Exhibit No. ___(JDM-1T)

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UG-14_____

DIRECT TESTIMONY OF

JOSEPH D. MILLER

REPRESENTING AVISTA CORPORATION

I. INTRODUCTION

Q. Please state your name, business address and present position with Avista Corporation.

A. My name is Joseph D. Miller. My business address is 1411 East Mission Avenue, Spokane, Washington. I am employed as a Senior Regulatory Analyst in the State and Federal Regulation Department.

Q. Would you briefly describe your responsibilities?

A. Yes. I am responsible for preparing and maintaining the regulatory natural gas cost of service models for the Company. I also provide support in the preparation of revenue analysis, rate spread and rate design, and miscellaneous other duties as required.

Q. Please describe your educational background and professional experience.

A. I am a 1999 graduate of Portland State University with a Bachelors degree in Business Administration, majoring in Accounting. In 2005 I graduated from Gonzaga University with a Masters degree in Business Administration. I joined the Company in March 2008 after spending eight years in both the public and private accounting sector. I started with Avista as a Natural Gas Accounting Analyst in the Company's Resource Accounting Department. In January 2009, I joined the State and Federal Regulation Department as a Regulatory Analyst. My primary responsibility was coordinating discovery for the Company's general rate case filings. In 2010, I was promoted to a Senior Regulatory Analyst, where my primary responsibilities have been the preparation of the Company's natural gas cost of service studies and revenue adjustments in all jurisdictions, previously sponsored by Company witness Ms. Knox.

Q. Have you previously provided testimony in other regulatory jurisdictions?

A. Yes. I have submitted pre-filed testimony before the Oregon Public Utility Commission as a cost of service witness in Dockets UG-201 and UG-246.

Q. What is the scope of your testimony in this proceeding?

A. My testimony and exhibits will cover the Company's natural gas revenue normalization adjustments and cost of service study performed for this proceeding. A table of contents for my testimony is as follows:

Q. Are you sponsoring any exhibits in this case?

A. Yes. I am sponsoring Exhibit No.___ (JDM-2) which includes a narrative of the natural gas cost of service study process, and Exhibit No.___ (JDM-3), the natural gas cost of service study summary results.

Q. Were these exhibits prepared by you or under your direction?

A. Yes they were.

II. NATURAL GAS REVENUE NORMALIZATION

Q. Would you please describe the natural gas revenue normalization adjustment included in Company witness Ms. Andrews Attrition Study?

A. Yes. Similar to the electric revenue normalization adjustment, sponsored by Company witness Ms. Knox, there are three separate adjustments that normalize revenue as part of the natural gas Attrition Study.

1 – The Commission Basis Results of Operations in Column [A] of Exhibit No.___(EMA-3), page 4 includes a Commission Basis weather normalization adjustment. Revenues and natural gas costs for this adjustment are based on rates that were in effect during the July 2012 through June 2013 test period.

2 – The Incremental Revenue Normalization Adjustment in column [D] of Exhibit No.___(EMA-3), page 4 adjusts July 2012 through June 2013 test period customers and usage for any known and measurable (pro forma) changes. And in addition, re-prices billed, unbilled, and weather adjusted usage and natural gas costs at the base tariff rates approved for 2013, as if the January 1, 2013 revenue increase were effective for the full 12-months of the test year.

3 – The 2014 Temporary Rate Increase shown in column (f) of Exhibit No.___(EMA-3), page 1 identifies the incremental revenue produced when the normalized usage is re-priced at the base tariff rates approved for 2014.

Q. Please begin with the first revenue normalizing adjustment in the Attrition Study. What is the Commission Basis weather normalization adjustment?

A. Weather normalization is a required element of Commission Basis reporting pursuant to WAC 480-90-257. The intent of this adjustment is for Commission Basis

adjusted revenues and natural gas costs to reflect operations under normal temperature conditions during the reporting period.

Q. Would you please briefly discuss natural gas weather normalization?

A. Yes. The natural gas weather normalization adjustment is developed from a regression analysis of ten years of billed usage per customer and billing period heating degree-day data. The resulting seasonal weather sensitivity factors (use-per-customer-per-heating-degree day) are applied to monthly test period customers and the difference between normal heating degree-days and monthly test period observed heating degree-days. This calculation produces the change in therm usage required to adjust existing loads to the amount expected if weather had been normal.

Q. In the discussion of electric weather normalization sponsored by Ms. Knox, she indicated that the adjustment utilized sensitivity factors from the ten year period January 2002 through December 2011. Is this true for natural gas as well?

A. Yes, the natural gas weather adjustment utilized updated weather sensitivity factors for the same ten-year period.

Q. What data did you use to determine "normal" heating degree days?

A. Normal heating degree-days are based on a rolling 30-year average of heating degree-days reported for each month by the National Weather Service for the Spokane Airport weather station. Each year the normal values are adjusted to capture the most recent year with the oldest year dropping off, thereby reflecting the most recent information available at the end of each calendar year. The calculation includes the 30-year period from 1983 through 2012.

