#### BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

#### WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant

v.

#### AVISTA CORPORATION, D/B/A AVISTA UTILITIES

Respondent.

DOCKETS UE-160228 and UG-160229 (Consolidated)

#### POST-HEARING BRIEF OF AVISTA CORPORATION

David J. Meyer Avista Corporation VP and Chief Counsel for Regulatory Governmental Affairs Avista Corporation 1411 East Mission PO Box 3727 Spokane, WA 99220-3727 Telephone: 509-495-4316

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## I. INTRODUCTION

#### A. <u>Nature of Rate Relief Requested.</u>

On February 19, 2016, Avista filed for both electric and natural gas rate relief for an 18month period, from January 1, 2017 through June of 2018.<sup>1</sup> For the 2017 <u>electric</u> rate request, Avista is proposing an overall increase in electric <u>base</u> revenues of \$38.6 million or 7.8%. This would result in an overall net electric <u>bill</u> increase of 7.6%. This request is based on a proposed rate return of 7.68%, with a common equity ratio of 48.5% and a 9.9% return on equity. For the 2018 second-step <u>electric</u> rate request, Avista is proposing an overall increase in electric <u>base</u> revenues of \$9.0 million or 3.4%, to become effective January 1, 2018. This includes updated power supply costs as of November 1, 2016.<sup>2</sup> The Company proposed to update its power supply costs sixty (60) days prior to the new rates going into effect on January 1, 2017, as well as sixty (60) days prior to the second-step increase on January 1, 2018.<sup>3</sup> The Company is proposing to

<sup>&</sup>lt;sup>1</sup> This "18-month rate plan" is intended to change the "cycle" of base rate adjustments from the middle of the winter to the middle of the summer months; if base rate adjustments occur in the summer months, customers will be aware well before the winter heating season. <u>See</u> Exh. No. SLM-1T, p.3:9-17.

<sup>&</sup>lt;sup>2</sup> <u>See</u> Avista's response to Bench Request 10.

<sup>&</sup>lt;sup>3</sup> Exh. No. SLM-1T, p.5:18-22); <u>Id.</u> at p.4:11-14 and p.5:3-8. On November 1, 2016, Avista filed with the WUTC a Motion to include in the record its Power Supply Update impacting its electric 18-month plan period. This proposed update shows a slight reduction of overall net power supply expense of approximately \$591,000 (\$611,000 impact on revenue requirement) for 2017. Accordingly, Avista's <u>updated</u> electric revenue requirement need of \$40.1 million in 2017 is reduced to approximately \$39.5 million, still above Avista's filed-for electric revenue increase request of \$38.6 million in 2017. For the six-month period January – June 2018, the Power Supply

offset the impact of this second-step bill increase with a rebate of available ERM dollars.<sup>4</sup> Accordingly, the proposed net bill change to electric customers on January 1, 2018, is zero.<sup>5</sup>

With respect to the Company's 2017 <u>natural gas</u> rate request, it is requesting an overall <u>base</u> revenue increase of \$4.4 million, reflecting a 5.0% increase in base rates effective on January 1, 2017. The proposed general increase over present <u>billing</u> rates, however, is 2.8%, after including all other rate adjustments such as the Purchase Gas Cost Adjustment and Demand Side Management, etc.<sup>6</sup> The Company is proposing a second-step natural gas revenue increase on January 1, 2018 of \$0.9 million, reflecting a 1.8% overall increase in <u>base</u> rates. The proposed increase in <u>billing</u> rates, including all other rate adjustments (Purchased Gas Cost Adjustment, Demand Site Management, etc.) is 1%.<sup>7</sup>

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Avista would like to draw the Commission's attention to five issues, in particular, that "drive" much of the revenue requirement:

(1) <u>Adoption of an Attrition Adjustment;</u>

(2) <u>Use of the appropriate trending factor for O&M/A&G</u> of 4.07% Electric / 4.23% Natural Gas;

(3) <u>Adoption of an "after-attrition adjustment" for the Spokane River Project</u> reflecting the level of plant-in-service in 2016 [\$67.1M (Company) versus \$17.5M (Staff)];

(4) <u>Recognition of \$17.9M of AMI plant-in-service in 2017</u>, out of a total spending level of \$70.5M (WA share) on AMI in 2017; and

(5) <u>Continuing recovery through rates of Avista's annual lease payments</u> (\$3.5M WA share) to the State of Montana under the Hydropower Site Lease Agreement (or deferral thereof).

Update results in a <u>reduction</u> of power supply expenses of \$1.46 million (\$1.5 million impact on revenue requirement). Accordingly, Avista's <u>updated</u> electric revenue need for the six-month period January to June 2018 of \$10.5 million is reduced to \$9.0 million. Therefore, Avista's revised request for rate relief for the first six months of 2018 is now \$9.0 million. See also Avista's response to Bench Request 10.

<sup>&</sup>lt;sup>4</sup> The ERM currently has a rebate deferral balance (due to customers) of \$17.7 million. The Company proposes to credit a portion of these dollars back to customers from January through June of 2018, in order to entirely offset the bill increase to electric customers from this January 1, 2018 second-step base rate increase. Exh. No. KON-1T, p.2:22-25.

<sup>&</sup>lt;sup>5</sup> <u>Id</u>. at p.5:3-8.

<sup>&</sup>lt;sup>6</sup> <u>Id</u>. at p.6:4-10.

<sup>&</sup>lt;sup>7</sup> <u>Id</u>. at p.6:19-22.

Given changed circumstances since the filing of the Company case in February of 2016, it has become apparent that the Company did not ask for enough rate relief. In the end, Avista's filed-for electric revenue requirement of \$38.6M in 2017 and \$10.3M in 2018 is less than what we need (\$48.3M in 2017 and \$12.5M in 2018). Its filed-for natural gas revenue requirement of \$4.4M in 2017 and \$0.9M in 2018 is also less than what we need (\$7.1M in 2017 and \$2.3M in 2018).<sup>8</sup>

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This case, therefore, is unlike Avista's last rate cases (Docket Nos. UE-150204 and UG-150205) (see Order 05), in which, due to favorable circumstances, costs went down fairly dramatically after those cases were filed, resulting in an actual reduction in revenue requirement.<sup>9</sup>

This Brief will marshall the evidence in support of Avista's need for the entirety of its requested rate relief. It will demonstrate that a Modified Historical Test Year Study is insufficient to provide necessary rate relief, and that an attrition adjustment is well supported by its Attrition Study. Finally, its updated Cross Check study not only validates the need for the rate relief developed through the Attrition Study, but demonstrates that, <u>even with</u> an attrition adjustment, the Company will under-recover its costs during the rate-effective period.

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The conditions that reflect what the Commission characterized as the "new normal" in its recent Order 05, <u>supra</u>, persist today. Those conditions are characterized by levels of expense and rate base that far exceed the revenues derived from very low customer growth and sales growth. This phenomenon of "attrition" is recognized by both Staff and the Company and both have provided detailed attrition studies in support of their respective recommendations. As will be explained below, both studies are largely consistent with the attrition studies presented by Avista and Staff in Avista's last general rate case and, in many respects, are quite similar to one another.

<sup>&</sup>lt;sup>8</sup> See updated Cross-Check Study, Exh. No. JSS-5, pp.12 and 14; Exh. No. JSS-6, pp. 12 and 14; see also Exh. No. KON-1T, p.23.

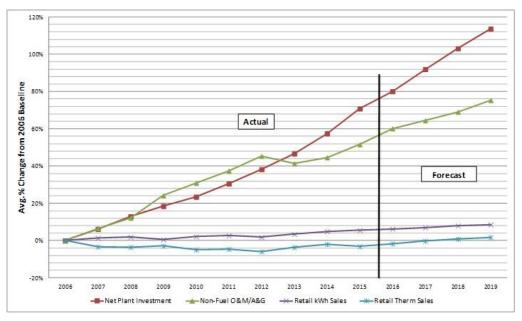
<sup>&</sup>lt;sup>9</sup> See, Wash. Utils. & Transp. Comm'n v. Avista Corp., Docket UE-150204 and UG-150205, Order 05, p.52, ¶140 (Jan. 6, 2016). At the conclusion of that proceeding, Avista was requesting an electric reduction of \$6.6 million; ultimately, the Commission ordered an overall electric reduction in excess of \$8 million. (See Order 05) Among the factors contributing to the reduction in needed revenue requirement in that case were, e.g., a substantial reduction in power costs, changes in net plant investment, tax adjustments, and normalization of thermal maintenance. Those circumstances are not present in this case.

There remain, however, important differences between the Company and Staff attrition studies that must be addressed. These are discussed in detail below.

Unless the "end result" of the Commission's deliberations produces a revenue requirement that fully accounts for the very real phenomenon of attrition, the Company will not have been provided with a reasonable opportunity to earn its allowed return.

#### B. <u>Increases in Net Plant Investment and Operating Expenses Continue to Exceed</u> <u>Growth in Sales, Resulting in Attrition.</u>

The growth in energy sales continue to be insufficient to cover the necessary investments in plant and operating expenses. Company witness Scott Morris provided the following illustration in his direct testimony, showing the actual growth in net utility plant investment through 2015, and the expected growth for 2016 through 2019.<sup>10</sup> This graph is excerpted below:



This graph shows that net plant investment is growing at a much faster pace than sales. It also demonstrates that non-fuel Operation and Maintenance (O&M) expenses and Administrative and General (A&G) expenses are also growing at a faster pace than sales. Because annual costs are growing faster than sales, it is necessary to increase retail rates so that total revenues are sufficient

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<sup>&</sup>lt;sup>10</sup> Exh. No. SLM-1T, p.15:1-20.

to cover costs, while providing a fair rate of return on investment for investors.<sup>11</sup> As noted by Mr. Morris, "these are the circumstances facing not just Avista, but many investor-owned and consumer-owned utilities across the Country, and it is the primary reason Avista has requested electric and natural gas revenue increases through this filing."<sup>12</sup> Indeed, much of the evidentiary portion of the case revolves around the appropriate manner in which to recognize, through the ratemaking process, the erosion in earnings caused by this phenomenon of "attrition."<sup>13</sup>

#### C. <u>Avista Rates Placed Into Perspective.</u>

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Avista understands the need to manage its costs, while still providing safe and reliable service, and meeting the needs of its customers. It also is mindful of the impact of its rate increases on its customers, and, indeed, has participated in, and supports, a variety of programs and service offerings meant to mitigate the impact of rate increases.<sup>14</sup>

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Avista's residential customers' rates remain among the lowest in the Country for investorowned utilities; the average residential monthly electric bill in Avista's Idaho and Washington service territories is lower than anywhere else in the country, except for the State of Tennessee.<sup>15</sup> While it is true that Avista's low retail rates are due in part to a history of the Company aggressively pursuing the acquisition and preservation of a diversified portfolio of low-cost resources for the

<sup>&</sup>lt;sup>11</sup> <u>Id</u>. at p.15:21 – p.16:3.

<sup>&</sup>lt;sup>12</sup> Ibid.

<sup>&</sup>lt;sup>13</sup> Mr. Morris explained the Company's disciplined approach to evaluating the need for new plant investment, describing the business cases for specific projects and programs that are submitted to a Capital Planning Group that meets on a regular basis to review and prioritize all proposed utility capital projects. (Exh. No. SLM-1T, p.16:4-12) In fact, there were \$54 million of unfunded projects in 2013 and \$55 million of unfunded projects in 2014, as testified to by Company Witness Schuh. (Exh. No. KKS-1T, p.10:1-5) As further explained by Mr. Morris, in recent years Avista has chosen to not fund all of the capital investment projects proposed by the various departments in the Company, driven, in part, by the Company's desire to mitigate the retail rate impacts to customers, and that decision is made only in cases where the Company believes the amount of risk associated with the delay is reasonable and prudent. (Exh. No. SLM-1T, p.17:1-5).) Mr. Morris also identified measures that the Company has taken to control its expenses. For example, it has eliminated the defined benefit pension plan for non-union new hires beginning in 2014, and is transitioning away from providing medical coverage for non-union retirees. (Id. p.18:1-9.)

<sup>&</sup>lt;sup>14</sup> Avista offers a number of programs for its Washington customers, such as energy efficiency programs, the Low Income Rate Assistance Program (LIRAP), Project Share for emergency assistance to customers, the Customer Assistance Referral and Evaluation Service (CARES) Program, level pay plans, and payment arrangements. (Exh. No. SLM-1T, pp.28-29) These are described, in detail, in Company Witness Morris' testimony. (<u>Id</u>.)

<sup>&</sup>lt;sup>15</sup> See Exh. No. SLM-1T, Illustration No. 10, p.25:6-22

benefit of our customers, the low rates are also the result of Avista's efforts to control its costs in order to keep retail rates "as low as reasonably possible," as noted by Company Witness Morris.<sup>16</sup>

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With regard to natural gas, customer bills have dropped from approximately \$85 per month in 2009, to approximately \$65 per month in 2016, for a Washington residential natural gas customer using an average of 70 therms per month.<sup>17</sup> This, of course, also reflects the decrease in wholesale natural gas prices in recent years, benefits which are fully passed through to natural gas customers through PGA filings. But it also reflects the Company's attention to cost management.

<sup>13</sup> Finally, the Company enjoys a very high level of overall customer satisfaction. Its overall customer satisfaction from the Company's Voice-of-the-Customer (VOC) surveys in the fourth quarter of 2015 was 96% company-wide. As noted by Company Witness Morris, "these results can be achieved only with very committed and competent employees."<sup>18</sup>

#### II. AN ATTRITION ADJUSTMENT IS AN APPROPRIATE VEHICLE TO PROVIDE THE COMPANY WITH A REASONABLE OPPORTUNITY TO EARN A FAIR RATE OF RETURN

<sup>14</sup> Staff Witness Hancock appropriately recognizes that rates calculated using a modified historical test year will generate revenues that will fall short of those necessary to provide Avista with a "fair opportunity to achieve the authorized rate of return":

While the modified historical test year framework provides a better avenue for evaluation of specific changes to rate base and expenses, the revenue requirement produced in this case, absent an attrition adjustment, is likely to be insufficient to provide a fair opportunity to achieve the authorized rate of return.<sup>19</sup>

He observes that expenses and capital investment are growing faster than revenues and that the "growth rates in expenses and capital investments are largely the result of factors that appear to be outside of the control of the utility."<sup>20</sup> And, he further notes that "revenue growth is flat."<sup>21</sup> Finally,

<sup>&</sup>lt;sup>16</sup> Exh. No. SLM-1T, p.26:1-7; Putting Avista's increases in rates over time into further perspective, the average increase in the monthly bill from 2009 to 2016, for a Washington residential electric customer using an average of 1,000 kilowatt-hours per month has been 1.9% per year. (Exh. No. SLM-1T, p.20:17-21)

<sup>&</sup>lt;sup>17</sup> Exh. No. SLM-1T, p.21:12-17.

