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Attorney for the Commission Staff

## BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE FILING OF AVISTA )	
CORPORATION DBA AVISTA UTILITIES' 2016) )	CASE NO. AVU-G-16-03
NATURAL GAS INTEGRATED RESOURCE )	
PLAN )	COMMENTS OF THE
)	COMMISSION STAFF
)	

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**COMES NOW** the Staff of the Idaho Public Utilities Commission, by and through its Attorney of record, Daphne Huang, Deputy Attorney General, submits the following comments.

### BACKGROUND

On August 31, 2016, Avista Corporation dba Avista Utilities filed its 2016 natural gas Integrated Resource Plan (IRP). The Company files a natural gas IRP every two years to describe the Company's plans to meet its customers' future natural gas needs. The IRP must discuss the subjects required by Commission Order Nos. 25342, 27024 and 27098, and Section 303(b)(3) of the Public Utility Regulatory Policies Act (PURPA), 15 U.S.C. § 3203(b)(3).

The Company's natural gas IRP, including appendices, is about 800 pages long. The IRP contains an Executive Summary, and chapters on Demand Forecasts; Demand-Side Resources; Supply-Side Resources; Integrated Resource Portfolio; Alternate Scenarios, Portfolios, and Stochastic Analysis; Distribution Planning; and the Company's Action Plan.

## **STAFF REVIEW**

Staff reviewed the Company's 2016 natural gas IRP to determine if it complies with requirements specified by prior Commission orders. Staff believes that the 2016 IRP contains the required information.

Staff examined the Company's natural gas demand forecasts, supply-side resources, distribution planning, and demand-side management (DSM), with each of these subjects addressed in greater depth in sections below. The Company modeled multiple demand scenarios – Average Case, Expected Case, High Growth/Low Price, Low Growth/High Price, Alternate Weather Standard, and Expected Case/Low Price – to account for variations in customer growth, usage and weather. The Company's analysis shows that with several significant distribution upgrades, existing resources meet demand in all Idaho scenarios with the exception of unserved demand in 2037 in the high growth/low price scenario. Based on its analysis, Staff believes the Company's estimates cover a range of possibilities and are reasonable.

### **Natural Gas Demand**

The Company determines demand forecasts by defining eight distinct demand areas in its service territory. The demand forecast accounts for several factors influencing demand, including natural gas prices, weather, customer growth and use, conservation technology, industry innovations, and regulation.

The Company expects minimal growth in the residential, commercial, and industrial segments. However, the Company recognizes that in today's natural gas market of low price and abundant supply there is increasing interest in use of gas for power generation, transportation fuel, industrial feedstock, and liquefied natural gas (LNG). While most of the markets would not be customers of the Company, they could impact the natural gas infrastructure and pricing in its service area.

The Company forecasts a 0.5% annual growth rate (net of projected DSM program savings), with average day, system-wide core<sup>1</sup> demand increasing from an average of 94,164 dekatherms per day (Dth/day) in 2016 to 102,840 Dth/day in 2035. IRP at 3. The Company forecasts that coincident peak day, system-wide core demand will increase from a peak of

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<sup>1</sup> The Company's core (retail) customers are residential, commercial, and very few industrial customers. Transportation-only customers are not included in peak day IRP planning.

361,901 Dth/day in 2016 to 425,144 Dth/day in 2035, for a 0.8% annual average annual growth rate in peak day requirements (net of projected DSM savings). *Id.* Non-coincident peak day system-wide core demand is forecasted to increase from a peak of 331,820 Dth/day in 2016 to 387,742 Dth/day in 2035 for a 0.8% average. *Id.* In the Washington/Idaho service territory, number of customers is projected to increase at an average annual rate of 1.10 percent, with gas demand increasing at a compounded average annual rate of 0.36 percent. *Id.* at 39.

Staff reviewed the Company's projections of its average system-wide consumption, coincident peak day consumption, and non-coincident peak day consumption. Staff believes the Company's projections are based on a reasonable analysis of growth and consumption patterns in its Idaho service territory.

### **Natural Gas Supply Resources and Options**

The Company states it has a "diversified portfolio of natural gas supply resources," including contracts to buy gas from several supply basins, stored gas, and firm capacity rights on six pipelines. *Id.* at 6. In addition, the Company considers "incremental pipeline transportation, storage options, distribution enhancements, and various forms of LNG storage or service" as potential resource additions. *Id.* at 6.

