STATE OF WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION
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February 10, 2017

Scott L. Morris
Chairman of the Board, President, and Chief Executive Officer
Avista Utilities
1411 East Mission
Post Office Box 3727
Spokane, Washington 99220

Re: Avista Corporation dba Avista Utilities
2016 Natural Gas Integrated Resource Plan (Docket UG-151751)

Dear Mr. Morris:

The Washington Utilities and Transportation Commission (Commission) has reviewed the 2016 Natural Gas Integrated Resource Plan (IRP) filed by Avista Corporation dba Avista Utilities (Avista or Company) on August 31, 2016, and finds that it meets the requirements of Washington Administrative Code (WAC) 480-90-238.

By acknowledging compliance with WAC 480-90-238, the Commission does not signal pre-approval for ratemaking purposes of any course of action identified in the IRP. The Commission will review the prudence of the Company's actions at the time of any future request to recover costs of resources in customer rates. The Commission will reach a prudence determination after giving due weight to the information, analyses, and strategies contained in the Company's IRP along with other relevant evidence.

Because an IRP cannot pinpoint precisely the future actions that will minimize a utility's costs and risks, we expect that the Company will regularly update the assumptions that underlie the analysis within the IRP and adjust its investment strategies accordingly.

In the attached document the Commission elaborates on the following expectations regarding the Company's Technical Advisory Committee (TAC) process and 2018 IRP:

1) Include a section that discusses impacts of the Clean Air Rule (CAR) (WAC 173-442 and WAC 173-441). In its 2018 IRP expected case, Avista should model specific CAR impacts as well as consider the costs and risk of additional environmental regulations, including a possible carbon tax ($/ton).

2) Provide more detail on the Company's natural gas hedging strategy, including information on upper and lower pricing points, transactions with counterparties, and how diversification of the portfolio is achieved.
3) Ensure that the entity performing the Conservation Potential Assessment (CPA) evaluates and includes the following information:
    a. All conservation measures excluded from the CPA, including those excluded prior to technical potential determination.
    b. The rationale for excluding any measure.
    c. A description of Unit Energy Savings (UES) for each measure included in the CPA, specifying how it was derived and the source of the data.
    d. The rationale for any difference in economic and achievable potential savings, including how the Company is working towards an achievable target of 85 percent of economic potential savings.
    e. A description of all efforts to create a fully-balanced cost effectiveness metric within the planning horizon based on the Total Resource Cost (TRC) Test.

Discuss with the TAC:

1) The results of Northwest Energy Efficiency Alliance (NEEA) coordination, including non-energy benefits to include in the CPA.
2) 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.

At Commission Staff's request, Avista filed a revised 2017-2018 Action Plan on November 15, 2016, in Docket UG-151751, which documents specific comments from the Commision made throughout the IRP development process. Commission Staff will continue to provide additional input as Avista develops its next IRP.

Consistent with previous IRPs, the Commission expects that any regulatory deliberations or decisions on the economic viability of any specific course of action described within Avista's next IRP will not be made within the context of the IRP. Avista should file its next Natural Gas IRP work plan on or before August 31, 2017, and its final 2018 Natural Gas IRP on or before August 31, 2018.

Sincerely,

STEVEN V. KING
Executive Director and Secretary

Attachment

Attachment

Avista Corporation's 2016 Natural Gas Integrated Resource Plan
Docket UG-151751

I. Introduction

Every two years, Avista Corporation (Avista or Company) is required to prepare a Natural Gas Integrated Resource Plan (IRP or Plan) pursuant to Washington Administrative Code (WAC) 480-90-238. As required by rule, Avista has the responsibility to manage risks and opportunities associated with acquiring and delivering natural gas on behalf of its customers. The rule also directs investor-owned utilities (IOUs) to describe in detail the mix of natural gas supply resources and conservation that will meet current and future needs at the lowest reasonable cost to the utilities and its ratepayers.