Q. Is this proposed weather adjustment methodology consistent with the methodology utilized in the Company's last general rate case in Washington?

A. Yes. The process for determining the weather sensitivity factors and the monthly adjustment calculation are consistent with the methodology presented in Docket No. UG-120437. This methodology has been used in every case since it was introduced in Docket No. UG-070805.

Q. What was the impact of natural gas weather normalization on the twelve months ended June 2013 test year?

A. Weather was considerably warmer than normal for the second half of 2012. This was somewhat offset by a return to more normal weather from January through June of 2013. The adjustment to normal required the addition of 281 heating degree-days from October through December and January through June.[1] The adjustment to sales volumes was an addition of 5,337,877 therms which is approximately 2.3 percent of billed usage.

Q. What was the impact of this adjustment on Commission Basis results of operations?

A. The Commission Basis weather normalization adjustment increased margin revenue[2] by $1,538,000 and after revenue related expenses and taxes, produced an increase to net income of $887,000.

Q. Moving on to the <u>second revenue normalizing</u> adjustment in the Attrition Study. What is the purpose of the Incremental Revenue Normalization adjustment?

[1] Heating degree days that occur during July through September do not impact the natural gas weather normalization adjustment as the seasonal sensitivity factor is zero for summer months.
[2] The term "margin revenue" in this context consists of revenues less natural gas costs.

A. The purpose of the "Incremental Revenue Normalization" adjustment is to restate revenue and natural gas costs on a forward-looking basis. This is accomplished by re-pricing test year normalized billing determinants (including unbilled and weather adjustments, as well as any known and measurable changes to the test year loads and customers) to reflect revenues and gas costs for the July 2012 through June 2013 test period, as if the revenue increase effective January 1, 2013 had been in effect for the full twelve months of the test period.

Base rates do not include any of the adder schedules that are included in billed revenues such as Temporary Gas Rate Adjustment Schedule 155, Public Purposes Rider Adjustment Schedule 191, and Natural Gas Decoupling Rate Adjustment Schedule 159. Therefore the amortization expenses associated with the adder schedule revenues must be eliminated in this adjustment for proper matching of revenues and expenses.

Q. Does the Incremental Revenue Normalization Adjustment contain a component reflecting normalized natural gas costs?

A. Yes. Purchased natural gas costs are normalized using the natural gas costs approved by the Commission in Docket No. UG-131748 (the Company's 2013 PGA filing), as set forth under Schedule 150. These natural gas costs, effective November 1, 2013, are applied to the pro forma retail sales volumes so that there is a matching of revenues and natural gas costs.

Q. What is the impact of the Incremental Revenue Normalization adjustment?

A. The Incremental Revenue Normalization adjustment increases operating income before federal income taxes by $2,320,000, which after income taxes increases

Washington net operating income $1,549,000, as shown in column [D] on pages 4 and 5 of Exhibit No.___(EMA-3)[3].

Q. Please describe the third revenue normalizing adjustment in the Attrition Study?

A. The "2014 Temporary Rate Increase" shown on page 1 of Exhibit No.___(EMA-3) reflects the incremental change when the same normalized billing determinants used in the Incremental Revenue Normalization adjustment are re-priced at the base tariff rates in effect during the calendar year 2014[4]. This adjustment adds an incremental $1,358,000 of revenues over the 2013 base rates.

Q. Are the same normalized restated revenues and natural gas costs included in Ms. Andrews Pro Forma Cross Check Study shown as Exhibit No.___(EMA-5)?

A. Yes. The presentation in the Pro Forma Cross Check Study is slightly different because the first and second revenue normalizing adjustments discussed earlier are incorporated into one 2013 Revenue Normalization adjustment. Therefore the weather adjustment at restated rates is included with the annualization of test year revenue to 2013 base rates. The 2013 restating revenue normalization adjustment for the Pro Forma Cross Check Study increases Washington net operating income by $2,395,000, as shown in adjustment column 2.10 on page 6 of Exhibit No.___(EMA-5). The 2014 Revenue Normalization adjustment captures the 2014 Temporary Rate Increase of $1,358,000 with an

[3] Ms. Andrews explains the rate base adjustments shown in this column, which are unrelated to this revenue normalization adjustment.
[4] Docket No. UG-120437 base rates effective 1/1/2014 – 12/31/2014

increase to Washington net operating income of $843,000, as shown in adjustment column 4.05 on page 10 of Exhibit No.___(EMA-5).

III. NATURAL GAS COST OF SERVICE

Q. Please identify the natural gas cost studies presented to this Commission in the last five years as required by WAC 480-07-510 (6).

A. Natural gas cost of service studies were filed with this Commission in Docket No. UG-120437, No. UG-110877, No. UG-100468, No. UG-090135 and No. UG-080417.