The Company discusses projected resource needs including near term distribution upgrades, and states that the Average Case and Expected Case demand scenarios show it will not need additional upstream capacity or storage in the 20-year planning horizon. However, the Company expects to spend approximately \$4M in 2017 and \$5.5M in 2018 on distribution projects in Idaho. The Company anticipates that, "where an upstream resource deficiency is [expected to be] nearly present," it will have "time to carefully monitor, plan and take action on potential resource additions." *Id.* at 8-9.

In addition to Staff's review of the IRP, Staff also evaluates supply side resources through participation in the IRP Technical Advisory Committee (TAC) team and semi-annual discussions with the Company. The Company has positioned itself to address current and changing market conditions. Specifically, the Company modified its procurement strategy which includes hedging, storage, and index purchases to minimize cost and risk. *Id.* at 65. In 2018, the Company intends to research procuring a derivative base contract, 10-year forward strip, and natural gas reserves. *Id.* at 13.

## Distribution Planning

The Company utilizes a computer based modeling tool (GL Noble Denton Synergi) to monitor and study loads to assess distribution system needs and growth. The tool provides a graphic representation of the Company's system which behaves very close to the actual system allowing users to model alternatives. Transportation-only customers are excluded in long-term planning exercises but are included in distribution planning exercises because they utilize the Company's distribution system. The Company states, "Securing adequate natural gas supply and ensuring sufficient pipeline transportation capacity to Avista's city gates become secondary issues if distribution system growth behind the city gates increases faster than expected and the system becomes severely constrained." *Id.* at 129. The Company also assesses its distribution system integrity which generally occurs due to an increased number of customers and load growth but can also be because maintenance upgrades are necessary. *Id.* at 130.

Staff agrees with the Company's perspective and believes it is important to closely monitor the distribution system for capacity constraints even if transportation capacity exists upstream of the city gate.

As mentioned previously, the Company is planning a number of projects in Idaho to upgrade the distribution system. The Company is initiating a project (Coeur d'Alene High Pressure Reinforcement) to reinforce the Coeur d'Alene system to address low pressure conditions in the Hayden Lake system that generally occur when demand is high during cold winter conditions. *Id.* at 136. The total project cost is approximately \$8M from 2017 to 2018. *Id.* The project includes two regulator stations and roughly 17,000 feet of high pressure steel main. *Id.* The Company selected an option which utilizes the GTN-TransCanada pipeline since Northwest Pipeline's CDA lateral is at capacity. *Id.* This choice provides a second gas source to the Company's system and is the least cost routing solution. An additional 2018 distribution project (Schweitzer Mountain Rd High Pressure Reinforcement) is scheduled at a cost of \$1.5M. *Id.* Currently, the Company is monitoring other Idaho city gate stations with minimal capacity constraints and has tentatively scheduled projects for 2019 or later at the Athol #219, Bonners Ferry #208, and Genesee #320 gate stations. *Id.* at 137.

Staff believes the Company should evaluate and more thoroughly describe alternatives, including conservation, in order to determine the least-cost approach to meeting its distribution capacity needs.

## Demand-Side Management

The Company suspended natural gas DSM programs in 2012. In the Company's 2012 Application it advised the Commission that gas costs were lower than the existing avoided costs rendering its gas DSM program cost-ineffective. Order No. 32650. On October 28, 2015, the Company filed an application to: (1) resume natural gas energy efficiency programs and projects to residential (including low income), commercial, and industrial natural gas customers; and fund these programs by increasing its "Energy Efficiency Rider" rates. Case No. AVU-G-15-03. The Company claimed that its historic method of measuring DSM cost-effectiveness, through the Total Resource Cost (TRC) test, has the potential for bias against conservation programs. Consequently, the Company proposed the use of the Utility Cost Test (UCT). Additionally, the Company proposed modifications to its avoided cost calculation to include the demand portion of Schedule 150 Purchased Gas Cost Adjustment. The Commission approved the Company's application to resume its natural gas energy efficiency programs on December 24, 2015. Order No. 33444.