In the 2016 Natural Gas IRP, Avista presents analysis of its current and future portfolio resource needs for the next 20 years to meet system demand, with the least cost mix of natural gas supply and conservation to the utility and its ratepayers. The Company considers such factors as resource cost, market-volatility risks, public policies regarding resource preference and the cost of risks associated with environmental effects, including but not limited to the emissions of carbon dioxide.[1] The planning requirements set forth in the IRP rules ensure each utility develops a strategic approach to meet future resource needs.

On August 31, 2016, Avista filed with the Commission its 2016 Natural Gas Integrated Resource Plan. The Company conducted a comprehensive analysis of the costs and benefits, including risk mitigation benefits, of various approaches for meeting future resource needs using the best available information. The Commission recognizes the significant efforts that Avista has made in the modeling and analyses in the 2016 IRP, as well as in engaging with Commission Staff and other stakeholders. However, the IRP section on conservation fails to meet the Commission's expectations as to clarity, thoroughness, and coordination with stakeholders. The following sections provide specific comments and requests for improvement in the next IRP.

II. Summary of 2016 Integrated Resource Plan

Avista projects its Washington/Idaho demand to grow at 1.1 percent annually, with slightly higher customer growth offset by lower use-per-customer. Peak day requirements are projected to grow at 0.8 percent per year, net of projected conservation savings from Demand Side Management (DSM) programs. The result in 2016 is a relatively flat demand curve.

Avista's 2016 Natural Gas IRP shows no resource deficiencies during the 20-year forecasted term.[2] Avista currently has firm rights to surplus pipeline capacity and will not need to acquire additional supply-side resources in the 20-year planning horizon.[3]

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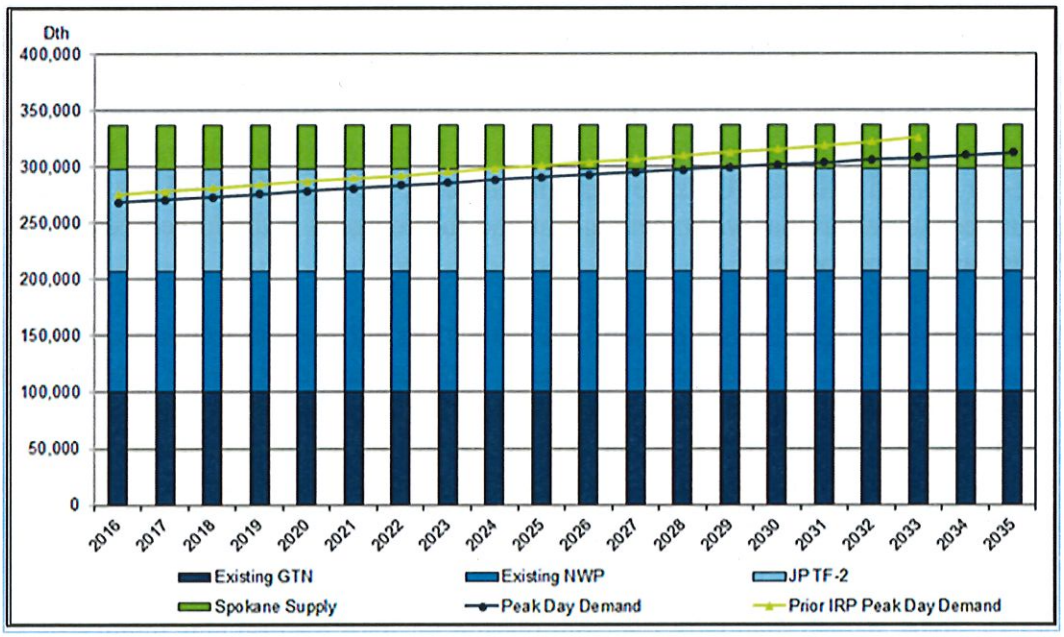
[1] WAC 480-90-238(2)(b).
[2] *Avista Corporation*, 2016 Natural Gas Integrated Resource Plan (August 31, 2016), at 8.
[3] *Id.* at 73. Released interstate pipeline capacity is generally marketed through a competitive bidding process and can be on a short-term or long-term basis.