<sup>&</sup>lt;sup>18</sup> <u>Id</u>. at p.27:10-18.

<sup>&</sup>lt;sup>19</sup> Exh. No. CSH-1T, p.26:7-10.

<sup>&</sup>lt;sup>20</sup> <u>Id</u>. at p.21:6-9.

<sup>&</sup>lt;sup>21</sup> <u>Ibid</u>.

Staff Witness Hancock concludes that the "current environment of low revenue growth is not temporary. It is the new normal."<sup>22</sup>

This is the same characterization used by the Commission in its Order 05 in the Company's last rate case, where it found that the erosion of earnings brought on by levels of capital investment and expense that exceed revenues represents the "new normal."

The evidence in this case demonstrates that Avista is making increased capital investments in non-revenue generating plant (primarily on the distribution system) in an environment of low load growth. However, we do not believe that these circumstances are extraordinary. In fact, we believe that these circumstances represent the "new normal."

Order 05, <u>supra</u> at p.40, ¶109. Given this "new normal," the Commission noted that it has, in its discretion, a variety of tools in its regulatory "toolbox" for utility ratemaking; and among these "tools" is the use of an attrition adjustment. (Id. at p.41, ¶110)<sup>23</sup>

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On cross-examination, Staff Witness Hancock agreed with the following propositions:<sup>24</sup> For purposes of establishing a revenue requirement, the Commission arrives at an <u>overall level of rate base</u> that it deems to be "used and useful" for providing service to customers. It does not otherwise make thousands of individual rate base determinations in its Order. It has, at its disposal, any number of different "tools" or approaches in arriving at what is ultimately a factual determination of what overall level of plant is "used and useful." Over time, the Commission, depending on the circumstances, has used a variety of different "tools" for that purpose. These have included, at various points, the use of a historical test period with limited pro forma adjustments and, more recently, the use of an attrition adjustment. The important point is that the Commission is uniquely situated as the fact-finder that must apply its informed judgment as to how best to determine the overall level of rate base during the rate period that is used and useful

<sup>&</sup>lt;sup>22</sup> <u>Id</u>. at p.20:3-5.

<sup>&</sup>lt;sup>23</sup> As the Supreme Court explained in the <u>Hope Nat'l Gas</u> case, the requirement that rates be "fair, just and reasonable" <u>does not define a method</u> by which rates are to be calculated; instead, the fixing of fair, just and reasonable rates involves a balancing of investor and consumer interests. (Fed. Power Comm'n v. Hope Nat'l Gas Co., 320 U.S. 591, 603 (1944). The "end result" must be reasonable. (Exh. No. KON-1T, p.15:14-21)

<sup>&</sup>lt;sup>24</sup> Hancock, TR. 423-428.

to provide service to customers.<sup>25</sup> Upon questioning by Commissioner Jones, Mr. Hancock replied:

"... I felt the results of that [Attrition Study] were a reasonable approximation of future used and useful and prudent investments, and they were reflective of conditions that were outside of the Company's control."<sup>26</sup>

#### B. Both Staff and Avista Use a Similar Methodology to Compute Attrition.

As recognized by Staff Witness Hancock, both Staff and Avista largely adopt the approach used by Staff in Avista's last general rate case (Dockets UE-150204 and UG-150205). As explained by Mr. Hancock:

... Both studies apply regression analysis to evaluate prevailing rates of growth in expenses and rate base. Future revenues are based on future billing determinants estimated in the Company's load forecast. The revenue shortfall in the Attrition Study is the difference between expected revenues at current rates, and the revenues required to make the Company whole at the estimated levels of rate base and expenses.<sup>27</sup>

Finally, the estimated revenues, expenses and rate base balances found in the Attrition Studies are

then compared to the results of the traditional ratemaking approach and the difference between the

two produces the attrition adjustment.<sup>28</sup>

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<sup>18</sup> For its part, Avista also prepared electric and natural gas attrition studies to quantify the

mismatch in the growth of revenues, expenses and rate base for ratemaking purposes. (See Exh.

Nos. EMA-7 and EMA-8.) The similarities between Avista and Staff's electric and natural gas

Attrition Study models are summarized below:<sup>29</sup>

1) Use of Updated Commission Basis Results as of 12.2015 – included in both Avista and Staff models is the use of the December 31, 2015 CBR. As previously discussed,

<sup>&</sup>lt;sup>25</sup> That is what the Commission has more recently done with its approved attrition adjustment which captures a total level of rate base for the Company's electric and natural gas operations. (Hancock, TR:424-426) (See also, Staff Exh. No. CSH-2, p.1:49 and Exh. No. CSH-3, p.1:47, with respect to "total rate base" included in Staff's electric and natural gas attrition studies for 2017 and 2018.) See also the Company's attrition study (EMA-7 and 9, p.1 (Electric) and EMA-8 and 10, p.1 (Natural Gas), establishing 2017 and 2018 rate base levels for purposes of the attrition study.

<sup>&</sup>lt;sup>26</sup> Hancock, TR. 416:4-8.

<sup>&</sup>lt;sup>27</sup> Exh. No. CSH-1T, p.26:17-23.

<sup>&</sup>lt;sup>28</sup> This attrition adjustment can be found in Staff's revenue requirement presentation as Adjustment 4.08 in its electric model and Adjustment 4.08 in its natural gas model. <u>See Huang</u>, Exh. Nos. JH-2 and JH-3.

<sup>&</sup>lt;sup>29</sup> Exh. No. EMA-6T, pp. 19-20.

this is done to reflect the most current, up-to-date information. In fact, Mr. Hancock's models leading up to the 12.2015 AMA base column, prior to the application of growth factors, are identical to Avista's rebuttal models.

- 2) <u>Historical CBR Trended Data 2007-2015</u> both Staff and Avista used Avista's actual CBR data for the period 2007 through 2015 for both electric and natural gas to determine historical trending, with the exception of Operating and Maintenance (O&M) expenses, as discussed in Ms. Andrews' testimony.
- 3) <u>Use of Forecasted Revenues</u> Both Staff and Avista use Avista's electric and natural gas load forecasts to derive retail revenues for the rate-effective periods.
- 4) <u>Electric Regression Analysis (Linear basis):</u> For electric, both Staff and Avista used linear regression analysis to determine the appropriate growth rates.
- 5) <u>After Attrition Adjustment (Avista) / Pro Forma Adjustment (Staff) for</u> <u>Spokane River Projects (electric only)</u> – Both Staff and Avista, albeit at different amounts, add an adjustment beyond that produced within the electric trended results to reflect an additional level of expense and rate base. An adjustment is added because the use of historical trended data alone does not produce a result reflective of what is expected to happen during the 2017 rate period.<sup>30</sup>
- 6) **2017 and 2018 (AMA) Attrition Model Results** Both Avista and Staff have prepared electric and natural gas attrition models producing results for the 2017 rate year and for the six-month period ending June 2018. Both sets of electric and natural gas models show an attrition revenue requirement need in 2017, with an incremental revenue requirement need for electric for the period January through June 2018.
- 7) <u>"Attrition Allowance" Required Beyond Modified Test Year Study Results</u> Both Avista and Staff recognize the need for an "Attrition Allowance" adjustment beyond Modified Test Year Studies, in order to allow Avista an opportunity to earn a reasonable return during the 18-month rate period.

#### Notwithstanding the similarities in approach, Staff's attrition-adjusted proposed revenue

increases fall "well short" of what is needed by Avista to have an opportunity to earn a reasonable

return during the January 2017 through June 2018 rate period, as testified to by Company Witness

Andrews.<sup>31</sup> Staff Witness Hancock's 2017 attrition models result in revenue requirement amounts

of \$20.6 million electric and \$2.1 million for natural gas.<sup>32</sup> His June 2018 attrition model results

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<sup>&</sup>lt;sup>30</sup> This is similar to the approach approved in Docket Nos. UE-150204 and UG-150205, whereby the Commission in Order 05, approved an electric and natural gas "After Attrition Adjustment" related to the Company's Customer Information System "Project Compass."

<sup>&</sup>lt;sup>31</sup> Exh. No. EMA-6T, p.18:16-19.

<sup>&</sup>lt;sup>32</sup> See Exh. No. CSH-4 and CSH-5.

in revenue requirement amounts of \$30.5 million for electric and \$2.2 million for natural gas.<sup>33</sup> His June 2018 results, however, are <u>cumulative</u> for the 2017 calendar-year <u>and</u> for the January-to-June 2018 rate periods.<sup>34</sup>

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The Company's updated Attrition Studies support a higher level of electric rate relief of \$40.1 million, effective January 1, 2017, and \$10.5 million [or \$9.0 million with the November Power Supply Update], effective January 1, 2018. For natural gas rate relief, the Company's Attrition Studies support \$7.9 million, effective January 1, 2017 and \$1.5 million effective January 1, 2018. As noted at the outset, however, the Company's actually requested rate relief is somewhat lower.<sup>35</sup> Substantial differences remain with respect to the outcome of Staff's and Avista's Attrition Studies, which will be addressed below.

#### C. <u>Differences Between Staff and Avista Attrition Analyses</u>.

1. <u>Differences in Electric Attrition Studies</u>.

The main differences between Avista and Staff's <u>electric</u> Attrition Study results (beyond the impact of ROE) relate to <u>three issues</u>, representing a total of \$11.5 million of revenue requirement in 2017, and \$703,000 in 2018. These issues are:

- The <u>use of the appropriate O&M growth rate</u> applied to operating expenses, resulting in an electric revenue requirement difference of \$2.9 million in 2017, and \$703,000 in 2018;
- The use of different net rate base and expense amounts included for the <u>Spokane River</u> <u>Projects in the "after attrition adjustment</u>," resulting in a revenue requirement difference of \$4.8 million in 2017 (the Company included plant in-service of \$67.1 million for the Spokane River Projects, while Staff included only \$17.5 million); and
- Staff's exclusion of the <u>2017 Advanced Metering Infrastructure (AMI) Project as an "after</u> <u>attrition adjustment</u>" resulting in an additional difference of \$3.8 million of associated electric revenue requirement (and \$1.2 million for gas).<sup>36</sup>

<sup>&</sup>lt;sup>33</sup> Exh. No. (9) CSH-6 and CSH-7.

<sup>&</sup>lt;sup>34</sup> In determining its revenue requirement, however, Mr. Hancock used the results of his 2017 and 2018 attrition models, and <u>averaged</u> those results. He then proposes a <u>one-time</u> electric and natural gas increase for the entire 18-month period effective January 2017 through June 30, 2018. This average was then compared with Staff's Modified Test Year Study results, sponsored by Staff Witness Huang (see Exhs. JH-2 and JH-3).

<sup>&</sup>lt;sup>35</sup> Exh. No. EMA-6T, p.3:21-23, and p.4:1-3.

<sup>&</sup>lt;sup>36</sup> <u>Id</u>. at p.4:26-37, and p.5:1-3.

22 These differences are reflected in the table below, excerpted from Company Witness Andrews' rebuttal testimony:<sup>37</sup>

	(a) 2017	(b) 2018		6 Mos. 2018		(a)+(b) / 2 Staff Proposed Average for 18 Mos.	
Staff Filed:	\$20,604	\$	30,535	\$	9,931	\$	25,570
Reconciliation of Major Categories to Avista Models:							
1) O&M Escalation difference	\$ 2,880	\$	3,583	\$	703		
2) Annualized Spokane River Projects (After Attrition Adj.)	\$ 4,799	\$	4,799	\$	-		
3) AMI (After Attrition Adj.)	\$ 3,794	\$	3,794	\$			
Staff Electric Attrition Model (and average result)			0				
with inclusion of items 1-3)	\$32,077	\$	42,711	\$	10,634	\$	37,394

\*The primary difference between the Company's updated revenue requirement amount of \$40.1 million, and the adjusted \$32.1 million for Staff noted above, of \$8.0 million, relates mainly to Staff's use of a 9.2% ROE versus Avista's use of 9.9% ROE.

Properly including the three adjustments above in Staff's attrition methodology would have resulted in a \$37.4 million increase for the 18-month period of January 1, 2017 through June 30, 2018.<sup>38</sup> (This is without any upward adjustment for, e.g., a higher cost of capital than recommended by Staff.)

#### b. Use of An Appropriate O&M Growth Rate.

23

Staff Witness Hancock proposes an O&M "blended average" growth rate by combining Avista's actual historical growth trend (for the period 2007-2015) (weighted 50% in his analysis) with additional weightings for the "Employment Cost Index for utilities" (ECI-U) (one-quarter weight), and the Producer Price Index (PPI-U) for utilities (given a one-quarter weight).<sup>39</sup> His "blended average" results in annual growth rates of 3.04% for electric and 3.46% for natural gas.<sup>40</sup>

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Mr. Hancock's use of non-Avista indices such as the ECI-U and the PPI-U, is inconsistent with this Commission's last Order in Avista's prior rate case (Docket Nos. UE-150204 and UG-

<sup>&</sup>lt;sup>37</sup> <u>Id</u>. at p.21.

<sup>38</sup> Exh. No. EMA-6T, p.21:13-17. The Company, however, does not agree with that underlying methodology that only provides a one-time increase in 2017, rather than a two-step rate increase of \$38.6 million in 2017 and \$9.0 million for the first 6 months of 2018.

<sup>39</sup> See Exh. No. CSH-1T, p.46:7-14.

<sup>40</sup> Exh. No. EMA-6T, p.23:17-18.

