**BEFORE THE WASHINGTON**

**UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

AVISTA CORPORATION d/b/a AVISTA UTILITIES,

Respondent.

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DOCKETS UE-160228 & UG-160229 (*Consolidated*)

# REVISED DIRECT TESTIMONY OF GLENN A.WATKINS (GAW-1T)

ON BEHALF OF

PUBLIC COUNSEL

(RED-LINED)

**AUGUST 17, 2016**

**(REVISED OCTOBER 4, 2016)**

DIRECT TESTIMONY OF GLENN A. WATKINS (GAW-1T)

DOCKETS UE-160228 and UG-160229 (*Consolidated*)

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**EXHIBITS LIST**

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| Exhibit No. GAW-2 | Resume and Experience Profile |
| Exhibit No. GAW-3 | Avista's Response to Public Counsel Data Request No. 3 (Electronic format only) |
| Exhibit No. GAW-4 | Avista's Response to Public Counsel Data Request No. 7 (Electronic format only) |
| Exhibit No. GAW-5 | Avista's Response to ICNU Data Request No. 104 (Electronic format only) |
| Exhibit No. GAW-6 | Avista's Response to Public Counsel Data Request No. 24 |
| Exhibit No. GAW-7 | Avista's Response to Public Counsel Data Request No. 29 |
| Exhibit No. GAW-8 | Avista's Response to Public Counsel Data Request No. 10 |
| Exhibit No. GAW-9 | Avista's Response to Public Counsel Data Request No. 14 |
| Exhibit No. GAW-10 | Avista's Response to Public Counsel Data Request No. 8 (Electronic format only) |
| Exhibit No. GAW-11 | Avista's Response to Public Counsel Data Request No. 31 |
| Exhibit No. GAW-12 | Avista's Response to Public Counsel Data Request No. 30 |
| Exhibit No. GAW-13 | Avista's Response to Public Counsel Data Request No. 15 |
| Exhibit No. GAW-14 | Avista Washington Electric Payroll and Total Electric Labor Expense and Capital Accounts Including Paid Time Off and Overtime |

## I. INTRODUCTION

**Q: Please state your name and business address.**

A: My name is Glenn A. Watkins. My business address is 1503 Santa Rosa Road, Suite 130, Richmond, Virginia 23229.

**Q: By whom are you employed and in what capacity?**

A: I am a Principal and Senior Economist with Technical Associates, Inc., which is an economics and financial consulting firm with offices in Richmond, Virginia.

**Q: On whose behalf are you testifying?**

A: I am testifying on behalf of the Public Counsel Unit of the Washington Attorney General's Office (Public Counsel).

**Q: Please describe your professional qualifications.**

A: Except for a six-month period during 1987 in which I was employed by Old Dominion Electric Cooperative as its forecasting and rate economist, I have been employed by Technical Associates continuously since 1980.

During my thirty-six year career at Technical Associates, I have conducted marginal and embedded cost of service, rate design, cost of capital, revenue requirement, and load forecasting studies involving numerous gas, electric, water/wastewater, and telephone utilities, and have provided expert testimony in Alabama, Arizona, Delaware, Georgia, Indiana, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, North Carolina, New Jersey, Ohio, Illinois, Pennsylvania, Vermont, Virginia, South Carolina, Washington, and West Virginia. I hold an M.B.A. and B.S. in Economics from Virginia Commonwealth University. I am a member of several professional organizations as well

as a Certified Rate of Return Analyst. A more complete description of my education and experience is provided in Exhibit No. GAW-2.

**Q: What is your ratemaking experience within Washington State?**

A: I have testified on behalf of Public Counsel in numerous electric and gas rate cases over the last several years, including the last three general rate cases involving Puget Sound Energy, several Pacific Power and Light rate cases, the recent Cascade Natural Gas rate case, as well as Avista's 2009, 2012, and 2014 rate cases.

**Q: What is the purpose of your testimony in this proceeding?**

A: Technical Associates has been engaged to examine and evaluate various aspects relating to the appropriateness or need for allowing an attrition adjustment within the ratemaking process for Avista. Specifically, my investigation focused on the historical trends of Avista's profitability (before and after Avista began requesting attrition allowances in its rate filings), trends in inflation, and Avista's increases in expenses and capital investments over the last several years. The purpose of this testimony is to present my findings as a result of my investigation.

**Q: Generally speaking, what is the concept and purpose of attrition adjustments when applied to the ratemaking process?**

A: Attrition adjustments are conceptually a factor, or add-on, to the revenue requirement that would otherwise be determined in the ratemaking process. As such, the theoretical concept of attrition is that absent such an adjustment, a utility's capital and operating costs are expected to increase faster than revenues causing the utility to not have a reasonable opportunity to recover its costs and earn a fair rate of return ("ROR").

**Q: In the context of attrition, is there a fundamental economic and regulatory principle that must also be considered?**

A: Yes. While it is generally agreed that regulation should serve as a surrogate for competition, the reality is that the ratemaking process does not, and perhaps cannot, emulate the efficiencies obtained through truly competitive market pricing. That is, under true competition, a firm may not increase prices simply because its individual cost of providing service increases. In competitive markets, prices may only change when the costs of all producers in that industry increase or decrease. Therefore, if an individual firm is inefficient, it may not pass its increased costs along to its customers. However, under traditional utility ratemaking, regulators typically allow individual utilities to pass along their costs to ratepayers with little recognition of whether the utility's cost structure is truly efficient. Therefore, a major shortcoming of traditional utility ratemaking is that little attention is given to the question of whether a particular utility's cost structure is or is not as efficient as would occur in competitive markets.

**Q: How does the economic and regulatory principle discussed above relate to whether an attrition adjustment is or is not appropriate within the ratemaking process?**

A: In the 1980s and early 1990s, attrition allowances became somewhat common in the United States simply due to the high rates of inflation experienced by utilities and prices generally. As such, simply due to the rising costs of providing service, many utilities were granted attrition allowances to account for inflation. However, for many years, the United States has enjoyed very low rates of inflation and the inquiry has shifted in current times to whether a utility's increases in costs are absolutely prudent and clearly beyond its control.