A plot of Avista's supply-side resources against projected peak day demand is shown in Figure 5.[4]

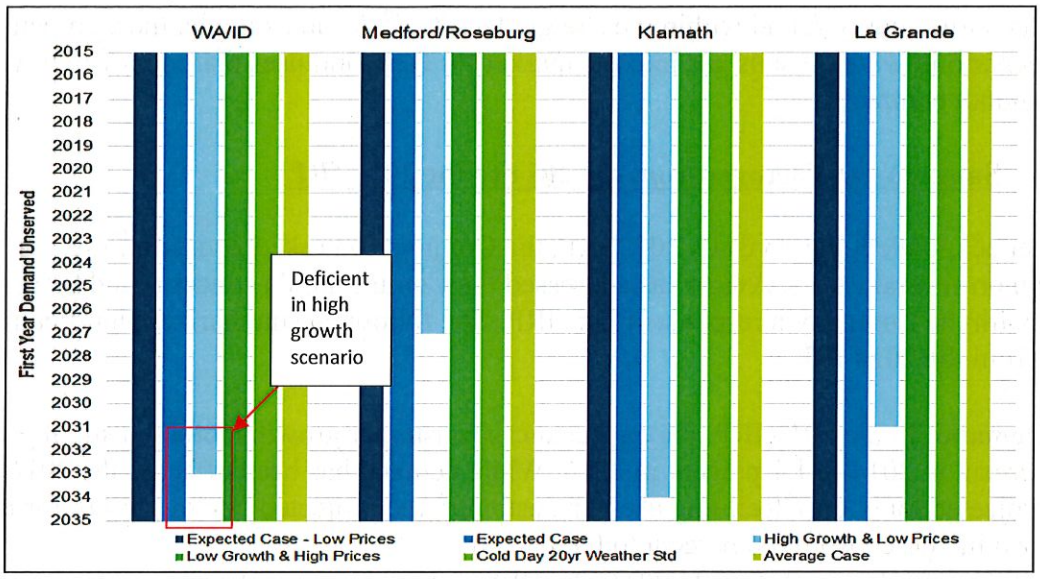
Figure 5: Expected Case – WA/ID Existing Resources vs. Peak Day Demand (Net of DSM)



Even in the high growth scenario, Avista has sufficient resources to meet system load through 2033.[5] Figure 10 shows the results of Avista's analysis of the first year in which peak demand is not met.

Figure 10: Scenario Comparison- Peak Demand Not Met with Existing Resources

[4] *Avista Corporation*, 2016 Natural Gas Integrated Resource Plan (August 31, 2016), at 8.
[5] *Id.* at 12.



In this IRP, Avista has demonstrated that it has firm rights to substantial surplus capacity and has sufficient resources to meet projected demand through 2033. Through the IRP modeling and analysis, Avista has determined that the unserved demand occurring in 2033 in its Washington and Idaho service territory could be supplied by contracting for an additional 13,300 Dth/day on the following major TransCanada pipelines: Alberta, Foothills, and Gas Transmission Northwest (GTN).[6] These pipelines move natural gas from supply in Alberta, Canada, to Avista's service territories through the AECO trading hub.

The Company's resource strategy will consist of continued management of underutilized capacity, investment in conservation resources to offset peak demand, and distribution system enhancements. Avista's conservation resource efforts are expected to offset 10.2 percent of projected growth in demand in Washington State over the 20-year planning horizon. The Company has planned distribution enhancements in the North Spokane area, where it experiences low pressure during winter at unpredictable times. Avista plans to install two district regulator stations, approximately 10,800 feet of HP steel gas main along Highway 2, and approximately 12,400 feet of HP steel gas main along the electric transmission easement west of North Spokane. Avista also identified four city gate stations as over-utilized and plans upgrades scheduled for 2019 or later.