150205). In its Order 05, the Commission approved an O&M growth factor that was based solely on the Company's historical data, not on other indices:

We prefer to use an escalation rate <u>more firmly grounded in historical data</u>. Therefore, for the purposes of calculating an attrition adjustment for Avista's electric and natural gas operations, we escalate O&M expenses by the arithmetic average of (a) the one year trend in O&M expense from 2013 to 2014, and (b) the multiyear trend in O&M expense from 2007 to 2014. (Emphasis added)

(See Order 05, at p.45, ¶123.) Company Witness Dr. Forsyth, in his rebuttal testimony, notes that the indices employed by Staff (PPI-U and CPI-U) do not accurately reflect the Company's operations, insofar as they include all types of utilities, including steam, water and sewage.<sup>41</sup> By definition, these indices would show different expense trends than for Avista's electric and natural gas utility operations.<sup>42</sup> Indeed, Staff Witness Hancock acknowledged that his use of external data (PPI and CPI indices) incorporated "broad measures" and were by no means perfect. He acknowledged that he simply "couldn't find a better measure." (Hancock TR. 411:23 – 412:2) He readily agreed that he used what he characterized as "subjective judgment" in the development of his O&M escalation rate.<sup>43</sup>

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The effect of Mr. Hancock's averaging approach with other indices reduces the use of Avista-specific data to only 50%, which "artificially reduces the Company's expected growth trend to a level that is <u>not representative of Avista's historical experience in costs nor its expected</u> increase in costs during the rate year . . .," according to Dr. Forsyth. (Emphasis added)<sup>44</sup>

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In contrast, Avista is proposing O&M growth rates, based on its Attrition Studies that take into account O&M trend data through December 31, 2015, of <u>4.07% for electric and 4.23% for natural gas</u>. Importantly, these growth rates are based on <u>Avista's actual historical data</u> for the trend period of 2007 through 2015.<sup>45</sup> The use of Avista's actual historical O&M expense data in

<sup>&</sup>lt;sup>41</sup> Exh. No. GDF-1T, p.13:12-18.

 <sup>&</sup>lt;sup>42</sup> Not surprising, these "types of all-inclusive utility indices would most likely show expense trends differently than for electric or natural gas utility operations," as testified to by Dr. Forsyth. (Exh. No. GDF-1T, p.13:18-19)

<sup>&</sup>lt;sup>43</sup> Hancock TR. 399:2-8.

<sup>&</sup>lt;sup>44</sup> Exh. No. GDF-1T, p.14:14-16.

<sup>&</sup>lt;sup>45</sup> Exh. No. EMA-6T, p.25:5-8.

the trend analysis better reflects the Company's recent and planned expenditures, as testified to by Company Witness Andrews.<sup>46</sup> The trending of O&M data for Avista should be reflective of <u>the</u> <u>Company's actual experience</u>, and not distorted by the introduction of broad indices.

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Even prior to reflecting the Company's update on medical expenses,<sup>47</sup> the most recent financial forecast for Avista shows an approximate 4% annual growth rate in O&M between 2015 and 2017 for total Company expenses. This is a further indication that the O&M growth trend for 4% for electric and 4.25% for natural gas, based on actual historical trends, continues to be a reasonable growth rate.<sup>48</sup>

#### c. "<u>After-Attrition Adjustments.</u>"

Staff Witness Hancock explains the purpose of an "after-attrition adjustment":

An "after-attrition adjustment" is made to the results of an attrition study due to the belief that the trend lines produced by the analysis do not adequately reflect the near future levels . . .. One reason for an "After-Attrition Adjustment" may be that future capital additions are composed of abnormal projects that aren't reflected in the historical record. Another reason may be that the data from which the historical trend is derived fails to reflect a "new normal" regarding the pace of capital additions. In Avista's last rate case, an "after-attrition adjustment" was made to accommodate a large capital addition known as Project Compass.<sup>49</sup>

Accordingly, Staff appropriately recognizes that after-attrition adjustments are meant to capture plant additions that are above and beyond what the historical trend suggests. Avista agrees with this proposition, but disagrees with Staff's exclusion or reduction of certain items in their adjustment. These are discussed below.

#### (i) <u>Spokane River Projects</u>.

28

The "Spokane River Projects" include the Company's Nine Mile Redevelopment Project, the Post Falls South Channel Gate Replacement Project, and the Little Falls Powerhouse

<sup>&</sup>lt;sup>46</sup> <u>See</u> Exh. No. EMA-6T, p.25 – 26:14.

<sup>&</sup>lt;sup>47</sup> She notes that "various operating, environmental, and financial factors continue to put upward pressure on our O&M costs," citing examples such as medical costs which are growing at a far greater pace than the 3% - 3.5% rate proposed by Staff (or the 4% - 4.25% rate proposed by Avista). (Exh. No. EMA-6T, p.26:2-7)

<sup>&</sup>lt;sup>48</sup> Exh. No. EMA-6T, p.26:10-14.

<sup>&</sup>lt;sup>49</sup> Exh. No. CSH-1T, p.53:1-10.

Redevelopment Project. As testified to by Company Witness Schuh, these three projects are "large in investment scale and their associated transfers to plant are well above the historical level of capital transfers for the production plant functional group."<sup>50</sup> Moreover, each of these projects are already in service as of July of 2016.<sup>51</sup> The total additions to plant-in-service in 2016 related to these three projects is \$67.1 million.<sup>52</sup> The following table, excerpted from Company Witness Andrews' rebuttal testimony, provides the gross plant additions for these three projects and their in-service dates: <sup>53</sup>

Spokane River Projects (2016):						
Project	Net Plant Amount (millions)					
Nine Mile	7/2016	\$	45.1			
Post falls	2/2016	\$	10.1			
Little Falls	2/2016	\$	11.9			
Total Spokane R	\$	67.1				

By way of contrast, Staff Witness Hancock <u>only included \$17.5 million</u> (versus \$67.1 million) of plant in-service associated with all three Spokane River Projects.<sup>54</sup> As such, Staff reflected a level of plant in its after-attrition adjustment which does not reflect the full investment cost in 2016 for the Spokane River Projects.<sup>55</sup>

<sup>&</sup>lt;sup>50</sup> Exh. No. KKS-8T, p.12:3-9.

<sup>&</sup>lt;sup>51</sup> <u>Ibid</u>.

<sup>&</sup>lt;sup>52</sup> <u>Ibid</u>. The <u>overall</u> level of production plant that has already been transferred to service in the first seven months of 2016 is nearly <u>\$92 million</u>. (See Exh. No. EMA-6T, p.30:21-22)

<sup>&</sup>lt;sup>53</sup> Exh. No. EMA-6T, p.29:1-9. As an After-Attrition Adjustment, the Company has included the cost of these projects, along with associated Accumulated Depreciation (AD) and Accumulated Deferred Federal Income Taxes (ADFIT), netting to a rate base increase of \$53.9 million. (Exh. No. EMA-6T, p.29:7-9)

<sup>&</sup>lt;sup>54</sup> Adjusting for AD and ADFIT, Mr. Hancock's total rate base addition was \$13.5 million, or only 25% of the overall cost of these projects. (Exh. No. EMA-6T, p.30:1-3).

<sup>&</sup>lt;sup>55</sup> Exh. No. KKS-8T, p.14:13-21.

Company Witness Schuh explains that the historical levels of production plant rate base additions have ranged from \$7 million to \$33 million per year over the last nine years (2007-2015), with average production plant additions of \$15.9 million annually.

Production Plant Additions Per year AMA Basis (in 000's) *						
2007	¢	0.507				
2007	\$	9,507				
2008		11,523				
2009		20,547				
2010		15,043				
2011		14,205				
2012		10,554				
2013		20,867				
2014		7,786				
2015		33,340				

\*Average production plant 2007 to 2015 is \$15.9 million annually.

<sup>30</sup> Exh. No. KKS-8T, pp.12-13. In contrast, for the first <u>seven months</u> of 2016, the <u>overall</u> level of production plant that has already been transferred to service is nearly <u>\$92 million</u>,<sup>56</sup> well above the historical trend of \$15.9 million. Adding an After Attrition adjustment of \$67.1 million above the annual historical trended amount of \$15.9 million, for a total of \$83 million, is still below the actual transfers of \$92 million just for the first seven months of 2016.

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In the last rate case, Project Compass was a large capital project for which both Avista and Staff agreed that the historical trend did not reflect the level of investment represented by Project Compass. And an after attrition adjustment was properly proposed and adopted by the Commission.

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In this case, the Spokane River Projects themselves of \$67.1 million, which are already completed in 2016, represent over four-times the annual level of production plant capital additions embedded in the 2007-2015 historical trend of \$15.9 million. And as indicated earlier, production

<sup>&</sup>lt;sup>56</sup> Exh. No. EMA-6T, p.30:21

plant completed in the first seven months of 2016 is \$92 million. Staff's after attrition adjustment for the Spokane River Projects of \$17.5 million is well below the adjustment that is necessary, in this instance, to reflect the proper level of production plant.

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Looked at in the broader context of <u>total</u> production plant, as pointed out by Avista Witness Schuh, Staff "effectively <u>excludes approximately \$99 million (or 64%)</u> of expected additions to net production plant, which will be serving customers during the 2017 rate year."<sup>57</sup> If the purpose of an "after-attrition adjustment" is to adjust base figures to more accurately represent figures as they are anticipated to be in the rate year, as testified to by Staff Witness Hancock, his nearly \$100 million reduction to the expected total production plant investment does not appear to accomplish this intent.<sup>58</sup>

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In the final analysis, the revenue requirement associated with the Spokane River Project as part of the "after-attrition adjustment" totals \$7.0 million for Avista, while Staff's adjustment totals only \$2.1 million – a revenue requirement difference of approximately \$4.9 million.<sup>59</sup>

#### (ii) <u>Advanced Metering Infrastructure (AMI) Project</u>.

Staff also removed the after-attrition adjustment associated with the 2017 AMI capital projects from both its electric and natural gas Attrition Studies.<sup>60</sup> This position is derived from Staff Witness Nightingale's testimony that it is premature for the Commission to make a prudence determination. Avista disagrees. As explained by Mr. Norwood, Avista is currently incurring operating costs and capital investment associated with AMI and significant investment dollars (\$17.9M) are scheduled to be transferred to plant-in-service in 2017. Accordingly, if costs incurred by the Company for AMI during this period are not reflected in the revenue requirement for the rate period, these costs would essentially be absorbed by Avista.<sup>61</sup> (As shown in Exhibit DN-3CXC, the Company will have spent nearly \$23 million (WA share) on AMI through the end of

<sup>&</sup>lt;sup>57</sup> Exh. No. KKS-8T, p.15:2-4.

<sup>&</sup>lt;sup>58</sup> Exh. No. CSH-1T, p.53:16-19; Exh. No. KKS-8T, p.15:4-12.

<sup>&</sup>lt;sup>59</sup> Exh. No. EMA-6T, at p.32:1-3.

<sup>&</sup>lt;sup>60</sup> <u>See</u> Exh. No. CSH-1T, p.56:20 – 57:2.

<sup>&</sup>lt;sup>61</sup> See Exh. No. EMA-6T, p.32 - 33:3.

2016.) The revenue requirement associated with the Company's 2017 AMI "after-attrition adjustment" is \$3.8 million for electric and \$1.2 million for natural gas.<sup>62</sup>

It is important to remember, as testified to by Company Witness Norwood, that Avista is only requesting recovery of the AMI-related costs during the rate period; it is not requesting an overall prudence determination at this time for <u>all</u> future investments and operating costs associated with AMI. Those costs will be the subject of subsequent rate filings.<sup>63</sup> In this case, however, Avista has provided supporting documentation for the AMI-related costs for the rate period, demonstrating the reasonableness of those costs. Other than Public Counsel opposing AMI in general, no party has challenged any particular item or component relating to such costs, after having had more than six months to review these costs and determine their reasonableness.<sup>64</sup> (See <u>also</u> Nightingale, TR. 244)

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If the Commission were to accept Staff Witness Nightingale's position that all cost recovery for AMI should wait until an after-the-fact review can be conducted, it would suggest that no costs associated with AMI could be recovered by Avista until after full deployment is completed in 2021.<sup>65</sup> As noted by Company Witness Norwood, "such a result would have a significant, negative, financial impact on the Company."<sup>66</sup>

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AMI, after all, is a major, multi-year project and the dollars invested in the project will be <u>transferred to plant-in-service as certain components are completed along the way</u>, as testified to by Mr. Norwood.<sup>67</sup> This is unlike the rate-basing of a new power plant which involves the

<sup>&</sup>lt;sup>62</sup> <u>Id</u>. at p.33:7-8.

<sup>&</sup>lt;sup>63</sup> Exh. No. KON-1T, p.31:25 – 32:3.

<sup>&</sup>lt;sup>64</sup> <u>Id</u>. at p.32-20-23.

<sup>&</sup>lt;sup>65</sup> While Staff Witness Nightingale seems to suggest that the Commission should essentially wait before entertaining rate relief for the projects that will be in-service in 2017, he also acknowledges that, in the meantime, the Company will have been denied approximately \$5 million annually of the associated revenue requirement. (See Nightingale, TR. 252:15-23) And this will occur without any determination that these cost elements were imprudent.