**Q: Has this Commission opined or provided guidance in this regard?**

A: Yes. In its Order for Avista's last rate case (Dockets UE-150204 and UG-150205), the Commission stated as follows:

> For this very reason, while we no longer find it necessary to justify granting attrition adjustments on the existence of extraordinary circumstances, **we do require utilities to demonstrate persuasively that the attrition occurring is outside of their control**. We understand Avista's contention that it operates in a challenging environment in which low load and revenue growth is outpaced by capital investment requirements and changes in operating expense levels. However, we also recognize there is a risk to the Company's ratepayers by embracing an attrition adjustment that may allow Avista to manage its capital expenditures without regard to rate impact, effective cost control, demonstrated benefit, or actual need, and only in reference to its own budgeted targets. **Simply stated, we are concerned about authorizing a practice that simply projects future levels of expense and capital expenditures that may, as multiple commenters point out, "become a 'self-fulfilling prophecy' where there is an incentive for rates of capital expenditure to be driven by an effort to match earlier projections."**[1]

**Q: Have you conducted analyses to determine if an attrition adjustment is warranted for Avista in light of the standard expressed by this Commission requiring that cost increases be beyond the control of Avista's management?**

A: Yes. I have evaluated the actual RORs earned by Avista for its electric and natural gas operations, as well as historical trends in the Company's growth in customers, revenues, rate base, various expense categories, and electric distribution reliability measures. I will first discuss Avista's electrical operations and then its natural gas operations.

**Q: You mentioned the impact of inflationary pressures on utilities cost of providing service earlier in your testimony. What have been the trends in inflation over the last several years?**

[1] *Wash. Utils. & Transp. Comm'n v. Avista Corp*. Dockets UE-150204 & UG-150205, Order No. 05 at 43-44 (emphasis added).

A: The following Table 1 provides the annual rates of inflation as measured by the Producer Price Index ("PPI") and Consumer Price Index ("CPI") over the last several years:

**TABLE 1**
**Annual Inflation Rates[2]**

| Year | PPI | CPI |
|---|---|---|
| 2016-Annualized[3] | 1.1% | 1.4% |
| 2015 | -1.1% | 0.7% |
| 2014 | 0.9% | 0.8% |
| 2013 | 1.2% | 1.5% |
| 2012 | 1.9% | 1.7% |
| 2011 | 3.2% | 3.0% |
| 2010 | 2.8% | 1.5% |
| 2009 | N/A | 2.7% |
| 2008 | N/A | 0.1% |
| 2007 | N/A | 4.1% |

As indicated above, general inflation has been exceptionally low and less than two percent for each of the last five years. Currently, inflation is running between one percent and 1.5 percent.

## II. TRENDS IN ELECTRIC OPERATIONS

**Q: What are Avista's achieved RORs for its Washington jurisdictional electric operations over the last several years?**

A: Table 2, which is provided below, presents Avista's actual RORs on rate base as reported in their annual Commission Basis Reports ("CBR"). This table shows actual per books earned RORs, as well as Avista's "reported" and "adjusted" RORs presented in each annual CBR:

/ /

[2] Per Economic Indicators, U.S. Council of Economic Advisors, June 2016.
[3] Annualized through May 2016 (seasonally adjusted).

**TABLE 2**
**AVISTA ELECTRIC OPERATIONS**
**(WASHINGTON JURISDICTION)**
**Rate of Return on Rate Base**

| | | Commission Basis Reports | |
|---|---|---|---|
| Year | Per Books[4] | Per Report[5] | Avista Adjusted[5] |
| 2015 | 7.65% | 7.65% | 8.37% |
| 2014 | 8.28% | 8.28% | 7.97% |
| 2013 | 7.99% | 7.99% | 7.57% |
| 2012 | 6.99% | 6.99% | 7.16% |
| 2011 | 6.75% | 6.76% | 6.56% |
| 2010 | 7.63% | 6.61% | 7.17% |
| 2009 | 7.21% | 6.76% | 7.41% |
| 2008 | 7.21% | 6.38% | 7.36% |
| 2007 | 7.15% | 6.32% | 6.92% |

As can be seen above, Avista's earned RORs for its Washington electric operations have increased each year since 2011. Indeed, Avista's authorized RORs in the last two cases have been 7.32 percent (UE-140188) and 7.29 percent (UE-150204). Avista has earned in excess of these authorized amounts each year since attrition adjustments became part of the ratemaking process for Avista in Docket UE-120436, i.e., beginning in 2013.

**Q: Have you examined the growth trends in Avista's electric number of customers and MWH sales?**

A: Yes. The following Table 3 provides Avista's number of Washington electric customers over the last several years along with the annual rates of change:

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[4] Glenn A. Watkins, Exhibit No. GAW-3 (Per Avista response to Public Counsel Data Request No. 3).
[5] Watkins, Exhibit Nos. GAW-4 and GAW-5 (Per Avista responses to Public Counsel Data Request No. 7 and Industrial Customers of Northwest Utilities (ICNU) Data Request No. 104).

**TABLE 3**

**No. of Electric Customers[6]**

| Year | WA | Annual % Change |
|---|---|---|
| 2015 | 245,401 | 1.81% |
| 2014 | 241,041 | 1.12% |
| 2013 | 238,379 | 0.73% |
| 2012 | 236,644 | 0.62% |
| 2011 | 235,192 | 0.43% |
| 2010 | 234,174 | 0.36% |
| 2009 | 233,332 | 0.77% |
| 2008 | 231,554 | 1.22% |
| 2007 | 228,758 | -- |

As can be seen above, Avista's growth rate in number of Washington electric customers has been modestly increasing since the Great Recession that began in about 2009. That is, during the period of the Recession, Avista's customer growth was minimal and at or below one-half of one percent annually. However, as the economy has improved, Avista's growth rate has also improved such that by 2014 its customer growth rate was somewhat greater than one percent, and by 2015, customer growth was almost two percent.