As requested by the Commission in its last IRP Acknowledgment letter, Avista included a section on how the Company optimally manages its underutilized surplus capacity. In 2015, Avista developed and began using a new storage optimization program to help recover costs at Jackson Prairie. The program's goal is to put into place a "controlled cost mechanism…to

[6] The Alberta pipeline delivers natural gas from Alberta, Canada, to the Alberta/British Columbia border, connecting to the Foothills pipeline at the Alberta/British Columbia border. The Foothills pipeline continues to the U.S./Canada border at Kingsgate, Idaho, where the GTN pipeline originates. GTN delivers natural gas to Avista's Washington/Idaho service area, ending at the California/Oregon border.

manage the large supply found within the storage facility."[7] As an example, the Company put forth a scenario in which it sells gas into the market for cash, and uses that money to buy a forward month contract.[8]

III. Summary of Changes from the 2014 to the 2016 IRP

In its letter acknowledging Avista's 2014 IRP, the Commission asked Avista for greater discussion on several issues. Avista has addressed the Commission's concerns and Staff is satisfied with the Company's response in this IRP. The following summarizes significant changes from the 2014 IRP.

- **Demand.** In the 2016 IRP, the expected case customer growth increased slightly from 1.0 percent in 2014 to 1.1 percent in 2016. While demand has been offset in the 2016 IRP by projected long term declining use-per-customer, the projected rate of growth for peak load increased from 0.6 percent to 0.8 percent.
- **Carbon Emission Policy.** In 2016, the IRP contains a new carbon tax adder embedded in the expected case price curve, starting at $9.89 per metric ton in 2018 and ramping up to $19.93 by 2035. Avista's current estimate is that carbon legislation will occur at both the federal level, through the Clean Power Plan, and on the state level through a cap and trade or tax mechanism. In the 2014 IRP, Avista only considered a federal carbon tax derived from Wood Mackenzie data. While the Commission is aware of legal challenges to both the federal and state mechanisms, we find Avista discussion to be informative and valuable.
- **Gas Price Curve and Conservation Potential.** The 2016 IRP forecasts lower natural gas prices than the 2014 IRP and consequently lower conservation potential.
- **Supply Side Scenarios.** In 2016, the only case that identifies a resource deficiency is the High Growth/Low Price scenario. Consistent with the direction in the Commission's acknowledgment letter for the 2014 IRP, Avista addressed this by adding contracted capacity for Washington.

IV. Areas for Further Consideration

Avista's analysis of its resource needs over the 20-year planning horizon presented in this IRP is comprehensive, and the Commission is satisfied with the scope of analysis and overall presentation in the 2016 IRP. However, as explained further in the following section, the Commission has a number of expectations that will improve the 2018 IRP and may require further analysis.

1) Avista should ensure that the entity performing the Conservation Potential Assessment (CPA) evaluates and includes the following information:
    i. All conservation measures excluded from the CPA, including those excluded prior to technical potential determination.

[7] *Avista Corporation,* 2016 Natural Gas Integrated Resource Plan (August 31, 2016), at page 71.
[8] *Id.* at 71-72.

ii. The rationale for excluding any measure.
iii. A description of Unit Energy Savings (UES) for each measure included in the CPA; specifying how it was derived and the source of the data.
iv. The rationale for any difference in economic and achievable potential savings, including how the Company is working towards an achievable target of 85 percent of economic potential savings.
v. A description of the efforts to create a fully-balanced cost effectiveness metric within the planning horizon based on the Total Resource Cost (TRC) Test.

2) The Commission urges Avista to work more closely with stakeholders and discuss with the Technical Advisory Committee (TAC) any results of coordination with Northwest Energy Efficiency Alliance, including non-energy benefits to include in the CPA.
3) The Company should include a section that discusses impacts of the Clean Air Rule (WAC 173-442 and WAC 173-441).
4) Avista should provide more detail on its hedging strategy, including information on upper and lower pricing points, transactions with counterparties, and how it acheives diversification of the portfolio.
5) Avista should discuss with the TAC 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.