The Company contracted with Applied Energy Group (AEG) to complete a CPA (Conservation Potential Assessment) with results published in April of 2016. AEG created a baseline forecast and consumption projections by end use which excluded utility programs and naturally occurring conservation. The Company states that; "The baseline forecast is the foundation for the analysis of savings from future DSM programs as well as the metric against which potential savings are measured." IRP at 47. The results of the CPA compared to the baseline forecast are shown below:

### Conservation Potential Summary for Idaho<sup>2</sup>

2015 Natural Gas Sales (Dth)			2017 to 2018 Cumulative Achievable Savings Potential (Dth)	2017 to 2018 Cumulative Economic Savings Potential (Dth)	2017 to 2018 Cumulative Technical Savings Potential (Dth)
<b>Residential</b>	4,304,740	62%	25,406	108,042	165,579
<b>Commercial</b>	2,456,621	35%	21,619	58,035	94,327
<b>Industrial</b>	187,203	3%	641	1,450	5,049
<b>Total</b>	6,948,564	100%	47,666	167,527	264,955

<sup>2</sup> "Achievable potential" is the theoretical lower limit and applies ramp rates to establish an acquisition target that is perceived to be more realistic. "Economic potential" incorporates cost-effective measures. "Technical potential" is the theoretical upper limit and assumes all customers replace equipment with the most efficient option available regardless of cost-effectiveness.

The Company is exploring a number of DSM alternatives for the 2018 IRP. *Id.* at 144. One possibility is targeted DSM which is in the process of being evaluated as an alternative to distribution upgrades. For example it may be possible to defer upgrades if large commercial or industrial customers located on capacity constrained laterals participated in DSM programs to reduce gas consumption. The Company's Demand Side Management, Gas Supply, and Gas Engineering groups are currently determining if a pilot program is feasible. However, the Company has determined that the effects of standard DSM offerings will not resolve or defer required Idaho upgrade projects. The Company states that it is evaluating avoided cost approaches with the DSM Advisory Group in the spring of 2017 and with the 2018 IRP TAC at its first 2018 meeting. *Id.* at 46. Staff supports the Company's continued evaluation of DSM avoided costs. Additionally, Staff is encouraged by the Company's interest in evaluating targeted DSM alternatives as an approach to deferring distribution capacity upgrades that have been tentatively scheduled.

### **Action Plan**

As stated in the above Background section, the Company's IRP includes an Action Plan that contains a 2015-2016 review section detailing progress on last year's action items. In summary, highlights of 2015-2016 results include implementation of a new storage optimization program, continued progress on DSM avoided cost methodologies, completion of gate station analysis, improved forecasting methodology awareness by providing TAC members with an overview of the Sendout system, and inclusion of distribution system project overviews in this IRP.

According to the Company, "Avista's 2017-2018 Action Plan outlines activities for study, development and preparation for the 2018 IRP." *Id.* at 144. The following summary includes key points from the 2017-2018 Action Plan. Summary of the Action Plan include:

- The price of natural gas has dropped significantly since the 2014 IRP. Consequently, the Company will research market opportunities including procuring a derivative base contract, 10-year forward strip, and natural gas reserves.
- The Company's 2018 IRP will support the selection of conservation (DSM) to meet unserved demand in individual portfolios.

- Monitor actual demand for accelerated growth [to] address resource deficiencies arising from exposure to “flat demand” risk.
- 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.

Staff is supportive of the Company’s 2017-2018 Action Plan. Staff supports addressing DSM avoided cost methodologies through participation in the DSM Advisory Group and IRP TAC team. Additionally, Staff believes that exploring the potential for deferring additional supply or distribution resources through targeted conservation programs is important given the planned near term (2017-2018) distribution upgrades at a projected cost of over \$8M.

### **Public Participation**

The Company conducted four TAC meetings with the first held in Portland, Oregon and the remaining three at Company headquarters in Spokane, Washington. *Id.* at 21. Each of the four meetings was also available online via WebEx and by phone. Meetings were conducted in an interactive manner to include feedback and input from TAC team members as well as stakeholders. TAC team members were provided an opportunity to review a draft of the IRP, ask questions, and offer suggestions prior to publication. *Id.* at 21.

The Company provided opportunities to any individual or entity interested in participating in the planning process by posting meeting details and presentations on the Company website. *See* Attachment A at 1. During the four TAC meetings there was a mix of Avista employees, staff from commissions (Idaho, Oregon, and Washington), state agency staff (Oregon and Washington), other regional gas utilities, pipeline companies, and trade associations. *Id.* at 1-9. Average meeting participation was a mix of roughly 9 (30%) Avista



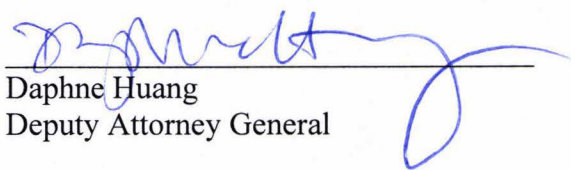
employees and 22 (70%) stakeholders including Staff that participated in all four meetings. *Id.* at 2-9.