Table 4 provides Avista's annual Washington MWH sales over the last several years along with the annual rates of change:

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[6] Watkins, Exhibit No. GAW-6 (Per Avista response to Public Counsel Data Request No. 24).

**TABLE 4**

**MWH Sales[7]**

| Year | WA | Annual % Change |
|---|---|---|
| 2015 | 5,766,017 | 1.23% |
| 2014 | 5,695,820 | 0.13% |
| 2013 | 5,688,528 | 3.00% |
| 2012 | 5,522,783 | -1.70% |
| 2011 | 5,618,259 | 2.14% |
| 2010 | 5,500,672 | 0.63% |
| 2009 | 5,466,376 | 0.02% |
| 2008 | 5,465,210 | -0.32% |
| 2007 | 5,482,503 | -- |

Although Avista's annual energy sales tend to vary due to seasonal weather patterns, we can see that the Company has seen modest growth in its energy sales over the last nine years.

**Q: What has been the growth in Avista's Washington electric jurisdictional investment over the last several years?**

A: Table 5 provides Avista's Washington electric net distribution plant and total reported rate base for each of the last five years. I have considered distribution plant separately because the Commission noted concerns regarding Avista's investment in distribution plant in the Company's last general rate case:

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[7] Watkins, Exhibit No. GAW-6 (Per Avista response to Public Counsel Data Request No. 24).

**TABLE 5**
**Washington Jurisdiction**

| Electric Investment ($000)[8] | | | Annual Compound Growth Rate | | |
|---|---|---|---|---|---|
| Year | Distribution Net Plant | Total Reported Rate Base | Period | Distribution Net Plant | Total Reported Rate Base |
| 2015 | $621,477 | $1,338,901 | '14-'15 | 5.3% | 6.4% |
| 2014 | $590,073 | $1,258,955 | '13-'15 | 5.3% | 4.5% |
| 2013 | $560,439 | $1,226,146 | '12-'15 | 6.0% | 4.7% |
| 2012 | $522,324 | $1,165,912 | '11-'15 | 6.3% | 4.5% |
| 2011 | $486,981 | $1,123,911 | -- | -- | -- |

As shown above, Avista's Washington electric capital investments have increased between roughly 4.5 percent to almost 6.5 percent annually over the last five years.

**Q: Does the fact that the growth rates in Avista's capital investment in its Washington electric operations have been two to three times the level of general inflation indicate a need for an attrition adjustment on its face?**

A: No. With regard to this growth in capital investments, this is certainly not anything exceptionally high. Furthermore, if this trend continues, Avista would almost certainly argue there could be regulatory lag if this Commission relies on a historic test year for ratemaking. However, this Commission generally uses a modified historic test year, and there are numerous other approaches that can more fairly and reasonably reflect growth in Avista's rate base, such as consideration of end of test year balances.

**Q: With regard to the issue of regulatory lag, is there an important point that should be understood regarding Avista's allowable rate base as used for ratemaking?**

A: Yes. It should be understood that Avista's rate base includes Allowances For Funds Used During Construction ("AFUDC"). Therefore, Avista's reported rate base reflects not only the actual cash dollars expended for its investments by shareholders, but also

[8] Watkins, Exhibit No. GAW-5 (Per Avista response to ICNU Data Request No. 104).

reflects an add-on for the "opportunity" costs during plant construction that is provided within AFUDC. In this regard, one of the purposes of AFUDC is to address utilities' arguments concerning the problem of regulatory lag; i.e., AFUDC bumps up rate base over and above the actual dollars committed by investors.

**Q: Mr. Watkins, Avista's investment in distribution plant was a contentious issue in its last general rate case as it relates to the issue of attrition. Have you investigated other trends in Avista's Washington electric distribution plant?**

A: Yes. I have also investigated the growth in Avista's Washington distribution system in terms of circuit miles, as well as trends in accepted distribution reliability measures, specifically, the Company's System Average Interruption Duration Index ("SAIDI") and System Average Interruption Frequency Index ("SAIFI"). Table 6 below provides this information:

**TABLE 6**
**Washington Jurisdiction**

| Year | Distribution Circuit Miles[9] | SAIDI[10] | SAIFI[9] |
|---|---|---|---|
| 2015 | 12,229 | 167 | 0.99 |
| 2014 | 12,216 | 145 | 1.06 |
| 2013 | Not Reported | 121 | 0.89 |
| 2012 | Not Reported | 133 | 1.04 |
| 2011 | 11,874 | 112 | 1.11 |
| 2010 | 12,106 | 132 | 1.27 |
| 2009 | 12,000 | 192 | 1.47 |
| 2008 | Not Reported | 144 | 1.22 |
| 2007 | Not Reported | 95 | 0.81 |

As indicated above, Avista's Washington distribution system has not expanded very much in the last several years. Indeed, the compound annual growth rate between 2009

[9] Watkins, Exhibit No. GAW-6 (Per Avista response to Public Counsel Data Request No. 24).
[10] Watkins, Exhibit No. GAW-7 (Per Avista response to Public Counsel Data Request No. 29).

and 2015 has been less than one-half of one percent (0.32%). This indicates that the majority of the Company's additional investments in distribution plant have been devoted to replacements and improvements to system reliability. However, when one examines Avista's Washington SAIDI and SAIFI indices, we can see that there has been virtually no improvement in the average duration of outages between 2010 and 2015 and in fact, have somewhat worsened. Based on the data above, the average frequency of outages has remained relatively constant and perhaps, improved ever so slightly.

Given the factors above, it is questionable as to how Avista's recent growth in distribution capital investments has benefited ratepayers given the fact that there has been virtually no improvement in system reliability, let alone, any need for an attrition allowance for distribution plant or rate base in general.