V. Discussion

Conservation

As evidenced by the data and analysis presented in the 2016 IRP, conservation and Demand Side Management (DSM) is a resource Avista should utilize to a greater degree. The Company's forecast shows that long-term conservation potential accounts for only 9.1 percent of sales of the 2036 baseline forecast, as compared with 10.2 percent in 2014 and 12.9 percent in 2012. The Commission is concerned with the Company's declining rate of investment in conservation and corresponding lack of explanation for excluding measures in the Conservation Potential Assessment (CPA).

Avista continues to experiment with different approaches to identifying the appropriate conservation potential, and thus the related conservation annual target for its natural gas conservation programs. In the 2016 IRP, the Company may have erred too far on the side of the utility cost test in establishing the annual targets. This reliance on the UCT-based economic screen should be considered temporary by the Company, while it actively works to develop a more fully-balanced TRC test as urged by the Commission in its Policy Statement on the Cost Effectiveness of Natural Gas Conservation Plans.[9]

[9] *In the Matter of the Commission Investigation into Natural Gas Conservation Programs,* Docket UG-121207, Policy Statement on the Evaluation of the Cost-Effectiveness of Natural Gas Conservation Programs (Oct. 9, 2013).

The decrease in the target and change in cumulative near-term savings is concerning. As shown in Table 1, the new approach decreased the potential target savings by approximately 54 percent, from 202,400 to 110,194 Dth.

Table 2 – Washington Conservation Cumulative Potential Savings

Potential Savings (Dth)	2015	2016	2017	2018
Technical Potential	662,000	996,300	298,959	597,600
Economic Potential	312,700	438,500	195,247	390,263
Achievable Potential	128,700	202,400	48,911	110,194

Table 2 also shows a decrease in the annual conservation target from the last IRP. Rather than developing new versions of the CPA, it is important that Avista focus on developing a fully-balanced total resource cost test for gas programs, which should incorporate the appropriate non-energy benefits. Avista should develop a plan for how and when it will revert back to the TRC and consult the DSM Advisory Group, discussing appropriate non-energy benefits to include within the 10 years over which the CPA generates the 10-year potential.

In addition, the Commission expects Avista to provide a rationale for any difference in economic and achievable potential savings. The Company's 20-year achievable conservation potential is only 55 percent of its economic potential which is below regional standards.[10]

- The next IRP should include an explanation of how the Company will move towards an achievable target of 85 percent of economic potential savings.

Beginning in Avista's 2018 Natural Gas IRP and in all future planning documents and analysis thereafter, Avista intends to model conservation as a potential resource addition, rather than a reduction to load. The DSM analytic approach and model will allow each portfolio to select the conservation measure(s) to meet unserved customer demand. The result of the new analysis is expected to be a more dynamic analytical process for the evaluation of conservation potential within individual portfolios. Overall, we are pleased with this approach and expect the Company to continue to evolve and advance its efforts.

Coordination with Northwest Energy Efficiency Alliance (NEEA)

In the 2018 Natural Gas IRP, the Commission expects more detailed analysis of any issues or challenges regarding the future of energy efficiency in Avista's territory. The Company should share and exchange best practices and innovative ideas with other IOUs, and better explain the results of NEEA coordination. The Commission expects that the Company will address non-energy benefits to include in the CPA and how it intends to move towards a fully-balanced TRC metric within the planning horizon.

[10] Table 3.3, at 52.

- Avista should coordinate to a greater degree with NEEA, both staff and members, in advancing regional energy efficiency efforts. Better coordination with NEEA members could result in valuable insight from other IOU programs and improve Avista's existing conservation efforts.

