerns Staff presents itself on page 116 of the Avista IRP in the “Portfolio Evaluation” discussion. The second paragraph on that page states: “Each portfolio is based on unique assumptions and therefore a simple comparison of PVRR cannot be made.” The purpose of calculating PVRR is to be able to directly compare alternate portfolios, thus Staff’s concern about a flawed portfolio analysis approach. As Staff considers the portfolio evaluation presented in Avista’s IRP, Staff concludes the evaluation is actually

that of one portfolio of resources (the existing portfolio) under different possible scenarios.

Portfolio analysis that is intended to identify the best combination of cost and risk is not useful when analyzing only one alternate combination of resources that meet forecasted demand, i.e. when only one portfolio is analyzed. This is what Avista stated it is doing in its response to Staff DR 16: “Alternative scenarios<sup>1</sup> in the 2014 IRP were not analyzed due to the lack of shortfall within the 20-year planning horizon for the expected case.”

Again, Staff recognizes that there is no resource deficiency in meeting Avista’s demand forecast during this IRP planning period. As a result, there may be no need to perform portfolio analysis to identify the best resource additions. If that is the case, Avista’s IRP must clearly state that conclusion rather than present Portfolio Evaluation and Stochastic Analysis as though it were indeed seeking to identify the portfolio of resources offering the best combination of cost and risk.

For this IRP, Staff requires a discussion and analysis that documents why the existing portfolio of resources offers the best combination of cost and risk for meeting the forecasted demand during the planning period.

For future IRPs Staff will require that Avista correct the above-identified flaw and perform the following analyses:

1. Deterministic Analysis – a process where various more or less “worst case” scenarios are defined, and the expected 20-year PVRR outcomes from the alternate portfolios of resources are compared. Combining these outcomes with the expected PVRR under “normal” conditions, the more attractive portfolios become the pool warranting further consideration – in stochastic analysis and refining sensitivity analysis.
2. Stochastic Analysis – a process where various conditions (e.g. weather, gas prices) are “shocked/sampled” using defined probability distribution functions in order to create, in turn, and for each resource portfolio under consideration, a probability density function of discounted, twenty-year future PVRR.

## **Demand Forecast**

Staff has some concerns with the current regression model specifications used for forecasting customer growth and gas usage per customer for each customer class - residential, commercial and industrial. Staff’s concerns are mostly related to the actual data and regression variables considered for the IRP demand analysis. Staff is currently reviewing Avista’s responses to data requests and investigating the issues.

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<sup>1</sup> The word “scenarios” is used by Avista here when “portfolio” is what is intended in the IRP process.

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

In Staff's June 30, 2014, draft IRP comments Staff referenced IRP Guideline 13 as follows:

Guideline 13: Resource Acquisition.

*b. Natural gas utilities should either describe in the IRP their bidding practices for gas supply and transportation, or provide a description of those practices following IRP acknowledgment.*

Staff's recommendation regarding the draft IRP was the following:

Provide a detailed description of, and basis for, the gas purchasing plan and hedging strategy, as well as the gas purchasing risk management plan/policy/strategy. As allowed in the Guideline, the description may be provided following IRP acknowledgement. In that event, the IRP should contain a summary level description and note that the detailed description will be submitted following acknowledgement. In either case, the detailed description should be in sufficient detail to allow Staff to do a proper review of the purchasing, hedging and risk management plans/policies/strategies.

Staff notes that Chapter 4 of Avista's IRP differs from the draft reviewed by Staff in that it includes a brief discussion of Avista's Procurement Plan and Market-Related Risks and Risk Management. This discussion, however, does not provide sufficient detail to allow Staff to do a thorough review of the purchasing, hedging and risk management plans/policies/strategies. As a result, Staff issued DR 5 and Avista responded by providing Avista's Gas Procurement Plan and Risk Management Policy for review and discussion in the context of this IRP.

Avista's responses to Staff data requests DR 17 to DR 21 show that overall, Avista's hedging strategy has resulted in substantial losses for its customers. Yet, Avista intends to continue its current hedging strategy. Avista has not included in its IRP an action item to modify the strategy or a description of any future changes in its hedging strategy. Staff is still analyzing the responses and will issue follow up data requests.

## **Distribution Planning**

Chapter 7 of the Avista IRP presents a discussion of distribution system planning. While the chapter is informative, Staff finds it is missing 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. Without this information in the IRP, a prudence determination may be difficult at the time of request to include the projects in rates. Staff will require future IRPs to include this information.

## Climate Change Regulation

IRP Guideline 8 (Environmental Costs) requires utilities to conduct a time profile of CO<sub>2</sub> compliance requirements and to conduct an “analysis that recognizes significant and important upstream emissions that would likely have a significant impact on its resource decisions.” Staff is concerned that all of the climate change regulatory implications beyond simply the immediate regulatory effects of the Environmental Protection Agency’s proposed rules under Section 111 (d) of the federal Clean Air Act, are not currently accounted for in the planning period. Indeed, EPA’s 111(d) rule may well result in fuel substitution in favor of natural gas which may significantly push natural gas prices upward. Increased demand for natural gas combined with increased natural gas prices would in turn lead to greater demand for pipeline capacity or DSM solutions. Therefore, Staff recognizes it is time for Avista to begin exploring how to better analyze regulations intended to address climate change. Staff will recommend that Avista and stakeholders begin climate change risk and opportunity analysis discussions as part of Avista’s next IRP process.

## Action Items

Staff notes that Chapter 8 Action Plan contains no action items for the next two to four years. As discussed in the DSM comments above, there is need however for an additional action item specific to DSM acquisition over the next two to four years .

This concludes Staff’s initial comments.

Dated at Salem, Oregon, this 31st of October, 2014.



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Erik Colville  
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CERTIFICATE OF SERVICE

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I certify that I have, this day, served the foregoing document upon all parties of record in this proceeding by delivering a copy in person or by mailing a copy properly addressed with first class postage prepaid, or by electronic mail pursuant to OAR 860-001-0180, to the following parties or attorneys of parties.

Dated this 31st day of October, 2014 at Salem, Oregon

*Kay Barnes*

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