**Q: What have been the trends in Avista's Washington electric operating expenses within the control of the Company's management?**

A: I evaluated the trends in Avista's Washington electric distribution operating and maintenance expenses, customer accounting and service expenses, and administrative and general expenses over the last several years. I selected these expense categories because, in my opinion, they are well within the control of management. This is because these expenses are unlike power supply and transmission costs, which are largely not labor-related and are often subject to variances in market or fuel prices. Table 7 provides the annual level of these expense items on an as-reported basis:

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**TABLE 7**
**Washington Electric Expenses**
**As Reported In CBR**
**($000)[11]**

| Year | Distribution O&M | Customer Accounting & Service | A&G |
|---|---|---|---|
| 2015 | $24,059 | $29,480 | $50,014 |
| 2014 | $21,301 | $30,073 | $45,984 |
| 2013 | $20,878 | $27,239 | $43,067 |
| 2012 | $21,152 | $28,305 | $47,675 |
| 2011 | $20,360 | $31,264 | $45,046 |
| 2010 | $18,355 | $30,096 | $46,091 |
| 2009 | $17,267 | $30,594 | $39,022 |
| 2008 | $17,329 | $22,082 | $35,836 |
| 2007 | $14,563 | $16,794 | $35,912 |

Table 8 is similar to Table 7 except that these expenses are expressed on a "restated CBR" basis:

**TABLE 8**
**Washington Electric Expenses**
**As Restated In CBR**
**($000)[12]**

| Year | Distribution O&M | Customer Accounting & Service | A&G |
|---|---|---|---|
| 2015 | $24,056 | $13,817 | $49,942 |
| 2014 | $21,299 | $12,549 | $46,210 |
| 2013 | $20,878 | $12,855 | $43,310 |
| 2012 | $21,152 | $28,828 | $49,333 |
| 2011 | $19,081 | $31,571 | $44,779 |
| 2010 | $18,354 | $30,269 | $44,662 |
| 2009 | $17,267 | $30,042 | $38,461 |
| 2008 | $17,329 | $21,337 | $35,982 |
| 2007 | $14,563 | $15,668 | $35,844 |

[11] Watkins, Exhibit Nos. GAW-4 and GAW-5 (Per Avista response to Public Counsel Data Request No. 7 and ICNU Data Request No. 104).
[12] Watkins, Exhibit Nos. GAW-4 and GAW-5 (Per Avista response to Public Counsel Data Request No. 7 and ICNU Data Request No. 104).

Table 7 and Table 8 indicate that distribution O&M expenses have increased by about $9.5 million (65%) over the last nine years. In evaluating trends in customer accounting, customer service/information, and sales expense, it is important to recognize the difference between as-reported and restated amounts. By far, the biggest difference relates to elimination of tariff rate riders relating to revenue producing programs such as conservation, etc. Such programs did not exist in the earlier period. Due to the significant influence of tariff rate adders, it is difficult to evaluate the specific trends in this expense category. However, based on my analysis, it appears that there have been no extraordinarily large increases in this expense category over the last several years when tariff rate adders (and attendant expenses) are considered. With regard to A&G expenses, these overhead expenses have increased by more than $14 million (39%) over the last nine years.

When the annual rates of change for distribution O&M and A&G expenses are evaluated, a disturbing trend is observed. Tables 9 and 10 below provide the compound annual growth rates for distribution O&M and A&G expenses during several recent time periods based on as reported CBR and Avista restated CBR:

**TABLE 9**
**Washington Electric Expenses**
**As Reported In CBR**
**Annual Compound Growth Rates[13]**

| Time Period | Distribution O&M | A&G |
|---|---|---|
| '14-'15 | 12.95% | 8.76% |
| '13-'15 | 7.35% | 7.76% |
| '12-'15 | 4.39% | 1.61% |
| '11-'15 | 4.26% | 2.65% |

[13] Calculated per Table 7.

**TABLE 9**
**Washington Electric Expenses**
**As Reported In CBR**
**Annual Compound Growth Rates[13]**

| Time Period | Distribution O&M | A&G |
|---|---|---|
| '10-'15 | 5.56% | 1.65% |

**TABLE 10**
**Washington Electric Expenses**
**As Restated In CBR**
**Annual Compound Growth Rates[14]**

| Time Period | Distribution O&M | A&G |
|---|---|---|
| '14-'15 | 12.94% | 8.08% |
| '13-'15 | 7.34% | 7.38% |
| '12-'15 | 4.38% | 0.41% |
| '11-'15 | 5.96% | 2.77% |
| '10-'15 | 5.56% | 2.26% |

As can be seen above, the distribution O&M annual growth rates during the periods 2010-2015, 2011-2015, and 2012-2015 have been about double that of inflation. However, when we evaluate the growth rates subsequent to when attrition has been reflected in the ratemaking process, we see much higher growth of about 7.3% annually for the 2013-2015 period and almost 13% between 2014 and 2015. With regard to A&G expenses, the annual rate of growth has been fairly close to general inflation during the 2010-2015, 2011-2015, and 2012-2015 periods. However, and once again, when we evaluate the growth in these expenses subsequent to the recognition of attrition, we see rates of growth of 7% to 8% annually between 2013 and 2015, as well as between 2014 and 2015.

[14] Calculated per Table 8.

**Q: Are distribution O&M and A&G expenses within the control of Avista's management?**

A: By and large, yes. While distribution O&M expenses do include some materials and supplies as well as outside contractors, the majority of these expenses are labor-related. Furthermore, the vast preponderance of A&G expenses are labor-related.