<sup>&</sup>lt;sup>66</sup> Exh. No. KON-1T, p.34:1-14. Even if the recommendation is to wait for any cost recovery for AMI investment made in 2017, until an after-the-fact review can be conducted, that would essentially "involve a Company filing in 2018 to allow review of the AMI investment in 2017, with recovery of the 2017 costs to begin at the conclusion of the case in 2019. This would represent a <u>two-year lag on recovery of a major investment by the Company</u>," as testified to by Mr. Norwood. Exh. No. KON-1T, p.34: 6-14

<sup>&</sup>lt;sup>67</sup> <u>Id</u>. at p.34- 35:10.

investment in a single project that does not transfer to plant-in-service until after the <u>entire</u> project is completed – several years after its inception.<sup>68</sup> At the end of the day, as testified to by

Mr. Norwood:

For AMI, because 'chunks' of the investment will be periodically moved to plant in service, there would be no opportunity for Avista to receive timely recovery of the costs if the costs are not included in each rate case as provided by Avista in this case.<sup>69</sup>

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In its Order 05 in Dockets UE-150204 and UG-150205, the Commission determined, at the time, that Avista's requested AMI rate relief presented an issue "not ripe" for Commission

determination. (Id. at ¶191.) According to the Commission:

We view Avista's requests in this case as requests that the Commission take the first step towards a prudence determination <u>prior to the Company even selecting a</u> <u>vendor to replace the meters, or for that matter, deciding on specific vendors for the meters, communications network, and related infrastructure supporting such a large project. (Emphasis added)</u>

(Id. at ¶190.) Those deficiencies have been remedied in this case. As indicated above, Avista has since entered into six different procurement contracts with vendors, accounting for nearly 80% of all anticipated purchases from outside vendors. These include the recent contract with Itron for the meters, as well as contracts with five other vendors for such matters as the meter data management computer application and installation. (See Exh. No. DN-3CXC, at p.2, for a listing of the primary AMI systems contractors, as well as the information technology support contractors.) Moreover, as shown in Exhibit DN-3CXC, the Company will have spent nearly \$23 million (WA share) on AMI through the end of 2016, and by the end of 2017, the <u>cumulative</u> amount of gross capital spending on AMI (WA share) will approximate \$70.5 million.<sup>70</sup>

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Included in the Company's "after-attrition adjustment" is only \$17.9 million reflecting <u>transfers-to-plant</u> for completed work in 2017 (which is much less than the overall AMI project spending level (WA share) of \$70.5 million through 2017). Bench Request No. 8, describes, the

<sup>&</sup>lt;sup>68</sup> Until such a project is completed, the Company accrues AFUDC on the project to cover its carrying costs, and depreciation does not begin until the investment is transferred to plant-in-service. <u>Id</u>. at p.35:1-10.

<sup>&</sup>lt;sup>69</sup> <u>Id</u>. at p.35:7-10.

<sup>&</sup>lt;sup>70</sup> Exh. No. DN-3CXC; see Table No. 1.

constituent projects that make up this level of \$17.9 million of transfers-to-plant.<sup>71</sup> Inasmuch as each of these items are transfers to plant during the rate-effective period, they will be in-service and useful for customers. As testified to by Company Witness Rosentrater, Avista's customers will derive actual benefits from these completed projects in 2017, long before the full deployment of AMI is completed in 2021.<sup>72</sup> That was not controverted.

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On cross-examination, Staff Witness Nightingale recognized that if the costs incurred by the Company for these discrete AMI projects during the 2017 rate effective period are not reflected in the revenue requirement, those costs will be essentially absorbed by Avista.<sup>73</sup> And he recognized that the associated revenue requirement in connection with the 2017 AMI projects is approximately \$3.8 million for electric and \$1.1 million for natural gas – for a total of \$4.9 million.<sup>74</sup> (See also Exh. No. DN-3CXC, Table 2)

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Moreover, Mr. Nightingale acknowledged that Staff had been provided with specific information surrounding these 2017 investments in AMI, as part of the Company's initial filing, and that he had not challenged the prudency of these items.<sup>75</sup> At the end of the day, AMI, unlike some projects, is a multi-year major project where dollars invested will be transferred to plant-in-service over time, as certain components are completed. This differs from the rate basing of a new power plant, which involves investment in a single project that does not transfer to plant-in-service until the <u>entire</u> project is completed – often several years after its inception.

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Contrary to Staff Witness Nightingale's suggestion that approval of the recovery of AMI costs in this rate period would somehow "limit the Commission's ability to hold the Company accountable after the fact for appropriate expenditures and levels of expenditures for capital

<sup>&</sup>lt;sup>71</sup> See Exh. No.BR-8; Nightingale, TR. 243-244.

<sup>&</sup>lt;sup>72</sup> Rosentrater, TR. 237:20-239:1. The transfers to plant in 2017 include the following projects: Collector Infrastructure; Meter Deployment; Head End System; Meter Data Management; and Data Analytics. (See Exh. No. BR-8)

<sup>&</sup>lt;sup>73</sup> TR. Nightingale TR. 252.

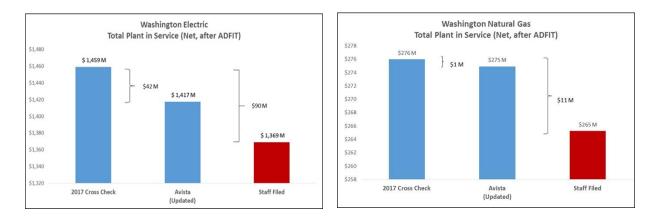
<sup>&</sup>lt;sup>74</sup> (<u>Ibid</u>.)

<sup>&</sup>lt;sup>75</sup> (<u>Id</u>. at TR. 244)

additions and operations,<sup>76</sup> it should be noted that the Company is only requesting recovery of the documented costs during the rate period, and not for any possible cost-overruns, and not for future costs. All parties have had an opportunity to review those costs and determine the reasonableness of those costs. Other than Public Counsel opposing AMI in general, no party has challenged the prudence of any specific capital or expense item associated with AMI during the rate period.

d. Even With An "After Attrition Adjustment," the Attrition Studies Will Significantly Understate the Level of Capital in Service During the 2017 Rate Year.

The following charts compare total net plant-in-service for both Washington electric and Washington natural gas in Avista's updated attrition analysis, as compared with its 2017 "Cross Check" analysis, and finally with Staff's filed attrition case:<sup>77</sup>



These charts demonstrate that the level of net plant (after ADFIT) included in the Company's electric and natural gas 2017 Attrition Studies, are still understated from that shown in Avista's 2017 Cross Check Studies <u>by \$42 million</u> for electric and <u>\$1 million</u> for natural gas.<sup>78</sup> Even more telling is the fact that Staff's net plant balances reflected in its electric and natural gas 2017

<sup>&</sup>lt;sup>76</sup> See Exh. No. DN-1T, p.7:22 – 8:2.

<sup>&</sup>lt;sup>77</sup> Exh. No. EMA-6T, p.35 – 36.

<sup>&</sup>lt;sup>78</sup> The "Cross Check Studies" reflect what the Company actually expects to occur for the rate period based on capital projects that are either already in progress or specifically planned for completion during the period. (Exh. No. EMA-6T, p.36:13-19)

Attrition Studies are <u>\$90 million</u> and <u>\$11 million</u> <u>understated</u>, for electric and natural gas, as compared with Avista's own 2017 Cross Check Studies. Accordingly, as testified to by Company Witness Andrews, Staff's level of net plant "equates to over \$12 million in understated electric revenue requirement for the Washington jurisdiction in 2017 alone." <sup>79</sup>

- 2. <u>Differences Between Staff and the Company in Their Natural Gas Attrition Studies.</u>
- The main differences in results between Avista's and Staff's <u>natural gas</u> Attrition Studies (beyond ROE) relate to three issues representing a difference of \$4.2 million of revenue requirement in 2017, and \$1.5 million in 2018:
  - The O&M growth rate applied to operating expenses, resulting in a difference of \$552,000 in 2017, and \$136,000 in 2018;
  - Staff's use of linear regression modeling rather than non-linear modeling as applied by Avista, resulting in a difference of \$2.467 million in 2017 and \$1.351 million in 2018; and
  - Staff's exclusion of the 2017 Advanced Metering Infrastructure (AMI) project as an "afterattrition" adjustment resulting in an additional difference of \$1.155 million of associated revenue requirement.80

The shortcomings of Staff's use of its O&M growth rate, as applied to both electric and natural gas operating expenses, was previously discussed above, and will not be repeated here. The same is true of Staff's exclusion of the 2017 AMI project as an "after-attrition adjustment." The other remaining difference in the natural gas Attrition Studies relates to Staff's use of linear regression modeling rather than non-linear modeling as applied by Avista.

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Staff Witness Hancock used a combination of linear and non-linear (polynomial) regression analyses to calculate his natural gas attrition growth rates. As explained by Company

Witness Andrews, Avista has two concerns with the application of his regression analysis:

First, due to his disaggregation of certain cost categories, his application of linear and non-linear (polynomial) regression <u>is not consistent</u>. And secondly, in some instances where a linear regression analysis was used, Mr. Hancock failed to recognize 'kink points' which exist in the data. (Emphasis supplied)<sup>81</sup>

<sup>&</sup>lt;sup>79</sup> Exh. No. EMA-6T, p.36:20 - 37:2.

<sup>&</sup>lt;sup>80</sup> <u>Id</u>. at pp. 4-5.

<sup>&</sup>lt;sup>81</sup> Exh. No. EMA-6T, p.39:1-8.

While Staff Witness Hancock used the same 2007-2015 time period as Avista, he was <u>inconsistent</u> in his use of linear and non-linear regression analyses to produce his natural gas attrition growth rates.<sup>82</sup> In some instances, Mr. Hancock used a linear regression analysis for certain cost categories that are not linear (<u>e.g.</u>, for natural gas General Plant and General Plant Accumulated Depreciation).<sup>83</sup> He does, however, appropriately apply non-linear regression to the categories of Underground Storage and Distribution Plant which do have non-linear time paths.<sup>84</sup> Staff's second error consisted of its failure to recognize "kink points" which exist in Mr. Hancock's analyses.<sup>85</sup>

#### D. Conclusion: In the End, Staff's Proposals Understate Avista's Need for Rate Relief.

Based on the average of Staff's 2017 and 2018 Attrition Study results, Staff has proposed a one-time rate adjustment of \$25.6 million for electric and \$2.1 million for natural gas, effective January 1, 2017, for the 18-month rate period (January 1, 2017 through June 30, 2018). In contrast, the Company has proposed a two-step increase of \$38.6 million for electric and \$4.4 million of natural gas on January 1, 2017, and \$9.0 million for electric and \$941,000 for natural gas on January 1, 2018. For the reasons stated above, Staff's proposals understate Avista's need for rate relief during the 18-month period, are not reasonable based on the evidence in the record, and would not allow Avista an opportunity to earn a reasonable rate of return for the rate period.<sup>86</sup>

#### E. <u>Attrition Studies of ICNU/NWIGU (Witness Mullins) Are Flawed and Should Not Be</u> <u>Relied Upon</u>.

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Mr. Mullins, on behalf of ICNU and NWIGU, sponsors electric and natural gas Attrition

Studies that are inconsistent in their use of trending periods and understate the growth factors for

each cost category, thereby producing significantly lower revenue requirement results than are

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<sup>&</sup>lt;sup>82</sup> In contrast, Mr. Hancock consistently used <u>only the linear regression analysis</u> for his electric attrition growth rate. <u>See also</u> Testimony of Dr. Forsyth addressing the <u>inconsistency</u> in Staff's application of linear versus non-linear regression. (<u>See Exh. No. GDF-1T, p.11:6 – 12:16</u>)

<sup>&</sup>lt;sup>83</sup> Exh. No. EMA-6T, p.41:1-10.

<sup>&</sup>lt;sup>84</sup> <u>Ibid</u>.

<sup>&</sup>lt;sup>85</sup> As discussed further by Dr. Forsyth, a "kink point" is a point in which the data in a series has a definite "kink" in the data series up or down from previous data points that should be recognized if a linear regression analysis is used. (See Exh. No. GDF-1T, pp.3-9)

<sup>&</sup>lt;sup>86</sup> See Exh. No. EMA-6T, p.5:5-14.

reasonable. More specifically, the Company takes issue with Mr. Mullins' choice of years of trending data (2000-2015) as well as his regression trending methodology, which are inconsistently and inappropriately applied across his electric and natural gas models.<sup>87</sup> This prompted Staff Witness Hancock to characterize Mr. Mullin's attrition studies as "arbitrary and seemingly engineered to produce similar results to that of his more traditional revenue requirements study."<sup>88</sup> The result he believes is "an ad hoc mismatch of subjective judgments."<sup>89</sup>

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This Commission has previously addressed the use of an appropriate time period for purposes of trending. As recently as in Order 05 in January of this year, the Commission reviewed the time periods that were appropriate to use within the Attrition Studies applied to Avista's historical data. It concluded that the period of 2007-2014 was appropriate based on testimony that a "kink point" existed in the data series beginning in 2007 and going forward. (See Order 05, supra at ¶71 and ¶114) As noted by Company Witness Andrews, "nothing significant has changed between the conclusion of that proceeding and this current case that would warrant a change or shift in the appropriate period of data to use within the attrition models being considered, namely 2007 and beyond, other than adding an additional historical year (2015) to the end of the previous historical time period as it became available."<sup>90</sup>

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Mr. Mullins also chooses to vary the number of years he chooses to trend, depending on the particular cost category.<sup>91</sup> For electric, his data series by cost category ranges anywhere from 2005-2015 (for "Distribution Taxes Other Than Income"), to only 2013-2015 (for "Accumulated

<sup>&</sup>lt;sup>87</sup> <u>Id</u>. at p.5:16-24.

<sup>&</sup>lt;sup>88</sup> Exh. No. CSH-10T, p.5:15-16.

<sup>&</sup>lt;sup>89</sup> <u>Id</u>. at p.6:6-8.

<sup>&</sup>lt;sup>90</sup> Exh. No. EMA-6T, at p.45:13-16.