Staff appreciates public access to presentations and availability of information on the Company's website but believes additional outreach to Idaho customers, local and state officials, and other stakeholders is appropriate. Incremental outreach could include bill stuffers, public flyers, local media, individual invitations, and other methods to encourage and enhance public participation. It is important for the public to understand how the Company forecasts future resource requirements and spending and how rates could be affected. Additionally, Staff suggests the Company consider conducting a workshop in the proximity of areas impacted by future projects.

#### **STAFF RECOMMENDATION**

Staff believes that the Company's 2016 Natural Gas IRP satisfies the requirements for a natural gas IRP set forth in Commission Order Nos. 25342, 27024, 27098, 32233, and 32698. Staff recommends the Company's 2016 Natural Gas IRP be acknowledged and accepted for filing.

Respectfully submitted this <sup>2<sup>nd</sup></sup> day of February 2017.

  
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Daphne Huang  
Deputy Attorney General

Technical Staff: Kevin Keyt  
Michael Morrison

I: umisc: comments/avug16.3djhkskmm comments



**AVISTA CORPORATION  
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	IDAHO	DATE PREPARED:	01/12/2017
CASE NO.:	AVU-G-16-03	WITNESS:	N/A
REQUESTER:	IPUC	RESPONDER:	Tom Pardee
TYPE:	Production Request	DEPARTMENT:	Natural Gas Resources
REQUEST NO.:	Staff-01	TELEPHONE:	(509) 495-2159

**REQUEST:**

Page 1 of the Avista 2016 Natural Gas IRP Appendix lists organizations and representatives that participated in the 2016 Natural Gas IRP TAC meetings. Please provide the telephonic and in-person attendance records for each of the TAC meetings, including attendee names and corresponding organizations. Additionally, please provide copies of any notifications, flyers, or publications sent to the public regarding the 2016 Natural Gas IRP.

**RESPONSE:**

Please see Staff\_PR\_01 Attachment A for the attendees at each Technical Advisory Committee (TAC) meeting during the 2016 Natural Gas IRP.

Throughout the planning phase of the 2016 IRP, the presentations and meeting locations were all posted to the Avista Utilities website ([www.avistautilities.com](http://www.avistautilities.com)) under the "Inside Avista" section link to "Resources and Transmission Services". More importantly there is contact information for any individual or entity requesting to participate in this planning process.

Avista 2016 Integrated Resource Plan –  
Technical Advisory Group Meeting

January 21, 2016

<u>Name</u>	<u>Company</u>	<u>Email Address</u>
Steve Stern	NW Natural	Steve.Stern@nwnatural.com
Jody Morehouse	AVISTA	
Timmy S. Liner	NW Natural	tsl@nwnatural.com
MATTHEW ELAM	Idaho PUC	matt.elam@puc.idaho.gov
Michael Dillon	Avista	mike.dillon@avistacorp.com
Chris McGuire	WUTC	cmcguire@utc.wa.gov
Terrence Browne	Avista	terrence.browne@avistacorp.com
Grant D. Forsyth	AVISTA	Grant.Forsyth@AvistaCorp.com
Kerry Shroy	Avista	Kerry.Shroy@avistacorp.com
Kaylene Schuttz	AVISTA	Kaylene.schuttz@avistacorp.com

Avista 2016 Integrated Resource Plan –  
Technical Advisory Group Meeting

January 21, 2016

	<u>Name</u>	<u>Company</u>	<u>Email Address</u>
{	ERIC COLVILLE	ORPUC	
	ED FINKLEY	NWGA	
	MARK SEWERS-VAUGHN	CASCADE	
	LISA GORSKE	OPUC	
	KEVIN KEYT	IPUC	
	Dan Kirschner	NWGA	