**Q: Have you analyzed the trends in Avista's labor costs over the last several years?**

A: Yes. Table 11 provides Avista's Washington electric operations total salaries and wages, i.e., includes capitalized labor over the last several years:

**TABLE 11**
**AVISTA ELECTRIC OPERATIONS**
**(WASHINGTON JURISDICTION)**
**Salaries and Wages[15]**

| Year | Direct | Allocated | Total |
|---|---|---|---|
| 2015 | $~~26,471,181~~24,060,158 | $~~42,890,848~~42,505,602 | $~~69,362,029~~66,565,760 |
| 2014 | $22,006,953 | $38,992,162 | $60,999,115 |
| 2013 | $21,296,174 | $36,701,292 | $57,997,466 |
| 2012 | $22,756,810 | $36,682,891 | $59,439,701 |
| 2011 | $22,811,179 | $32,851,391 | $55,662,570 |
| 2010 | $20,835,100 | $31,490,791 | $52,325,891 |
| 2009 | $17,663,117 | $29,639,533 | $47,302,650 |
| 2008 | $17,382,111 | $28,488,649 | $45,870,760 |
| 2007 | $16,306,487 | $26,907,266 | $43,213,753 |

As indicated above, this table provides Avista's Washington electric "direct" and "allocated" employee salaries and wages. The above table indicates that Washington's electric salary and wage expenses have increased by about $~~26.1~~ 23.4 million (~~61~~54%) over the last nine years. When the annual rates of change for salaries and wages are evaluated, similar trends to that seen for distribution O&M and A&G expenses are

[15] Watkins, Exhibit Nos. GAW-8 (per Avista response to Public Counsel Data Request No. 10, Attachment A). Note: 2015 salaries and wages are adjusted for the November 2015 windstorm as provided in my Exhibit No. GAW-14.

observed. Table 12 below provides the compound annual growth rates for Washington electric salary and wage expenses during several recent time periods:

**TABLE 12**
**Washington Electric**
**Salary and Wage ~~Expenses~~**
**Annual Compound Growth Rates[16]**

| Time Period | Direct | Allocated | Total |
|---|---|---|---|
| '14-'15 | ~~20.29~~9.33% | ~~10.00~~9.01% | ~~13.71~~9.13% |
| '13-'15 | ~~11.49~~6.29% | ~~8.10~~7.62% | ~~9.36~~7.13% |
| '12-'15 | ~~5.17~~1.87% | ~~5.35~~5.03% | ~~5.28~~3.85% |
| '11-'15 | ~~3.79~~1.34% | ~~6.89~~6.65% | ~~5.65~~4.57% |
| '10-'15 | ~~4.90~~2.92% | ~~6.37~~6.18% | ~~5.80~~4.93% |

As shown above, Washington electric salaries and wages annual growth rates during the periods 2010-2015, 2011-2015, and 2012-2015 have been two to three times the general rate of inflation. However, when we evaluate the growth rates subsequent to when attrition has been reflected in the ratemaking process, we see even higher growth rates of about ~~9~~7% annually for the 2013-2015 period and about~~almost~~ ~~14~~9% between 2014 and 2015.

~~**Q: Are these recent exceptionally high annual growth rates in Washington electric total salaries and wages attributable to increases in the number of employees or the average wage levels of the Company's employees?**~~

~~A: The increases in Avista's Washington electric salaries and wages expense can be attributed mostly to increases in average wage levels per employee and to a lesser extent,~~

[16] Calculated per Table 11.

growth in the number of electric employees. Table 13 below provides the annual number of direct Washington employees, as well as the average direct wage per employee[17]:

**TABLE 13**

| Year | Direct Washington Electric Employees[18] | Avg. Wage Per Employee |
|---|---|---|
| 2015 | 275 | $96,259 |
| 2014 | 253 | $86,984 |
| 2013 | 251 | $84,845 |
| 2012 | 274 | $83,054 |
| 2011 | 281 | $81,179 |
| 2010 | 266 | $78,327 |
| 2009 | 237 | $74,528 |
| 2008 | 238 | $73,034 |
| 2007 | 230 | $70,898 |

As shown above, Avista has added 45 additional Washington direct electric employees since 2007 for an increase of 19.6%. At the same time, the average Washington direct electric employee wage has increased by $25,361, or 35.8% over this same time period.

**Q: Have there been similar trends in the compound annual growth rates of the average wage per Washington electric employee to those observed for distribution O&M, A&G, and total salaries and wages?**

A: Yes. Table 14 below shows the compound annual growth rates of change for the average Washington electric direct wage per employee:

**TABLE 14**
**Washington Electric**
**Avg. Wage Per Employee**
**Annual Compound Growth Rates[19]**

[17] The number of allocated Washington electric employees are not reported as they include employees dedicated to other jurisdictions as well as Avista's gas operations.
[18] Watkins, Exhibit Nos. GAW-9 (Avista response to Public Counsel Data Request No. 14).

| ~~Time Period~~ | ~~Direct~~ |
|---|---|
| ~~'14-'15~~ | ~~10.66%~~ |
| ~~'13-'15~~ | ~~6.51%~~ |
| ~~'12-'15~~ | ~~5.04%~~ |
| ~~'11-'15~~ | ~~4.35%~~ |
| ~~'10-'15~~ | ~~4.21%~~ |

~~As shown above, the average wage level tended to increase about double the rate of inflation during the 2010-2015, 2011-2015, and 2012-2015 periods. However, subsequent to the recognition of attrition, we see much higher rates of growth of 6.5% annually over the 2013-2015 period and 10.7% between 2014 and 2015.~~

**Q: What are your conclusions regarding the trends in cost increases associated with Avista's Washington electric operations?**

A: While I do not know if the exceptionally high growth in Avista's Washington electric costs are the result of a "self-fulfilling prophecy" due to the allowance of attrition adjustments within the ratemaking process, it is clear that the Company's cost increases, which are under the control of management, have greatly exceeded general rates of inflation and have increased at a much faster rate subsequent to 2013. As discussed earlier in my testimony, such trends are clearly at odds with competitive or efficient firms. Indeed, under the attrition allowance mechanisms that have been approved by this Commission, Avista has little incentive to control its level of costs or the growth of these costs. Shareholders have been earning a fair ROR on their investments such that the majority of these increases are attributable to employee salaries and wages, with no observed benefits to ratepayers.