<sup>&</sup>lt;sup>91</sup> Mr. Mullins disaggregates Avista's expense cost categories into multiple items (10 electric, 11 natural gas) and separated ADFIT from Net Plant, producing multiple plant categories (6 electric, 4 natural gas). (<u>Id</u>. at p.45, n.47) Staff, within both its electric and natural gas Attrition Studies, further disaggregates cost categories for gross plant and accumulated depreciation by functional group. In contrast, Avista used a single growth factor for all net plant (after ADFIT). Exh. No. EMA-6T, p.37:10-19. Avista's approach, as testified to by Ms. Andrews, "is consistent with that proposed by Avista and Staff in its prior general rate case." As shown in Table No. 10 in Ms. Andrews' rebuttal testimony, for the <u>electric</u> trended results, the result <u>is essentially the same</u>, irrespective of the level of granularity, using the same regression analysis (linear regression) across all plant cost categories. (Exh. No. EMA-6T, p.38:1-18)

Deferred Income Taxes"). For natural gas, he also used several data series that ranged from 2000 to 2015 (for "Administrative and General Depreciation Expense") to only 2012-2015 (for "Administrative and General Expenses"). For other categories such as "Accumulated Deferred Income Taxes" he trends the data only using the 2009-2015 time period.<sup>92</sup> Simply put, there is no consistency whatsoever in his use of selected time periods for his trending analysis.<sup>93</sup>

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Not only does Mr. Mullins' mix and match data series in an inconsistent way, he ignores obvious "kink points." These "kink points" clearly exist over the 2000-2015 time periods that Mr. Mullins has chosen to use for various cost categories. He thereby ignores recent data trends which has the effect of understating the escalation factors used in his models.<sup>94</sup>

Nor is it fair to suggest that the use of an attrition adjustment becomes a "self-fulfilling prophecy," as does Mr. Mullins.<sup>95</sup> Along with its filing, the Company provided extensive documentation and explanations of all capital projects completed and planned for the near term. It responded to hundreds of data requests from the parties, who had more than six months to review specific capital investment items. As observed by Mr. Norwood, "it is noteworthy that no party in this case identified a single capital project that <u>should not be done</u> in the time frame in which the capital projects are being carried out by the Company."<sup>96</sup>

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Moreover, with regard to utility operating costs, Staff Witness Hancock recognizes in his testimony the reality of a continuing increase of such operating expenses and capital investment:

Expenses and capital investments are growing faster than revenues. <u>The growth</u> rates in expenses and capital investments are largely the result of factors that appear

<sup>&</sup>lt;sup>92</sup> Exh. No. EMA-6T, p.45:17 – 46:6.

<sup>&</sup>lt;sup>93</sup> A particular example will help make this point. He used only a 2013-2015 time period for electric ADFIT, but uses the period of 2007-2015 for his net plant categories. What he ignores is that a "Repairs Allowance" related to ADFIT was recorded in 2014, which included prior period amounts for the periods of 2011-2014, thereby impacting the trending slope for the period of 2013-2015. And yet, he simply uses the 2013-2015 time period for trending growth for ADFIT. Exh. No. EMA-6T, p.46:7-47:1. Accordingly, he mixes "apples to oranges" by using a 2007-2015 trend for net plant growth, but using a shorter 2013-2015 trend for ADFIT, which is an offset to net plant growth.

<sup>&</sup>lt;sup>94</sup> Exh. No. EMA-6T, p.47:10-14. Dr. Forsyth, on behalf of Avista, presents numerous examples to show the impact of ignoring obvious "kink points" in the data stream. See Exh. No. GDF-1T, p.3-11:3.

<sup>&</sup>lt;sup>95</sup> Exh. No. BGN-1T, p.8:13

<sup>&</sup>lt;sup>96</sup> Exh. No. KON-1T, p.16:19-21

to be outside of the control of the utility. Revenue growth is flat. To the extent that revenues are a function of load growth, load growth nonetheless remains low. <sup>97</sup> (Emphasis added)

#### F. <u>Public Counsel Witness Watkins Mischaracterizes the Rate of Growth in Distribution</u> <u>O&M and A&G.</u>

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Mr. Watkins, on behalf of Public Counsel, expressed concerns over the rate of growth in distribution O&M and A&G from 2013-2015.<sup>98</sup> By relying on only selected subsets of data pertaining to limited portions of the Company's operations, he incorrectly draws inferences that the Company is not managing its business or otherwise controlling its costs. As explained by Witness Andrews, his analyses are "inappropriate and misleading."<sup>99</sup> His results are derived from a limited subset of data that are not representative of the overall increases in distribution O&M and A&G. For example, if he had looked at the change in Avista's electric O&M and A&G expense as a whole from 2014 to 2015, he would have found an overall growth rate of 3.9%, which is not unreasonable, and is dramatically below the 12.9% and 9.13% numbers he presented to the Commission.<sup>100</sup> This prompted Witness Andrews to observe that, if he had "looked under the hood," he would "have understood the specific circumstances that drove the higher growth in costs from 2014 to 2015 for those limited subsets of data.<sup>"101</sup>

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Even though he selectively chose certain limited subsets of data, Mr. Watkins had more than six months since the date of the Company's filing in February of 2016 to "look under the hood" and propound data requests, in order to understand the reasons for the cost increases in these limited subsets of data. Unlike members of the Staff, however, he did none of the above.<sup>102</sup>

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Ms. Andrews also identified other items that caused his growth percentages for distribution O&M and A&G in the 2013-2015 time frame to be higher. For example, there was an increase in

<sup>&</sup>lt;sup>97</sup> Exh. No. CSH-1T, p.21:6-9.

<sup>&</sup>lt;sup>98</sup> Exh. No. GAW-1T, p.18:7-11.

<sup>&</sup>lt;sup>99</sup> Exh. No. EMA-6T, p.48:12-18.

<sup>&</sup>lt;sup>100</sup> <u>Id</u>. at p.48:19 – 49:3. For example, Mr. Watkins, in his Tables 9 and 10, on pages 13-14 of his testimony, shows growth in electric distribution O&M expenses of 12.9% from 2014 to 2015, and in Table 12, on page 16, he shows total growth in electric salary and wage expense of 9.13% from 2014 to 2015.

<sup>&</sup>lt;sup>101</sup> <u>Id</u>. at p.48:19-21.

<sup>&</sup>lt;sup>102</sup> <u>Id</u>. at p.49:4-11.

full-time employees resulting from the cancellation of a contract whereby an independent contractor had provided IS/IT personnel to support the Company's operations. Nearly 30 IS/IT personnel who had previously provided support for the Company's operations under a third party contract (i.e., they were not employees of Avista) were hired by Avista in 2014, after Avista cancelled the third party contract. Avista did so because it was <u>more cost-effective</u> to hire these employees directly rather than pay a higher amount to the vendor. While overall Avista labor costs increased, the <u>overall net expense actually decreased</u> with the cancellation of the contract. While his Tables reflect approximately \$2.0 million of increased labor costs, there was a corresponding decrease of \$3.0 million in contract expenses, thereby <u>saving customers approximately \$1.0 million on a net basis</u>. This \$3 million reduction in expense, however, was not reflected in Mr. Watkins' table because those expenses were recorded elsewhere.<sup>103</sup> This is a perfect example of the danger in selecting only certain subsets of data and drawing inferences therefrom, without "looking under the hood." <sup>104</sup>

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In conclusion, Mr. Watkins has drawn inferences from only limited subsets of data, and has drawn comparisons that were inaccurate and misleading. The data that he uses is not representative of the whole of Avista's electric O&M and A&G expenses, which are otherwise reasonable. That growth rate of O&M and A&G expense as a whole from 2014 to 2015 was 3.9% – well below the numbers proffered by Mr. Watkins.

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The Cross-Answering Testimony of Staff Witness Hancock also noted that Mr. Watkins' "reliance on general inflation rates is unreasonable."<sup>105</sup> His use of CPI, reflecting a market basket of consumer goods and services does not reflect utility purchasing: "Utilities do not eat breakfast

<sup>&</sup>lt;sup>103</sup> Exh. No. EMA-6T, p.50:14-27.

<sup>&</sup>lt;sup>104</sup> Another example pertains to atmospheric corrosion monitoring that is required to be conducted at least once every three calendar years. Avista has conducted this monitoring <u>every third year</u> from 2007 through 2015; accordingly, Washington's costs occurred and were recorded in 2009, 2012 and <u>2015</u>. Not surprisingly, then, a comparison of the growth in costs for the period 2013 to 2015 would naturally show a higher increase in costs for this period, driven by these additional costs in 2015. <u>Id</u>. at p.51:3-18.

<sup>&</sup>lt;sup>105</sup> Exh. No. CSH-10T, p.1:13.

cereal, or smoke cigarettes, or attend college."<sup>106</sup> As also explained by Dr. Forsyth, Mr. Watkins' use of the Producer Price Index (PPI) is "too broad of an index for the types of goods and services purchased by Avista, and therefore is not representative of the inflation experienced by the Company." (Exh. No. GDF-1T, p.14:19-23) Similarly, Mr. Watkins' reference to the Consumer Price Index (CPI) for all urban consumers is inappropriate, because the CPI is tracking inflation on all retail goods and services in urban areas; therefore, it does not reflect prices on the goods and services purchased by businesses such as Avista. (Exh. No. GDF-1T, p.14:9 – 15:3)

#### III. <u>ATTRITION-ADJUSTED RATES HAVE PRODUCED A REASONABLE END</u> <u>RESULT</u>

At the end of the day, the "end result" of the Commission's decision must produce rates that are just, reasonable and sufficient. They must be not only fair to customers, but fair to Avista. On their face, the revenue requirement proposals of certain parties to this case produce demonstrably unreasonable results. For example, ICNU's initial Attrition Analysis produced an electric revenue decrease of <u>\$3.8</u> million, as compared with Avista's proposed electric increase of \$38.6 million – a difference of \$42.4 million.<sup>107</sup> As explained by Mr. Norwood on behalf of the Company, if the Commission were to in fact order an electric revenue adjustment that was \$42.4 million lower than what is needed in order to allow the Company to earn its currently allowed ROE of 9.5%, this would provide Avista with an ROE earnings opportunity <u>of only 5.3%</u>.<sup>108</sup> Clearly this would not produce a reasonable "end result."<sup>109</sup> [ICNU<sup>110</sup> subsequently amended its proposal to reflect a lesser electric revenue requirement decrease of \$1 million and a \$2 million decrease for natural gas in 2017; this is still woefully deficient.]

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It is fair to ask, however, how Avista's after-the-fact earned returns for the period 2013-2015 compared with the returns authorized by the Commission. For 2013-2015, Avista's

<sup>&</sup>lt;sup>106</sup> <u>Id</u>. at p.3:2.

<sup>&</sup>lt;sup>107</sup> Exh. No. KON-1T, p.4:20 – 5:2; see also Exh. No. BJM-1T, p.12.

<sup>&</sup>lt;sup>108</sup> Exh. No. KKN-1T, at p.5:3-10.

<sup>&</sup>lt;sup>109</sup> Public Counsel, for its part, did not even include an electric or natural gas revenue requirement proposal for the Commission's consideration.

<sup>&</sup>lt;sup>110</sup> Exh. No. BGM-10T, p.2:18 - 3:1.

normalized Returns On Equity (ROE) for its Washington electric and natural gas operations show that it somewhat over-earned for its electric operations and under-earned for its natural gas operations during the three year period, although its earned ROE for its Washington utility operations as a whole were quite close to the authorized ROE.<sup>111</sup> These results prompted Mr. Norwood to observe:

These results indicate that the overall revenue adjustments approved for Avista by the Commission for 2013, 2014 and 2015, based on the underlying attrition analyses, were very close to what they should have been in order to allow Avista an opportunity to earn its allowed return for its Washington utility operations.<sup>112</sup>

Finally, a similar result has been observed thus far in 2016 for Avista's electric and natural gas operations. After examining the electric and natural gas earnings sharing deferrals for Washington operations for the first six months of 2016, the results, when translated into equivalent ROEs, yield an estimated electric ROE for 2016 of 9.54%, as compared with the authorized ROE of 9.5%; and for natural gas it demonstrates a 10.2% ROE as compared to the same authorized ROE of 9.5%.<sup>113</sup> All of this suggests that the most recent revenue adjustments ordered by this Commission in Order 05 in Docket Nos. UE-150204 and UG-150205 in January of this year were "very close to what they needed to be in order for Avista to have the opportunity to earn its allowed return for 2016."<sup>114</sup>

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Accordingly, the earned ROEs for Avista for 2013 through 2015, as well as the most recent results for 2016 are "an after-the-fact confirmation that the recent revenue increases granted by the Commission, based on recognition of attrition, [have] resulted in earned returns very close to the authorized ROEs," as testified to by Mr. Norwood.<sup>115</sup>

<sup>&</sup>lt;sup>111</sup> This information is based on the Company's Commission Basis Reports (CBR) filed annually with the Commission which provide an after-the-fact "apples-to-apples" comparison with the ROE authorized by the Commission for the respective periods. (Exh. No. KON-1T, p.10:20 – 11:15)

<sup>&</sup>lt;sup>112</sup> (Emphasis added) <u>Id</u>. at p.12:3-6.

<sup>&</sup>lt;sup>113</sup> <u>Id</u>. at p.13:11-18; as explained by Mr. Norwood, gas ROE percentages are very sensitive to relatively small changes in revenue, given a proportionately smaller level of natural gas rate base (10 basis points in ROE equals \$145,000) (Norwood, TR. 114:17-22).

<sup>&</sup>lt;sup>114</sup> <u>Id</u>. at p.13:19-22.

<sup>&</sup>lt;sup>115</sup> <u>Id</u>. at p.14:4-10.

Company Witness Smith<sup>116</sup> presented the Company's "Modified Test Year" study<sup>117</sup> and adjusted it to reflect not only agreed-upon adjustments by the parties, but also updates to reflect more recent information.<sup>118</sup> She also presented a "Cross Check Study" for the purpose of reflecting the level of net plant and operating expense that will be experienced by the Company during the 2017 and 2018 rate-effective period – a "bottoms-up" study. While Avista's proposed revenue requirement was not specifically derived from its "Cross Check Study," as explained below, such a study served as a useful comparison with the results of the Attrition Studies prepared by the Company and Staff. (Avista's Attrition Study, however, forms the basis for Avista's filed-for revenue requirement.)

Notwithstanding the differences between the parties with respect to calculating a "Modified Test Year," the more important point is that <u>none</u> of these studies serve to capture the level of capital investment or operating expense in 2017 and 2018 – as shown in the Company's "Cross Check Study." And that is why, as discussed below, the Commission's previous practice of basing rates on Modified Test Years will not work under the "new normal" circumstances whereby new investment in plant and operating expenses outpace revenues.

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The Cross Check Studies produce a revenue requirement analysis based on individual restating, Pro Forma and Cross Check adjustments, providing a "separate independent analysis of Avista's need for rate relief for the calendar 2017 and January to June 2018 rate periods," as

<sup>&</sup>lt;sup>116</sup> Exh. No. JSS-4T.