Q. Please describe the natural gas cost of service study and its purpose.

A. A natural gas cost of service study is an engineering-economic study which separates the revenue, expenses, and rate base associated with providing natural gas service to designated groups of customers. The groups are made up of customers with similar usage characteristics and facility requirements. Costs are assigned in relation to each group's test year load and facilities requirements, resulting in an evaluation of the cost of the service provided to each group. The rate of return by customer group indicates whether the revenue provided by the customers in each group recovers the cost to serve those customers. The study results are used as a guide in determining the appropriate rate spread among the groups of customers. Exhibit No.___(JDM-2) explains the basic concepts involved in performing a natural gas cost of service study. It also details the specific methodology and assumptions utilized in the Company's Base Case cost of service study.

Q. What is the basis for the natural gas cost of service study provided in this case?

A. The cost of service study provided by the Company as Exhibit No.___(JDM-3) is based on the twelve months ended June 2013 test year Pro Forma Cross Check Study presented by Ms. Andrews in Exhibit No.___(EMA-5). The Pro Forma Cross Check Study analysis was used for the cost of service study to provide results at the comprehensive level of detail required by the cost of service model. The Pro Forma Cross Check Study includes an adjustment that brings total expenses and rate base into agreement with the Attrition Study, therefore it provides the appropriate detailed cost basis for the cost of service study in this case.

Q. Would you please explain the cost of service study presented in Exhibit No.___(JDM-3)?

A. Yes. Exhibit No. ___(JDM-3) is composed of a series of summaries of the cost of service study results. Page 1 shows the results of the study by FERC account category. The rate of return and the ratio of each schedule's return to the overall return are shown on lines 38 and 39. This summary is provided to Company witness Mr. Ehrbar for his consideration regarding rate spread and rate design. The results will be presented later in my testimony. Additional summaries show the costs organized by functional category (Page 2) and classification (Page 3), including margin and unit cost analysis at current and proposed rates. Finally, Page 4 is a summary identifying specific customer related costs embedded in the study.

The Excel model used to calculate the cost of service and supporting schedules has been included in its entirety both electronically and hard copy in the workpapers accompanying this case.

Q. Does the Natural Gas Base Case cost of service study utilize the methodology from the Company's last natural gas case in Washington?

A. Yes, the Base Case cost of service study was prepared using the same methodology applied to the study presented in Docket No. UG-120437.

Q. What are the key elements that define the cost of service methodology?

A. Allocations of natural gas costs reflect the current purchased natural gas tracker methodology. Underground storage costs are segregated proportionately into commodity storage benefits for sales customers and load balancing benefits for all customers. Natural gas main investment has been segregated into large and small mains. Large usage customers that take service from large mains do not receive an allocation of small mains. Large usage customers that take service from small mains (11 of the 38 Schedule 146 customers) have their associated throughput and coincident peak demand assigned to the small main allocation factors. Meter installation and services investment is allocated by number of customers weighted by the relative current cost of those items. System facilities that serve all customers are classified by the peak and average ratio that reflects the system load factor, then allocated by coincident peak demand and throughput, respectively. General plant is allocated by the sum of all other plant. Administrative & general expenses are segregated into labor-related, plant-related, revenue-related, and "other". The costs are then allocated by factors associated with labor, plant in service, or revenue, respectively. The "other" A&G amounts get a combined allocation that is one-half

based on O&M expenses and one-half based on throughput. A detailed description of the methodology is included in Exhibit No.___(JDM-2).

Q. Does this methodology follow previously-approved methods?

A. Yes, with the exception of Company-specific purchased natural gas and related items that match the PGA assumptions, the methodology I have presented here has been presented in prior cases before this Commission, and replicates the methodology established in Docket No. UG-940814 for Washington Natural (now Puget Sound Energy).

Q. What are the results of the Company's natural gas cost of service study?

A. I believe the Base Case cost of service study presented in this filing is a fair representation of the costs to serve each customer group. The study indicates that the General service schedule (101 – serves most residential customers) and Transportation schedule (146) are providing less than the overall rate of return (unity), and Large General, High Load Factor Large General, and Interruptible service schedules (111/112, 121/122 and 131/132) are providing more than unity. The following table shows the rate of return and the relative return ratio at present rates for each rate schedule:

Table No.1:

Customer Class	Rate of Return	Return Ratio
General Service Schedule 101	4.21%	0.91
Large General Service Schedules 111/112	6.29%	1.36
Large General Service – High Annual Load Factor Schedules 121/122	6.73%	1.46
Interruptible Service Schedules 131/132	7.99%	1.73
Transportation Service Schedules 146	3.73%	0.81
Total Washington Natural Gas System	4.61%	1.00

The summary results of this study were provided to Mr. Ehrbar for consideration into development of the proposed rates.

Q. Does this conclude your pre-filed direct testimony?

A. Yes.