[19] ~~Calculated per Table 13.~~

## III. TRENDS IN NATURAL GAS OPERATIONS

**Q: What are Avista's achieved RORs for its Washington jurisdictional natural gas operations over the last several years?**

A: Table 15, which is provided below, presents Avista's natural gas actual RORs on rate base, as reported in their annual CBR. This table shows earned RORs on an "as reported" and "adjusted" bases:

**TABLE 15**
**AVISTA NATURAL GAS OPERATIONS**
**(WASHINGTON JURISDICTION)**
**Rate of Return on Rate Base**

| | Commission Basis Reports | |
|---|---|---|
| Year | Per Report[20] | Avista Adjusted[2] |
| 2015 | 5.41% | 6.14% |
| 2014 | 5.58% | 5.76% |
| 2013 | 6.52% | 6.23% |
| 2012 | 4.98% | 5.44% |
| 2011 | 6.40% | 6.07% |
| 2010 | 4.41% | 5.91% |
| 2009 | 5.93% | 6.22% |
| 2008 | 6.95% | 7.11% |
| 2007 | 6.42% | 7.79% |

As can be seen above, Avista has not earned its authorized ROR of approximately 7.73% for several years.

**Q: Have you examined various factors that have contributed to Avista's inability to earn its authorized ROR?**

A: Yes. Similar to my evaluation of the Company's electric investments, revenues, and expenses, I have examined trends associated with Avista's natural gas operations.

**Q: Have you examined the growth trends in Avista's natural gas number of customers?**

[20] Watkins, Exhibit Nos. GAW-10 and GAW-5 (Avista responses to Public Counsel Data Request No. 8 and ICNU Data Request No. 104).

A: Yes. The following Table 16 provides Avista's number of Washington natural gas customers over the last several years along with the annual rates of change:

**TABLE 16**

**No. of Natural Gas Customers[21]**

| Year | WA | Annual % Change |
|---|---|---|
| 2015 | 154,906 | 1.83% |
| 2014 | 152,109 | 1.10% |
| 2013 | 150,460 | 0.76% |
| 2012 | 149,331 | 0.79% |
| 2011 | 148,161 | 0.75% |
| 2010 | 147,064 | 0.77% |
| 2009 | 145,944 | 1.20% |
| 2008 | 144,214 | 1.71% |
| 2007 | 141,793 | -- |

As can be seen above, Avista's growth rate in number of Washington natural gas customers has been increasing since the Great Recession that began in about 2009. That is, during the period of the Recession, Avista's customer growth was about three-quarters of one percent. However, as the economy has improved, Avista's growth rate has also improved such that by 2014 its customer growth rate was somewhat greater than 1%, and by 2015, customer growth was almost 2%.

**Q: What has been the growth in Avista's Washington natural gas jurisdictional investment over the last several years?**

A: Table 17 provides Avista's Washington natural gas net distribution plant and total reported rate base for each of the last five years.

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[21] Watkins, Exhibit Nos. GAW-6 (Avista response to Public Counsel Data Request No. 24).

**TABLE 17**
**Washington Jurisdiction**

| Natural Gas Investment ($000)[22] | | | Annual Compound Growth Rate | | |
|---|---|---|---|---|---|
| Year | Distribution Net Plant | Total Reported Rate Base | Period | Distribution Net Plant | Total Reported Rate Base |
| 2015 | $238,989 | $269,077 | '14-'15 | 7.12% | 13.99% |
| 2014 | $223,099 | $236,050 | '13-'15 | 8.02% | 10.73% |
| 2013 | $204,807 | $219,467 | '12-'15 | 7.30% | 8.98% |
| 2012 | $193,474 | $207,913 | '11-'15 | 6.79% | 8.16% |
| 2011 | $183,790 | $196,579 | -- | -- | -- |

As shown above, Avista's Washington natural gas net distribution plant has increased from 7% to 8% annual during the last several years while its total rate base has increased at a much faster rate since Avista began requesting attrition adjustments.

**Q: Have you investigated other trends in the Company's Washington natural gas distribution plant?**

A: Yes. I have also investigated the growth in Avista's Washington natural gas distribution system in terms of replacing existing mains and in terms of additions to the Company's existing distribution system, i.e., mains extensions. Table 18 provides the annual investment in replacement and non-replacement mains, as well as the annual percentage of total mains that these additions represent:

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[22] Watkins, Exhibit Nos. GAW-5 (Avista response to ICNU Data Request No. 104).

**TABLE 18**
**WASHINGTON JURISDICTION**

| | WA Dist. Mains Footage | | | Percentage of Total Dist. Mains | |
|---|---|---|---|---|---|
| | Total Distribution Mains[23] | Annual Replacement[24] | Annual Non-Replacement[25] | Annual Replacement | Annual Non-Replacement |
| 2015 | 17,818,944 | 48,298 | 106,788 | 0.27% | 0.60% |
| 2014 | 17,733,936 | 85,003 | 151,744 | 0.48% | 0.86% |
| 2013 | 17,689,584 | 119,821 | 96,482 | 0.68% | 0.55% |
| 2012 | 17,645,232 | 65,497 | 80,950 | 0.37% | 0.46% |
| 2011 | 17,631,504 | 53,054 | 75,330 | 0.30% | 0.43% |
| 2010 | 17,586,096 | 24,269 | 71,722 | 0.14% | 0.41% |
| 2009 | 17,948,304 | 45,144 | 72,101 | 0.25% | 0.40% |
| 2008 | 17,787,792 | 42,285 | 216,875 | 0.24% | 1.22% |
| 2007 | 17,796,240 | 23,640 | 281,270 | 0.13% | 1.58% |

As indicated above, Avista has not engaged in a significant pipe replacement program nor has its system expanded very much at all in the last several years. Indeed, the Company's annual mains replacement has only been about 0.2% to 0.7% of its total mains each year for the last several years. Similarly, Avista's expansion growth has been limited to less than one percent for the last several years.