<sup>&</sup>lt;sup>117</sup> Id. at pp. 2-9. In developing its Modified Test Year Study, Staff only included transfers-to-plant on major pro forma projects through July of 2016. Moreover, in preparing its study, Staff used a limiting threshold for "major" projects of "one-half of one percent" of net utility plant, resulting in a threshold of \$7.9 million for electric and \$1.5 million for the definition of a "major" plant investment. (Exh. No. KKS-8T, p:3:7-4:1, at p.3:7-14) This limiting "threshold" serves to exclude approximately one-half of the overall plant that will actually be serving customers in the rate-effective period, i.e., it excludes smaller discreet levels of investment not otherwise meeting the threshold. And yet, those investments will be in service during the rate-effective period.

<sup>&</sup>lt;sup>118</sup> In the course of preparing its "Modified Test Year" study, Company Witness Smith also identified various Staff and Intervenor adjustments with which Avista disagreed. See Exh. No. JSS-4T, pp. 9-29. The Staff and Intervenor proposed adjustments to the "Modified Test Year" that were rejected by Avista are summarized in Table No. 5 of Ms. Smith's testimony. (Exh. No. JSS-4T, p.10). The explanations of why these Staff and Intervenor proposed adjustments were rejected by Avista are set forth at pages 10-29 of Ms. Smith's rebuttal testimony, and will not be repeated here.

testified to by Company Witness Smith.<sup>119</sup> In her rebuttal testimony, Company Witness Smith also provided <u>updates</u> to its "Modified Test Year" and "Cross Check Studies," to reflect the most recent information.<sup>120</sup> Total electric <u>rate base</u> equals \$1.51 billion for 2017, in Ms. Smith's updated analysis. This level of net rate base reflected in her Cross Check Study <u>exceeds</u> the amounts produced in the Company's Attrition Study by <u>\$43 million</u> for electric net rate base for the 2017 rate-effective period. Similar results were shown in the <u>updated</u> study with respect to natural gas where the "Cross Check Study" exceeds the level of net rate base otherwise shown in the Company's Attrition Study by \$4 million.<sup>121</sup> This comparison demonstrates the reasonableness (if not the conservative results) of Avista's Attrition Study.

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Expressed in terms of overall revenue requirement, how do the Company's Cross Check Studies compare with its Attrition Analysis? In Mr. Norwood's rebuttal<sup>122</sup>, he compares the revenue requirements supported by Avista's Modified Test Year Study, its Attrition Study, and its Cross Check Studies, as originally filed and as updated. (See Table No. 4 at page 23 of Exh. No. KON-1T) <u>As updated</u> in the Company's rebuttal filing, for 2017, the Company's "Cross Check Study" would support a <u>\$48.3 million revenue requirement</u> – well above the results of the updated Attrition Study of \$40.1 million for electric service and well above the \$38.6 million level of requested relief. These Cross Check Studies confirm the reasonableness of an "end result" arrived at by means of the Attrition Studies.<sup>123</sup>

<sup>&</sup>lt;sup>119</sup> Exh. No. JSS-1T, p.5:8-11. See The Company's Electric Pro Forma Cross Check Studies are provided in Exhibit No. JSS-2, and the Natural Gas Pro Forma and Cross Check Studies are provided in Exhibit No. JSS-3. The 2017 Cross Check Study revenue requirement is reconciled to the Attrition Study revenue requirement in order to establish revenue, expenses and rate base numbers that can be used as inputs to the Company's cost-of-service studies prepared by Company Witnesses Ms. Knox and Mr. Miller. (Exh. No. JSS-1T, p.5:11-14)

<sup>&</sup>lt;sup>120</sup> Exh. No. JSS-4T, p.1:15-19. She explains the updates to both her "Modified Test Year" and "Cross Check Studies" elsewhere in her testimony at pages 2-9 of her testimony. (Exh. No. JSS-4T)

<sup>&</sup>lt;sup>121</sup> Exh. No. KKS-8T, p.10:7-10.

<sup>&</sup>lt;sup>122</sup> Exh. No. KON-1T, p.23.

<sup>&</sup>lt;sup>123</sup> As in Dkt. Nos. UE-150204 and UG-150205, the Commission should continue to exercise its "broad discretion" and use its "informed judgment," given the facts and circumstances presented, in order to establish rates that are fair, just, reasonable and sufficient. Avista's three complementary studies (Modified Test Year, Attrition and Cross Check) provide "a solid foundation for an end result that is fair for customers and the Company," as testified to by Mr. Norwood. Exh. No. KON-1T, p.26:1-2.

#### IV. COST OF CAPITAL

#### A. <u>Introduction.</u>

Avista plans for a continuation of utility capital investments to preserve and enhance service reliability for our customers. Capital expenditures of approximately \$1.2 billion are planned for the three year period ending December 31, 2018.<sup>124</sup> Accordingly, as testified to by Company Witness Thies, Avista needs adequate cash flow from operations to fund these requirements and for repayment of maturing debt, together with access to capital from external sources under reasonable terms, on a sustainable basis.<sup>125</sup>

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The Company proposes<sup>126</sup> an overall rate of return of 7.68%, which includes a 48.5% common equity ratio, a 9.9% return on equity, and an updated cost of debt of 5.594%.<sup>127</sup> The proposed overall rate of return of 7.68% and the proposed capital structure will provide a reasonable balance between safety and economy.<sup>128</sup>

#### B. <u>Proposed Capital Structure of the Company is Reasonable.</u>

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The Company's requested capital structure consists of 51.5% debt, 48.5% equity, and with a requested overall rate of return of 7.68%, incorporating a 9.9% cost of common equity. This is summarized in the table below:<sup>129</sup>

<sup>&</sup>lt;sup>124</sup> Exh. No. MTT-1T, p.2:4-10.

<sup>&</sup>lt;sup>125</sup> <u>Ibid</u>.

<sup>&</sup>lt;sup>126</sup> Exh. No. EMA-6T, p.14:3-10.

<sup>&</sup>lt;sup>127</sup> Exh. No. MTT-1T, at p.2:11-15.

<sup>&</sup>lt;sup>128</sup> Exh. No. MTT-1T, at p.2:16-23. At present, Avista's corporate credit rating from Standard & Poor's is currently BBB and Baa1 from Moody's Investors Service. In order to maintain or improve its corporate credit rating, a "supportive regulatory environment" is an important consideration of rating agencies when reviewing Avista, as testified to by Witness Thies. Maintaining solid credit matrix and credit ratings will assist Avista in accessing capital markets at reasonable rates. Exh. No. MTT-1T, p.32:23-25.

<sup>&</sup>lt;sup>129</sup> Exh. No. MTT-1T, p.18:1-7

AVISTA CORPORATION Proposed Cost of Capital								
			Percent of				Component	
		Amount	Total Capital	_	Cost	_	Cost	
Total Debt	\$	1,678,000,000	51.50%		5.594%		2.88%	
Common Equity		1,580,252,427	48.50%	(3)	9.90%	(1)	4.80%	
Total	\$	3,258,252,427	100%				7.68%	

On September 30, 2015, Avista's common equity percentage for the Washington jurisdiction was 49%.<sup>130</sup> After taking into account the timing of equity issuances for 2016 and the need for capital expenditures, Avista expects to maintain an average common equity level of approximately 48.5% for 2017, as testified to by Company Witness Thies.<sup>131</sup>

#### C. <u>An ROE of 9.9% is Reasonable and Supported by the Record.</u>

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Mr. Adrien McKenzie, on behalf of the Company, presents analysis which demonstrates that the Company's proposed 9.9% ROE, together with the proposed equity layer of 48.5%, would properly balance safety and economy for customers, and provide Avista with an opportunity to earn a fair and reasonable return, while providing access to capital markets under reasonable terms on a sustainable basis.<sup>132</sup> Mr. McKenzie's ROE recommendations will be addressed below.<sup>133</sup>

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Avista's proposed "weighted cost of equity" is 4.80% (derived by multiplying 9.9% times the 48.5% equity ratio). Avista's proposed weighted cost of equity of 4.80% <u>is squarely in the middle of the range</u> of weighted cost of equity numbers approved by state regulators for investor-owned utilities across the Country, for the 12-month period from January 1, 2015, through December 31, 2015.<sup>134</sup>

<sup>&</sup>lt;sup>130</sup> Id. at p.19:2-3.

<sup>&</sup>lt;sup>131</sup> Exh. No. MTT-1T, p.19:12-13; According to Mr. Thies, a 48.5% common equity ratio "solidifies our current credit ratings and moves us closer to our long-term goal of having a corporate credit rating of BBB+." Avista's corporate credit rating now stands at BBB from S&P. A BBB+, however, would be comparable with other U.S. utilities providing electricity and natural gas. (Exh. No. MTT-1T, p.31:3-9) (Exh. No. MTT-1T, p19:12-19)

 $<sup>^{132}</sup>$ <u>Id</u>. p.27:21 – 28:4.

<sup>&</sup>lt;sup>133</sup> Exh. No. AMM-1T; Exh. No. AMM-14T.

<sup>&</sup>lt;sup>134</sup> (See Illustration No. 7, at p.28 of Exh. No. MTT-1T, depicted in a bar chart representing all Commission decisions that specify an ROE and equity ratios for utilities during this prior 12- month period ending December 31, 2015.)

In support of his ROE recommendation, Mr. McKenzie presented the application of several well-accepted quantitative analyses to estimate the current cost of equity for a referenced group of comparable-risk utilities (the Proxy Group).<sup>135</sup> These analyses included the Discounted Cash Flow (DCF) model, the empirical form of the Capital Asset Pricing Model ("ECAPM"), the traditional Capital Asset Pricing Model (CAPM), an Equity Risk Premium approach based on allowed ROEs for electric utilities, and reference to expected rates of return for electric utilities.<sup>136</sup> These are all methods that are commonly relied on in evaluating investors' required rate of return. Mr. McKenzie then corroborated his quantitative analyses by applying the DCF Model to a group of low-risk <u>non-utility</u> firms.<sup>137</sup>

He summarized the results of his 21 cost-of-equity estimates arrived at through application of these various quantitative analyses in Table No. 1 of his Direct Testimony.<sup>138</sup> The combination of these analyses yielded a cost of equity recommendation in the range of 9.8% - 10.8%. After applying a flotation cost adjustment, his recommended range for an appropriate ROE was 9.93% - 10.93%.<sup>139</sup>

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Mr. McKenzie's recommended 9.9% ROE is, therefore, in his view a "conservative estimate" of investors' required ROE for Avista.<sup>140</sup> As shown in the excerpted figure from his Direct Testimony, Avista's requested ROE is on the lower end of the range of common equity estimates derived from the 21 different methods:<sup>141</sup>

<sup>&</sup>lt;sup>135</sup> His testimony compares the risk indicators of the Proxy Group and Avista. Exh. No. AMM-1T, p.33:1-9. It is Mr. McKenzie's belief that investors would likely conclude that the overall investment risks for Avista are generally comparable to those of the firms in the utility proxy group. (<u>Ibid</u>.)

<sup>&</sup>lt;sup>136</sup> Exh. No. AMM-1T, p.2:13-23.

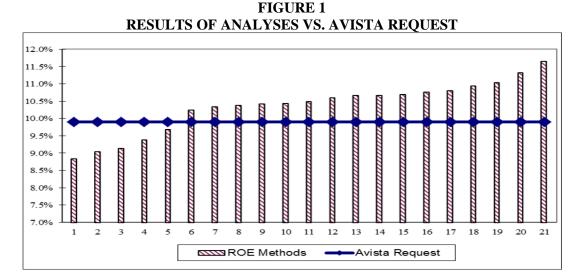
<sup>&</sup>lt;sup>137</sup> <u>Id</u>. at p.3:3-5.

<sup>&</sup>lt;sup>138</sup> Exh. No. AMM-1T, p.4.

<sup>&</sup>lt;sup>139</sup> <u>Id</u>.

<sup>&</sup>lt;sup>140</sup> Exh. No. AMM-1T, p.5:26-28.

<sup>&</sup>lt;sup>141</sup> Exh. No. AMM-1T, p.5:3-22.



Moreover, recognizing that utilities must compete for capital against other non-utility firms, Mr. McKenzie developed average DCF estimates for a low risk group of firms in the competitive sector, that range from 9.9% to 10.7% (averaging about 10.3%).<sup>142</sup> This reconfirms that a 9.9% ROE falls in the lower end of a reasonable range and provides a return commensurate with investments of comparable or lower risk and will provide support for the Company's ability to attract capital.<sup>143</sup>

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Mr. McKenzie was firm in his assertion that "no single method or model should be relied upon to determine a utility's cost of equity because no single approach can be regarded as wholly reliable."<sup>144</sup> That is why, in his opinion, ". . . comparing estimates produced by one method with those produced by other approaches ensures that the estimates of the cost of equity pass fundamental tests of reasonableness and economic logic."<sup>145</sup> The WUTC has also expressed the view that multiple methods and approaches should be employed:<sup>146</sup>

We value each of the methodologies used to calculate the cost of equity and <u>do not</u> <u>find it appropriate to select a single method as being the most accurate or</u> <u>instructive.</u> Financial circumstances are constantly shifting and changing, and we welcome the robust and diverse record of evidence based on a variety of analytics

<sup>145</sup> <u>Ibid</u>.

<sup>&</sup>lt;sup>142</sup> <u>Id</u>. at p.7:18-22.

<sup>&</sup>lt;sup>143</sup> <u>Ibid</u>.

<sup>&</sup>lt;sup>144</sup> Exh. No. AMM-1T, p.31:10-17.