Avista 2016 Integrated Resource Plan –  
Technical Advisory Group Meeting

February 18, 2016

<u>Name</u>	<u>Company</u>	<u>Email Address</u>
KEVIN KEYT	IPUC	KEVIN KEYT @ PUC. IDAHO. GOV
Eric Colville		
Nadine Hanhan		
Terri Carlack		
JODY MOREHOUSE	AVISTA	
Ryan Finesilver	Avista	
TERRENCE Brewne	Avista	
Kaylene Schuttz	Avista	
David White	TransCanada	
Brian Robertson	Cascade Natural Gas	Brian. Robertson @ cnge.com
Cam S. Liner	NW Natural	ts1@nwnatural.com
Ryan Bracken	NW Natural	rjb @ nwnatural.com
ERIC SCOTT	AVISTA	ERIC. SCOTT @ AVISTACORP.COM
Chris Robbins	CNGC	
JAY STORY	TransCanada	jay_story @ transcanada.com
Chris McGuire	WUTC	Cmcguire @ wte.wa.gov
James Gull	Avista	
John Lyons	Avista	john.lyons@avistacorp.com
DEBBIE SIMOCK	Avista	debbie.simock@AVISTACORP.COM
Enik Soreng	Avista	enik.soreng@avistacorp.com
Mike Rasmussen	Northwest	Michael.D.Rasmussen@williams.com
Leslie Tiler	Avista	
Max St. Brown	Opuc	
Lisa Grossnik	Opuc	
Kacie Chandler	PSE	

Staff\_PR\_01 Attachment A

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Avista 2016 Integrated Resource Plan –  
Technical Advisory Group Meeting

30  
March 16, 2016

<u>Name</u>	<u>Company</u>	<u>Email Address</u>
Karlene Schmittz	ALA	
Chris McGuire	WAUTC	
Eric Colville	OPUC	
Rick Sterling	IPUC	
Terri Carlisle	IPUC	
Max St. Brown	OPUC	
Lisa Gorsuch	OPUC	
Joe Miller		
Nahne Hanhan		
Kacie Chandler		
Brian Robertson	Cascade	
Tamy Linver	NWN	
Ray Warner		
Joanna		
Jody Morehouse	AVISTA	
David Machado	AVISTA	
KAREN SCHUH	AVISTA	
GRANT D. FOSYTH	AVISTA	
KEVIN KEAT	IPUC	

Avista 2016 Integrated Resource Plan –  
Technical Advisory Group Meeting

30  
March 16, 2016

<u>Name</u>	<u>Company</u>	<u>Email Address</u>
TERRIE BROWN	Avista	
Ryan Finesilver	Avista	
Connor Reiten	WW Gas Association	Creiten@nwga.org
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DEBBIE SIMOCK	AVISTA	debbie.simock@avistacorp.com
John Lyons	Avista	john.lyons@avistacorp.com
Jaime	OR COB	



Avista 2016 Integrated Resource Plan –  
Technical Advisory Group Meeting

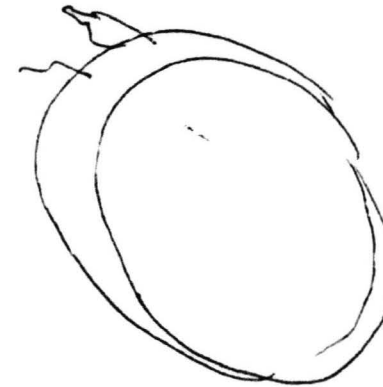
April 21, 2016

<u>Name</u>	<u>Company</u>	<u>Email Address</u>
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Terrance Brown	AVA	
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Chris McGuire	WUTC	cmcguire@wutc.wa.gov
Alison Kenyon	Ava	
ERIC COLVILLE	OPUC	
MAX ST BROWN	OPUC	
MARK SEWERS VAUGHN	CASCADE	
BRIAN ROBERTSON	CASCADE	
<del>CASTE</del> STACY	IPUC	
	<del>IPUC</del>	
CHAD STOKES	NWGA	
<del>CHAD</del> KACE	PSE	

Avista 2016 Integrated Resource Plan –  
Technical Advisory Group Meeting

April 21, 2016

<u>Name</u>	<u>Company</u>	<u>Email Address</u>
KEVIN KEYT	IPUC	KEVIN.KEYT@PUC.IDAHO.GOV
JOEY MOREHOUSE	AVISTA	
GRANT D. FORDSITH	AVISTA	
John Lyons	Avista	john.lyons@avistacorp.com
Connor Reiten	NW Gas Association	Creiten@NWga.org
Ryan Finesilver	Avista	



## CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 2<sup>nd</sup> DAY OF FEBRUARY 2017, SERVED THE FOREGOING **COMMENTS OF THE COMMISSION STAFF**, IN CASE NO. AVU-G-16-03, BY E-MAILING AND MAILING A COPY THEREOF, POSTAGE PREPAID, TO THE FOLLOWING:

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LINDA GERVAIS  
MGR REGULATORY POLICY  
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SECRETARY

CERTIFICATE OF SERVICE