**Q: What have been the trends in Avista's Washington natural gas operating expenses which are within the control of the Company's management?**

A: I have evaluated the trends in Avista's Washington natural gas distribution operating and maintenance expenses, customer accounting and service expenses, and administrative and general expenses over the last several years. I selected these expense categories because, in my opinion, they are well within the control of management. Tables 19 and

[23] Watkins, Exhibit Nos. GAW-6 (Avista response to Public Counsel Data Request No. 24).
[24] Watkins, Exhibit Nos. GAW-11 (Avista response to Public Counsel Data Request No. 31).
[25] Watkins, Exhibit Nos. GAW-12 (Avista response to Public Counsel Data Request No. 30).

20 below provide the annual level of these expense items on an as-reported and Avista restated basis:

**TABLE 19**
**Washington Natural Gas Expenses**
**As Reported In CBR**
**($000)**[26]

| Year | Distribution O&M | Customer Accounting & Service | A&G |
|---|---|---|---|
| 2015 | $12,314 | $13,128 | $13,853 |
| 2014 | $10,704 | $12,201 | $12,462 |
| 2013 | $10,821 | $12,978 | $11,928 |
| 2012 | $9,511 | $13,023 | $13,241 |
| 2011 | $8,854 | $15,907 | $11,384 |
| 2010 | $7,705 | $14,991 | $11,746 |
| 2009 | $7,700 | $14,141 | $10,155 |
| 2008 | $6,123 | $10,560 | $10,045 |
| 2007 | $6,611 | $9,909 | $8,771 |

**TABLE 20**
**Washington Natural Gas Expenses**
**As Restated In CBR**
**($000)**[27]

| Year | Distribution O&M | Customer Accounting & Service | A&G |
|---|---|---|---|
| 2015 | $12,315 | $7,469 | $14,007 |
| 2014 | $10,704 | $6,973 | $12,777 |
| 2013 | $10,820 | $7,256 | $11,862 |
| 2012 | $9,511 | $12,754 | $13,419 |
| 2011 | $8,854 | $15,520 | $11,585 |
| 2010 | $7,696 | $14,844 | $11,383 |
| 2009 | $7,700 | $13,692 | $9,770 |
| 2008 | $6,123 | $10,303 | $9,706 |
| 2007 | $6,467 | $9,661 | $8,901 |

[26] Watkins, Exhibit Nos. GAW-10 and GAW-5 (Avista responses to Public Counsel Data Request No. 8 and ICNU Data Request No. 104).
[27] Watkins, Exhibit Nos. GAW-10 and GAW-5 (Avista responses to Public Counsel Data Request No. 8 and ICNU Data Request No. 104).

The above tables indicate that distribution O&M expenses have increased by about $5.7 million (86%) over the last nine years. In evaluating trends in customer accounting, customer service/information and sales expense, it is important to recognize the difference between as-reported and restated amounts. By far, the biggest difference relates to elimination of tariff rate riders relating to revenue producing programs, such as conservation, etc., that did not exist in the earlier period. Due to the significant influence of tariff rate adders, it is difficult to evaluate the specific trends in this expense category. However, based on my analysis, it appears that there have been no extraordinarily large increases in this expense category over the last several years when tariff rate adders (and attendant expenses) are considered. With regard to A&G expenses, these overhead expenses have increased by more than $5.1 million (58%) over the last nine years.

When the annual rates of change for distribution O&M and A&G expenses are evaluated, we can see that the Company's natural gas distribution O&M expenses have been increasing at an annual rate of more than four times that of inflation, while A&G expenses have been increasing at a much faster annual rate subsequent to the recognition of attrition within the ratemaking process. Tables 21 and 22 below provide the compound annual growth rates for distribution O&M and A&G expenses during several recent time periods based on as-reported CBR and Avista restated CBR:

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**TABLE 21**
**Washington Natural Gas Expenses**
**As Reported In CBR**
**Annual Compound Growth Rates[28]**

| Time Period | Distribution O&M | A&G |
|---|---|---|
| '14-'15 | 15.04% | 11.16% |
| '13-'15 | 6.68% | 7.77% |
| '12-'15 | 8.99% | 1.52% |
| '11-'15 | 8.60% | 5.03% |
| '10-'15 | 9.83% | 3.35% |

**TABLE 22**
**Washington Natural Gas Expenses**
**As Restated In CBR**
**Annual Compound Growth Rates[29]**

| Time Period | Distribution O&M | A&G |
|---|---|---|
| '14-'15 | 15.05% | 9.63% |
| '13-'15 | 6.69% | 8.67% |
| '12-'15 | 8.99% | 1.44% |
| '11-'15 | 8.60% | 4.86% |
| '10-'15 | 9.86% | 4.24% |

As can be seen above, the distribution O&M annual growth rates have been about three to four times that of inflation with the exception of the most recent 2014-2015 annual increase of more than 15%. With regard to A&G expenses, the annual rate of growth prior to 2013 range from 1.4% to almost 5% annually. However, and as is the case for the Company's electric operations, when we evaluate the growth in these expenses from 2013 and beyond, we see much higher rates of growth of 8% to 10% annually.

**Q: Have you analyzed the trends in Avista's labor costs over the last several years?**

[28] Calculated per Table 19.
[29] Calculated per Table 20.