<sup>&</sup>lt;sup>146</sup> <u>See</u> Exh. No. AMM-1T, p.31:19 – 32:2.

and cost of capital methodologies." (<u>PacifiCorp d/b/a Pacific Power & Light Co.</u>, Docket UE-100749, Final Order at p.91 (March 25, 2011))

His results follow:

- (1) Constant Growth DCF Model. The constant growth DCF model resulted in average costof-equity estimates ranging from 8.8% to 10.4%, or from 9.0% to 11.3% at the mid-point of each range (depending on the growth rates employed. (See Table 5 at p.34 of Exh. No. AMM-1T.)
- (2) Application of ECAPM. Like the DCF Model, the ECAPM is a forward-looking model based on expectations of the future. Mr. McKenzie applied this method to the Proxy Group, based on a forward-looking estimate for investors' required rate of return from common stocks, which indicated an average ROE of 9.8% for the Utility Proxy Group. After incorporating a "size adjustment," which corrects for the findings of financial research demonstrating that beta does not fully reflect the risks associated with a firm's size,<sup>147</sup> the resulting cost of common equity was 10.8%, or 11.0% after considering forecasted bond yields for 2016-2020.<sup>148</sup>
- (3) *Application of CAPM Model.* As shown in Mr. McKenzie's Exhibit No. AMM-9, p.1, the application of the forward-looking CAPM approach to the firms in the Proxy Group resulted in an average cost of equity estimate of 10.3%, after incorporating the size adjustment corresponding to the market capitalization of the individual utilities. And, after incorporating a forecasted Treasury bond yield for 2016-2020, the implied average cost of equity under this method would be 10.6%.<sup>149</sup>

<sup>&</sup>lt;sup>147</sup> Exhibit No. AMM-14T, p. 56-58.

<sup>&</sup>lt;sup>148</sup> Exh. No. AMM-1T, p.35:2-5, 11-13. With a market capitalization of approximately \$2.2 billion, Avista is one of the smallest publicly-traded utilities followed by The Value Line Investment Survey ("Value Line"), which have an average capitalization of approximately \$11.8 billion. (Exh. No. AMM-1T, p.11:16-20) As explained by Mr. McKenzie, the magnitude of the size disparity between Avista and other firms has "important practical implications" with respect to risks faced by investors; these greater risks imply a higher required rate of return, which is supported by empirical evidence. <u>Id</u>. at p.12:1-9.

<sup>&</sup>lt;sup>149</sup> <u>See</u> Exh. No. AMM-9, p.2.

- (4) Application of the Risk Premium Method. Equity risk premiums for electric utilities were derived based on surveys of previously-authorized rates of return on common equity. As shown in Exhibit No. AMM-10, p.1, adding an adjusted risk premium of 5.26% to the sixmonth average yield on triple-B utility bonds as of December 2015 of 5.41%, resulted in an implied cost of equity of approximately 10.7%.<sup>150</sup> Incorporating a forecasted yield for 2016-2020 and adjusting for changes in interest rates since the study implied an even higher cost of equity of approximately 11.7%.<sup>151</sup>
- (5) Results of the Expected Earnings Approach. Rates of return available from alternative investments of comparable risk can also provide "an important benchmark in assessing the return necessary to assure confidence in the financial integrity of a firm and its ability to attract capital," as explained by Mr. McKenzie.<sup>152</sup> He demonstrated that Value Line's projections imply an average return on common equity for the electric and gas utility industries of 10.7% and 11.0%, respectively, over the 2018-2020 forecast horizon.<sup>153</sup> As concerns the Proxy Group used by Mr. McKenzie, Value Line's projections suggest an average ROE of approximately 10.4%, with a midpoint value of 10.8%.<sup>154</sup>
- (6) Application of Flotation Costs. When equity is raised through the sale of common equity, there are costs associated with "floating" the new equity securities.<sup>155</sup> Moreover, this Commission has previously recognized that "flotation costs" are properly considered in setting the allowed ROE. In Docket No. UE-991606, this Commission concluded that a flotation cost adjustment of 25 basis points should be included in the allowed return on equity. (See Third Supplemental Order, WUTC Docket No. UE-991606, at p.95 (Sept. 2000).)

<sup>&</sup>lt;sup>150</sup> Exh. No. AMM-1T, p.36:9-14.

<sup>&</sup>lt;sup>151</sup> See Exh. No. AMM-10, p.2.

<sup>&</sup>lt;sup>152</sup> Exh. No. AMM-1T, p.36:16-22.

<sup>&</sup>lt;sup>153</sup> <u>Id</u>. at p.37:3-7.

<sup>154</sup> Ibid.

<sup>&</sup>lt;sup>155</sup> Flotation costs typically include services such as legal, accounting, and printing, as well as the fees and discounts paid to compensate brokers for selling the stock to the public. (<u>Id</u>. at p.37:14-16)

(7) Corroboration of Results through Application of the Non-Utility DCF Model. Because utilities compete with non-regulated firms for capital, Mr. McKenzie presented DCF analysis for a low risk group of Non-Utility Firms, with which Avista competes.<sup>156</sup> Mr. McKenzie developed a proxy group of non-utilities who are even less risky than Avista and the Proxy Group of utilities.<sup>157</sup> The DCF results of the non-utility group suggested average cost of equity estimates ranging from 9.9% to 10.7%.<sup>158</sup> These DCF results for the less risky, non-utility group again confirm that Avista's recommended 9.9% ROE is conservative.<sup>159</sup>

## D. <u>The Cost of Capital Recommendations of Other Parties are Insufficient.</u>

As discussed in Mr. McKenzie's rebuttal testimony<sup>160</sup> the cost of equity recommendations of Mr. Parcell (9.2%) on behalf of Staff and Mr. Gorman (9.1%) on behalf of ICNU are "simply too low and fail to reflect the risk perceptions and return requirements of real-world investors in the capital markets" as explained by Mr. McKenzie.<sup>161</sup> Their recommendations are significantly below recent average ROEs authorized by other state commissions.<sup>162</sup>

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And when one examines the proxy groups of both Mr. Parcell and Mr. Gorman, the authorized ROE data is even more compelling: the average authorized ROE for the firms in Mr. Parcell's proxy group is <u>10.14%</u>; for Mr. Gorman's group it is <u>10.39%</u>.<sup>163</sup> Stated differently, the allowed ROEs for utilities that Mr. Parcell and Mr. Gorman use as reasonably comparable

<sup>&</sup>lt;sup>156</sup> Id. at pp. 40-45. Under the regulatory standards of <u>Hope</u> and <u>Bluefield</u>, the salient criterion in establishing a meaningful benchmark to evaluate a fair ROE is relative risk, not the particular business activity or degree of regulation. <u>Id</u>. at p.40:18-22.

<sup>&</sup>lt;sup>157</sup> <u>Id</u>. at p.43, Table 6.

<sup>&</sup>lt;sup>158</sup> Exh. No. AMM-1T, p.44:1-9.

<sup>&</sup>lt;sup>159</sup> Staff also recognized the relevance of expected returns for non-utility companies in its evaluation. Exhibit No. DCP-1T, pp. 30, 33.

<sup>&</sup>lt;sup>160</sup> Exh. No. AMM-14T.

<sup>&</sup>lt;sup>161</sup> Exh. No. AMM-1T, p.1:14-18.

<sup>&</sup>lt;sup>162</sup> Exh. No. AMM-14T\_p.1: 16-17.

<sup>&</sup>lt;sup>163</sup> <u>See</u> Exh. No. AMM-15.

substitutes for Avista demonstrate that their recommended ROEs are too low to meet regulatory standards.<sup>164</sup> The following represent a "snapshot" of flaws in the Parcell/Gorman analyses.

- 2. <u>The Technical Flaws in the ROE Analysis Provided by Mr. Parcell are Apparent.</u>
  - a. Flaws in DCF Analysis.
- Mr. Parcell's recommended ROE that was derived from his DCF analysis contains "several significant defects which bias its outcomes downward" as explained by Mr. McKenzie on rebuttal.
- His methodology produced almost 30 different "means and medians" from which to choose, resulting in a "scattershot approach" which could be used to justify virtually any ROE estimate.
- His DCF values are the result of a "purely mechanical application of the DCF model that appears more concerned with the quantity rather than the quality, of the outcomes," as explained by Mr. McKenzie.<sup>165</sup>
- More to the point, however, he has relied extensively on <u>historical growth rates</u> in determining his DCF ranges. This is a fundamental flaw, in that it is investors' <u>future</u> expectations (not historical results) that determine the current price they are willing to pay for common stocks.<sup>166</sup>
- He also improperly focuses on growth in dividends and book value in his DCF analysis, giving short shrift to Earnings Per Share (EPS) growth projections that are commonly relied on in the financial industry.<sup>167</sup>
- Finally, he misapplies his retention growth rates, using end-of-year book values instead of converting such values to average annual amounts in order to account for growth in common equity over the entire year.<sup>168</sup>
  - b. *His Capital Asset Pricing Model (CAPM) Is Flawed.*

<sup>&</sup>lt;sup>164</sup> Because interest rates are expected to increase, the ROE recommendations for Mr. Parcell and Mr. Gorman should, at the very least, have come from the upper end of their ROE ranges (9.5% for Mr. Parcell and 9.4% for Mr. Gorman). (Exh. No. AMM-14T, p.3)

<sup>&</sup>lt;sup>165</sup> Exh. No. AMM-14T, p.17:2-12; One of Mr. Parcell's results is in the 6% range, 14 are in the 7% range, 12 are in the 8% range, leaving just one result over 9%. Exh. No. AMM-14T, p.17:6-9.

<sup>&</sup>lt;sup>166</sup> Exh. No. AMM-14T, p.17:13-20; p.18-21. In fact, there is a downward bias inherent in the historical growth rates contained within his DCF analysis. Indeed, nearly half of the individual historical dividend growth rates for the companies in his proxy group falls at or below 3%; growth rates for two companies even fall below zero. (Exh. No. DCP-9, p.3) After combining a growth rate of 3% with his dividend yield of 3.2%, this implies a DCF cost of equity of 6.2% in his analysis. Exh. No. AMM-14T, pp.18-19.

<sup>&</sup>lt;sup>167</sup> <u>Id</u>. at pp. 19-20.

<sup>&</sup>lt;sup>168</sup> <u>Id</u>. at pp.20-21.

- Mr. Parcell's estimates range from 6.3% 6.6%, with a midpoint of 6.45%, after applying his CAPM analysis. This result is a "clear outlier" and should be dismissed as such.
- A risk premium method, such as CAPM, is a <u>forward-looking model</u> based on expectations of the future. Accordingly, this risk premium approach, as is true with the DCF Model, must be applied using data that reflects the expectations of actual investors in the market. In the case of the CAPM, Mr. Parcell's results were derived entirely based on <u>historical</u> (not projected) rates of return.<sup>169</sup>
- Moreover, the "backward-looking approach" used by Mr. Parcell incorrectly assumes that investors' assessment of the relative risk differences, and their required risk premium, between Treasury Bonds and commons stocks is constant and equal to some historical average. Nothing supports that assumption.<sup>170</sup>
  - c. *His Comparable Earnings Method is Also Flawed.*
- He includes <u>historical rates of return</u> in his analysis and uses market-to-book ratios as a guide to the reasonableness of returns, both of which are misguided, as explained by Mr. McKenzie.<sup>171</sup>
- Mr. Parcell also suggests that if a market-to-book substantially exceeds 100%, that is an indication that historic and prospective ROEs are "well above the actual cost of equity for those regulated companies."<sup>172</sup> This has no basis in fact. Most utilities have market-to-book ratios above 1.0 (or 100%).<sup>173</sup>
- 3. <u>Mr. Gorman's ROE Recommendations, on Behalf of ICNU, Are Also Flawed</u>.
- Mr. Gorman recommended an ROE of 9.1% based on his application of the constant growth and multi-stage forms of the DCF Model, and application of the CAPM based on historical realized rates of return, and finally, a risk premium approach based on allowed rates of return for

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<sup>&</sup>lt;sup>169</sup> Exh. No. AMM-14T, p.21:14-21. Mr. Parcell based his CAPM estimates on two alternative values of market risk premiums: one value relies on data for the S&P 500 from the period 1978-2014; and the other relies on data for the S&P 500 from the 1926-2014 period. As such, he is assuming that the events and expectations for the time periods covered by <u>these historical studies</u> are more representative of what is likely to occur going forward. (Exh. No. AMM-14T, p.22:11-18)

<sup>&</sup>lt;sup>170</sup> Exh. No. AMM-14T, p.23:9-16.

<sup>&</sup>lt;sup>171</sup> See Exh. No. AMM-14T, pp. 27-35; His reliance on past data from the period 2002-2015 is misguided because the setting of Avista's ROE is, by its very nature, a "forward-looking process." (Id. at p.27:8-16) One should look to investors' future expectations, not on data derived over an arbitrary 14-year historical period. (Id.)

<sup>&</sup>lt;sup>172</sup> <u>Id</u>. at p.28:2-6.

<sup>&</sup>lt;sup>173</sup> Value Line reports that approximately 1,460 of their roughly 1,600 stocks it follows (including utilities and other industries) sell for prices in excess of book value. (Exh. No. AMM-14T, p.29) Indeed, the market-to-book ratio for the utility sector is 1.83% and yet is still among the lowest of the industry groups – well below the 2.75 times historical average of the S&P 500. There simply is no basis for his use of a theoretical market-to-book 1.0 "benchmark." (Id. at p.31:5-9)

utilities. In his rebuttal testimony, Mr. McKenzie explains why Mr. Gorman's recommendation is

too low:

It is understated because, in his analysis, he applied inconsistent and incorrect approaches to reach his final ROE recommendation. Several specific factors detract from Mr. Gorman's analysis. His constant growth DCF results are biased downward because he excludes a legitimate proxy company and he includes outliers in his calculations. In addition, he fails to incorporate a readily available, and widely followed, source of analysts' growth rates. His multi-stage DCF analysis should be rejected because he mistakenly assumes that investor growth expectations are capped by forecasts for growth in the U.S. economy. His CAPM analysis is not credible because it is based almost exclusively on historical data, it fails to correct for an observed bias in the CAPM result, and it ignores the impact of company size on expected returns. Finally, Mr. Gorman's risk premium analysis is flawed because he rejects the well-documented, inverse relationship between equity risk premiums and interest rate levels. <sup>174</sup>

- b. Flaws in His Discounted Cash Flow Model.
- In his constant growth DCF Model, he generally relied on the same proxy group as Mr. McKenzie, with one important exception: he excluded Otter Tail Corporation. Interestingly enough, Otter Tail has the highest results in several of the ROE analyses conducted by Mr. McKenzie. Stated differently, "it is disingenuous of Mr. Gorman to unnecessarily advocate for the exclusion of Otter Tail from the proxy group," as noted by Mr. McKenzie.<sup>175</sup>
- Mr. Gorman also failed to remove obvious "outliers" from his final constant growth results, thereby failing to pass the "fundamental tests of reasonableness and economic logic."<sup>176</sup> Had he done so, this would have increased his constant growth DCF average by 36 basis points.<sup>177</sup>
- Mr. Gorman also left out readily available, widely respected sources of analysts' growth rates from Value Line. Because Value Line is so readily available and widely followed, his omission is inexplicable.<sup>178</sup>
- With respect to his multi-stage growth DCF analysis, it is entirely without merit, as explained by Mr. McKenzie. Mr. Gorman's basic assumption is that each company's growth would converge to a maximum sustainable growth rate for a utility company, as capped by a 4.35% projected growth in overall U.S. Gross

<sup>&</sup>lt;sup>174</sup> <u>Id</u>. at p.39:13 – 49:4.