Clean Air Rule

Avista is listed as an eligible party to the Department of Ecology's new state Clean Air Rule (CAR) and is subject to the emission standards for greenhouse gas (GHG) as a large emitter.[11] In the IRP rule, Avista is directed to consider public policies when determining resource preference, including the costs associated with GHG emissions.[12]

The Washington Department of Ecology (Ecology) promulgated a rule in 2016 that requires natural gas distribution companies to gradually reduce their emissions beginning in 2017. If Avista cannot limit its own emissions, it should explore other options. The Company could develop projects that further reduce GHG emissions in Washington, such as increasing efforts in its existing energy efficiency programs, or other GHG reduction actions listed in the rule.[13] Avista may also comply by buying and then retiring emissions reduction units generated within Washington, or allowances from approved markets.[14] The CAR establishes an emissions limit, but as evidenced by recent state legislative and ballot initiative efforts, there is still a cost risk associated with additional environmental and carbon regulations at both the state and federal level over the planning horizon. IRP analysis should consider existing law, public policy preferences, and the risk of future regulation.

- In the 2018 IRP expected case, Avista should model specific CAR impacts as well as consider the costs and risk of additional environmental regulations, including a possible carbon tax ($/ton).

Hedging

The commodity price of gas is a significant component of the total cost of the gas supply resource option. The Company's hedging strategy plays a significant role in natural gas resource planning due to the volatile nature of gas prices and the extent to which a utility attempts to manage that volatility through hedges. Some information may be confidential, but the Company should provide the Commission more information on how the Company sets terms, determines upper and lower pricing points, transacts with counterparties, and ultimately diversifies its portfolio.[15]

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[11] WAC 173-442; WAC 173-441.
[12] WAC 480-90-238(2)(b).
[13] WAC 173-442-160(1).
[14] WAC 173-442-100.
[15] *Id.* at 65.

- Avista should also provide more detail about its basic hedging strategy in the IRP. Specifically, the IRP should discuss how, or whether, the Company's hedging strategy influences its forward price curves for natural gas or its characterization of price volatility for specific supply basins.

Surplus Capacity

As in the 2014 Natural Gas IRP, Avista has demonstrated both that is has sufficient resources to meet demand through its 20 year horizon and firm rights to substantial surplus capacity. In the letter acknowledging compliance of the 2014 IRP with statute and rule, the Commission requested the Company to provide a comprehensive discussion on how it manages this surplus capacity. We appreciate the Company's inclusion of a discussion on 'Resource Utilization' discussion in the 2016 IRP.

- The Company should continue to optimally manage underutilized capacity through releases, daily or term transactions, and explore arrangements with other utilities that allow available resource utilization. It should quantify and report the net gain or surplus from the new program over the Company's previous plan. The Company should also continue to update its IRP advisory group and the Commission through future IRPs, on its active management strategy.

Distribution System

The Company's natural gas distribution system consists of 5,800 miles of pipeline and plant in Washington, including numerous regulator stations, service distribution lines, monitoring and metering devices, and other equipment. Each natural gas utility regulated by the commission has the responsibility to meet system demand with the least-cost mix of natural gas supply and conservation, which includes least-cost distribution system enhancements.

In its IRP presentation to the Commission in November 2016, the Company provided a good overview of its distribution system and how it uses GL Noble Denton's Synergi software to determine network requirements, develop distribution scenarios, and assist the Company in forming cost-effective solutions with sufficient lead times. This was the first time we have seen a distribution systems presentation as part of Avista's IRP and we found the discussion to be informative.

- The Commission requests that Avista further explore the appropriateness of listing and mapping all prospective distribution system enhancement projects planned over the 20-year horizon. The Company should compare actual projects completed to prospective projects listed in previous IRPs and look at the value of including this information in its next IRP process.

Avoided Cost

The Commission is modifying its Integrated Resource Planning rules for investor-owned natural gas and electric utilities in Docket U-161024, and is seeking comment on ways to improve the transparency of avoided costs values reported in natural gas IRPs. The Commission looks forward to Avista's participation on this topic.

VI. Conclusion

The Commission acknowledges that Avista's 2016 Natural Gas Integrated Resource Plan complies with WAC 480-90-238, on the condition that the recommendations made concerning the 2016 IRP are addressed prior to the submission of the 2018 Integrated Resource Plan. The Commission expects Avista to follow the recommendations outlined in this letter as it develops future IRPs.