A: Yes. Table 23 provides Avista's Washington natural gas operations total salaries and wages, i.e., includes capitalized labor over the last several years:

**TABLE 23**
**AVISTA NATURAL GAS OPERATIONS**
**(WASHINGTON JURISDICTION)**
**Salaries and Wages[30]**

| Year | Direct | Allocated | Total |
|---|---|---|---|
| 2015 | $9,472,298 | $8,094,208 | $17,566,506 |
| 2014 | $9,450,774 | $8,168,649 | $17,619,423 |
| 2013 | $8,237,739 | $7,084,765 | $15,322,504 |
| 2012 | $7,628,225 | $7,203,736 | $14,831,961 |
| 2011 | $6,849,801 | $6,285,958 | $13,135,759 |
| 2010 | $6,512,994 | $5,571,886 | $12,084,880 |
| 2009 | $6,936,631 | $5,230,626 | $12,167,257 |
| 2008 | $6,596,499 | $4,746,557 | $11,343,056 |
| 2007 | $6,345,622 | $4,966,833 | $11,312,455 |

As indicated above, this table provides Avista's Washington electric "direct" and "allocated" employee salaries and wages. The above table indicates that Washington's natural gas salary and wage expenses have increased by about $6.3 million (55%) over the last nine years. When the annual rates of change for salaries and wages are evaluated, a similar trend to that seen for electric salaries and wages is observed. Table 24 below provides the compound annual growth rates for Washington natural gas salary and wage expenses during several recent time periods:

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[30] Watkins, Exhibit Nos. GAW-8 (Avista response to Public Counsel Data Request No. 10, Attachment A).

**TABLE 24**
**Washington Natural Gas**
**Salary and Wage ~~Expenses~~**
**Annual Compound Growth Rates[31]**

| Time Period | Direct | Allocated | Total |
|---|---|---|---|
| '14-'15 | 0.23% | -0.91% | -0.30% |
| '13-'15 | 7.23% | 6.89% | 7.07% |
| '12-'15 | 7.48% | 3.96% | 5.80% |
| '11-'15 | 8.44% | 6.52% | 7.54% |
| '10-'15 | 7.78% | 7.75% | 7.77% |

As shown above, except for the most recent year, Washington natural gas salaries and wages compound annual growth rates have been about three times that of the general rate of inflation over the last several years.

~~**Q: Are these recent exceptionally high annual growth rates in Washington natural gas total salaries and wages attributable to increases in the number of employees or the wage levels of the Company's employees?**~~

~~A: The increases in Avista's Washington natural gas salaries and wages expense can be attributed mostly to increases in wage levels per employee and to a lesser extent, growth in the number of natural gas employees. Table 25 below provides the annual number of direct Washington employees, as well as the average direct wage per employee:[32]~~

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[31] Calculated per Table 23.

~~[32] The number of allocated Washington natural gas employees are not reported as they include employees dedicated to other jurisdictions as well as Avista's electric operations.~~

**TABLE 25**

| Year | Direct Washington Natural Gas Employees[33] | Avg. Wage Per Employee |
|---|---|---|
| 2015 | 140 | $67,659 |
| 2014 | 139 | $67,991 |
| 2013 | 132 | $62,407 |
| 2012 | 135 | $56,505 |
| 2011 | 123 | $55,689 |
| 2010 | 118 | $55,195 |
| 2009 | 135 | $51,382 |
| 2008 | 130 | $50,742 |
| 2007 | 127 | $49,966 |

As shown above, Avista has added 13 additional Washington direct natural gas employees since 2007 for an increase of 10.2%. At the same time, the average Washington direct natural gas employee wage has increased by $17,693, or 35.4% over this same time period.

Table 26 below shows the compound annual growth rates of change for the average Washington natural gas direct wage per employee:

**TABLE 26**
**Washington Natural Gas**
**Avg. Wage Per Employee**
**Annual Compound Growth Rates[34]**

| Time Period | Direct |
|---|---|
| '14-'15 | -0.49% |
| '13-'15 | 4.12% |
| '12-'15 | 6.19% |

[33] Watkins, Exhibit Nos. GAW-13 (Avista response to Public Counsel Data Request No. 15.
[34] Calculated per Table 25.

~~**TABLE 26**~~
~~**Washington Natural Gas**~~
~~**Avg. Wage Per Employee**~~
~~**Annual Compound Growth Rates**~~[34]

| ~~**Time Period**~~ | ~~**Direct**~~ |
|---|---|
| ~~'11-'15~~ | ~~4.99%~~ |
| ~~'10-'15~~ | ~~4.16%~~ |

~~With the exception of the most recent 2014 to 2015 change, the average wage level tended to exceed the rate of inflation by two to three times.~~

**Q: What are your conclusions regarding the trends in cost increases associated with Avista's Washington gas operations?**

A: While I do not know if growth rates in Avista's Washington natural gas costs are the result of a "self-fulfilling prophecy," it is clear that the Company's cost increases, which are under the control of management, have greatly exceeded general rates of inflation. As discussed earlier in my testimony, such trends are clearly at odds with competitive or efficient firms. Indeed, under the attrition allowance mechanisms that have been approved by this Commission, Avista has little incentive to control its level of costs or the growth of these costs. Shareholders have been earning a fair ROR on their investments such that the majority of these increases are attributable to employee salaries and wages, with no observed benefits to ratepayers.

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## IV. CONCLUSIONS

**Q: Based on your analyses of trends in the Company's specific costs, what are your conclusions regarding the need for, and appropriateness of, attrition allowances for Avista?**

A: When specific cost categories that are, or should be, within the control of Avista's management are evaluated, it is apparent that these costs have escalated at a much faster rate than inflation and general price increases in the economy. Furthermore, it does not appear that these increases in the Company's cost structure are the result of major expansions or replacement of its existing system, but rather, largely a result of exceptionally high increases in salaries and wages, as well as general overhead expenses. My understanding is that the burden of proof in rate cases rests squarely on the applicant, and this Commission has unequivocally put Avista on notice that it must provide clear evidence for a need to consider attrition in the ratemaking process. Indeed, if an attrition allowance is allowed in this rate case, the economic burden falls squarely on ratepayers even though the efficiency and prudency of Avista's continually large increases in costs are questionable and likely indicate serious inefficiencies within the Company's management. As a result, I recommend no attrition allowance be given to either the Company's electric or natural gas operations in this case and that the Commission order a detailed management audit of Avista, specific to its efficiencies and levels of costs.

**Q: Does this complete your testimony?**

A: Yes.