 $<sup>\</sup>frac{175}{\text{Id}}$ . at p.41:1-9.

<sup>&</sup>lt;sup>176</sup> <u>Id</u>. at p.41:12-18.

<sup>&</sup>lt;sup>177</sup> <u>Ibid</u>.

<sup>&</sup>lt;sup>178</sup> <u>Id</u>. at p.42:11-17.

Domestic Product. He is simply wrong that GDP growth somehow sets a "maximum sustainable long-term growth rate" for a utility.<sup>179</sup>

- Mr. Gorman presents no persuasive evidence that investors share his view that growth in GDP must, somehow, be considered the highest sustainable long-term growth rate of a utility. Stated differently, it is entirely logical for investors to recognize the potential for certain companies to grow faster than the overall economy.<sup>180</sup>
  - c. Flaws in His Application of CAPM.

As noted by Mr. McKenzie, Mr. Gorman's CAPM analysis also has several shortcomings:

It is based almost exclusively on historical data, even though the analysis should be forward-

looking. His analysis fails to correct for the observed bias documented in financial research related

to the impact of company size on expected returns.<sup>181</sup>

- Even though Mr. Gorman characterizes his analysis as "forward-looking," his CAPM was actually based almost entirely on <u>historical</u> data.<sup>182</sup> Accordingly, while a relatively small portion of his purportedly "forward-looking" market return constituting inflation was based on projected data, the actual return on the market itself was completely backward-looking, as observed by Mr. McKenzie.<sup>183</sup>
- Mr. Gorman also failed to reflect any size adjustment in his CAPM application. The need for a size adjustment arises because differences in investors' required rate of return that are related to firm size are not fully captured by the Beta.<sup>184</sup>
  - d. Shortcomings in Gorman's Utility Risk Premium Analysis.
- Mr. Gorman arbitrarily limited the data available to apply to his risk premium approach by ignoring all observations prior to 1986. In doing so, he introduced subjective bias into his analysis, thereby artificially lowering the results.<sup>185</sup>

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<sup>&</sup>lt;sup>179</sup> See Exh. No. AMM-14T, pp.43-53; The actual historical growth rates for individual firms in Mr. Gorman's own proxy group, refute the very notion that long-term growth for electric utilities is somehow constrained by GDP.<sup>179</sup> Therefore, Mr. Gorman's own proxy firms demonstrate that utilities can and do achieve growth far in excess of the GDP growth rate he suggests as a cap or limit in his multi-stage DCF Model. (Id. at p.46:5-7)

<sup>&</sup>lt;sup>180</sup> Mr. McKenzie also addresses other "computational errors" in Mr. Gorman's multi-stage DCF analysis, including his use of an improper Internal Rate of Return (IRR) and his misplaced reliance on individual "BR+SV growth rates." (See Exh. No. AMM-14T, pp. 51-52)

<sup>&</sup>lt;sup>181</sup> <u>Id</u>. at p.53:5-8.

<sup>&</sup>lt;sup>182</sup> Mr. Gorman, himself, explained that: "I estimated the expected return on the S&P 500 by adding an expected inflation rate to the long-term <u>historical</u> arithmetic average real return on the market." Exh. No. MPG-1T, p.39.

<sup>&</sup>lt;sup>183</sup> Exh. No. AMM-14T, p.53:19-21.

<sup>&</sup>lt;sup>184</sup> <u>Id</u>. at p.56:1-13; *Morningstar* has developed size premiums that need to be added to the CAPM cost of equity estimates to account for the level of a firm's market capitalization in determining the CAPM cost of equity. <u>Id</u>. at p.56:8-13.

<sup>&</sup>lt;sup>185</sup> See Exh. No. AMM-14T; Ibbotson Assoc. noted the pitfalls of such a subjective approach:

- Significantly, Mr. Gorman failed to reflect the <u>inverse relationship</u> between interest rates and equity risk premiums in his analysis of historical authorized rates of return. (When interest rates are relatively high, equity risk premiums narrow; when interest rates are relatively low, equity risk premiums are greater.)<sup>186</sup>
  - e. Mr. Gorman Ignores Any Application of Non-Utility DCF Analysis.
- Mr. Gorman's outright rejection of any analysis of non-utility DCF returns is unreasonable. An estimate of the required return for firms in the competitive sector of the economy is, in fact, useful in determining the appropriate return for a utility.<sup>187</sup>
  - f. Mr. Gorman Also Ignores Flotation Costs.
- Without recognizing these flotation costs, these legitimate costs of providing utility service will be improperly excluded from ratemaking.<sup>188</sup>

# E. <u>Cost of Debt</u>.

As noted at page 14 of Exhibit No. EMA-6T, lines 3-10, on rebuttal the Company updated its cost of debt from 5.51% to 5.594%.<sup>189</sup> No party has taken issue with either the original or updated cost of debt figures. In response to Bench Request No. 5, the Company was asked to provide the updated cost of debt information related to the \$175 million First Mortgage Bond issuance noted within Company Witness Andrews' rebuttal testimony.<sup>190</sup> The Company responded that in August 2016, Avista priced \$175,000,000 of First Mortgage Bonds due in 2051 (35 years)

Some analysts estimate the expected risk premium using a shorter, more recent time period on the basis that recent events are more likely to be repeated in the near future . . . this view is suspect . . . It is  $r_{1} = r_{1} + r_{2} = r_{1} + r_{2} + r_{3} + r_{4} + r_{5} + r$ 

Cited in Exh. No. AMM-14T, p.59:8-14.

 <sup>&</sup>lt;sup>186</sup> This relationship is documented in the financial literature. Exh. No. AMM-14T, p. 59:1-60:8. Other regulators have also acknowledged this relationship. Exh. No. AMM-3 at p. 29, fn. 20. Given that interest rates are currently lower than the average over his study period, current equity risk premiums should be <u>relatively higher</u>, something which Mr. Gorman's analysis ignores. Mr. McKenzie corrected for this omission, and reran Mr. Gorman's risk premium studies, and after taking into account the inverse relationship between interest rates and risk premiums, yielding a cost of equity estimate for Avista of <u>9.88%</u>. (Exh. No. AMM-14T, p.60:15-21)
<sup>187</sup> As explained by Mr. McKenzie, "returns in the competitive sector of the economy form the very underpinning for

<sup>&</sup>lt;sup>187</sup> As explained by Mr. McKenzie, "returns in the competitive sector of the economy form the very underpinning for utility ROEs because regulation purports to serve as a substitute for the actions of competitive markets." (Exh. No. AMM-14T) After all, the cost of capital is "an opportunity cost based on the returns that investors realize by putting their money in other alternatives, which include all other securities available in the stock, bond or money markets," as explained by Mr. McKenzie. (<u>Id</u>. at p.63:14-16)

<sup>&</sup>lt;sup>188</sup> <u>Id</u>. at p.64:6-16.

<sup>&</sup>lt;sup>189</sup> This update to the cost of debt was provided to all parties on August 8, 2016, in supplemental response to Staff\_DR\_030-Supplemental 2 (Attrition Model Update) and August 9, 2016 in supplemental response to Staff\_DR\_091-Supplemental 3 (Pro Forma/Cross Check Model Update).

<sup>&</sup>lt;sup>190</sup> Exh. No. EMA-6T at p.14:3-10.

with a coupon rate of 3.54%, through a private placement offering with the bonds to be funded and issued in December 2016. Including transaction costs and the cost of hedges, the all-in-rate is 5.63% over the 35-year period.

### V. INCLUSION OF ADVANCED METERING INFRASTRUCTURE (AMI) IN RATES

As discussed above, the Company has included, as an "After-Attrition Adjustment" \$17.9 million of capital projects associated with AMI that will be in service in 2017, in both its electric and natural gas Attrition Studies.<sup>191</sup> The revenue requirement associated with the 2017 AMI "After Attrition Adjustment" is approximately \$3.8 million for electric and \$1.2 million for natural gas.<sup>192</sup>

### A. <u>AMI Provides Net-Benefits to Customers Over Time.</u>

Advanced Metering Systems (AMI) are being deployed by utilities across the United States in order to optimize the value of smart grid technologies and provide a variety of customer benefits ranging from lower operating costs and improved reliability to providing customers with information and tools to better understand and derive greater value from their energy service.<sup>193</sup> In Washington, the Company will deploy advanced metering to approximately 253,000 electric and 155,000 natural gas customers, encompassing the entirety of its Washington service area.<sup>194</sup> The project has already commenced and Avista expects to complete the full implementation by 2021. Simply put, AMR will support Avista's continuing effort to improve the quality and costeffectiveness of the services we offer our customers.

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While Public Counsel (Witness Alexander) and, to some extent Staff, give little credence to the growing adoption of AMI throughout the Country, the number of advanced meters in the U.S. has increased from just under 5% in 2008 to over 30% by 2013; it is expected to reach 50% to 70% by the year 2020, just prior to Avista's full implementation of AMI.<sup>195</sup> Indeed, as of today,

<sup>&</sup>lt;sup>191</sup> See Exh. No. EMA-6T, pp.32-33.

<sup>&</sup>lt;sup>192</sup> <u>Ibid</u>.

<sup>&</sup>lt;sup>193</sup> <u>See</u> Exh. No. HLR-1T, p.8:22 – 9:6.

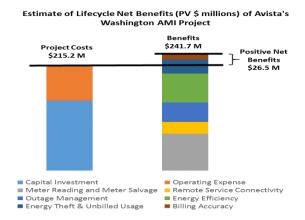
<sup>&</sup>lt;sup>194</sup> <u>Id.</u> at p.9:7-12.

<sup>&</sup>lt;sup>195</sup> Exh. No. HLR-9T, p.3:1-6.

more than half of all households in the Country are equipped with an advanced meter.<sup>196</sup> The old electromagnetic meter is fast becoming a "relic" in our industry, as utilities increasing transition to smart meters.<sup>197</sup>

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The Business Case for the Advanced Metering Project is attached as Exhibit No. HLR-3 to Ms. Rosentrater's direct testimony. Through that Business Case, Avista was able to estimate the life cycle net benefits of its Washington AMI Project – producing <u>positive net benefits of \$26.5</u> <u>million</u> over time. The following "waterfall" chart illustrates this:<sup>198</sup>



These positive net benefits not only reflect a \$20.8 million "contingency" amount for estimated capital costs, but also reflect a conservative level of net benefits based on the sensitivity analyses conducted by the Company with respect to <u>each</u> assumed benefit.<sup>199</sup> And, most importantly, the level of net benefits only incorporates "quantified" net benefits and does not take into account a myriad of other unquantified benefits discussed below.

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Compared to a year ago when AMI was last before this Commission in Avista's rate case, the current Business Case has been refined with more comprehensive information on the estimated

<sup>&</sup>lt;sup>196</sup> <u>Ibid</u>. The Edison Foundation Institute for Electric Innovation (IEI) predicts that the total number of meters deployed is expected to reach 70 million in 2016. Exh. No. HLR-9T, p.3:2-5.

<sup>&</sup>lt;sup>197</sup> For its part, Avista is not an "early-adopter" of advanced metering. As noted by Company Witness Rosentrater, even the much smaller customer-owned utilities adjacent to our service area (Inland Power & Light Company and Kootenai Electric Cooperative) either have installed advanced metering or are in the process of doing so. Elsewhere in the State of Washington, Tacoma Public Utilities has deployed advanced metering, and Seattle City Light and Puget Sound Energy are currently in the process of evaluating and selecting new advanced metering systems that they intend to place into service. (Ibid.)

<sup>&</sup>lt;sup>198</sup> Exh. No. HLR-1T, p.23:1-5.

<sup>&</sup>lt;sup>199</sup> <u>Id</u>. at p.24:8-18.

costs, based on actual vendor pricing, as well as more granular detail on each element of the system to be deployed, including Avista and contract labor requirements during the deployment period. As a result of this additional refinement, the Company has firmed up the previous estimates of the project capital costs. At present, Washington's share of the estimated project capital costs over the life of the project is \$166.7 million, which has remained unchanged since the Company's original filing in February 2016.<sup>200</sup> This reflects the actual contracting for services, as well as overall project development that has occurred. In its Order 05, the Commission stated that "we look forward to more refined cost-benefit analysis in a future proceeding," and that has been provided in these Dockets. (See ¶193)

Turning now to the <u>benefit side</u> of the equation, the Company has reassessed the range of customer benefits expected from the project since it last presented AMI to the Commission in Docket Nos. UE-150204 and UG-150205. As noted by Witness Rosentrater, "Avista had been overly conservative in its estimate of benefits, by not including certain benefits recognized by others in the industry, or by electing to not include the reasonable value of the benefit calculated by the Company."<sup>201</sup>

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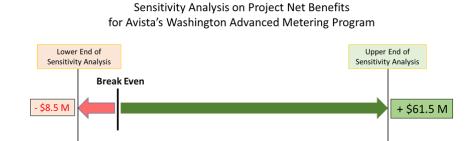
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Moreover, Avista's "point estimates" of the financial value of each benefit have now been subjected to a "sensitivity analysis." This sensitivity analysis indicates that the overall net benefits would range from a low (every benefit realized at the <u>lowest</u> end of the range) of negative \$8.5 million, to an upper limit of \$61.5 million (assuming every benefit realized at the <u>highest</u> end of the range).<sup>202</sup> This is shown in the excerpted chart below:

<sup>&</sup>lt;sup>200</sup> In Exh. No. HLR-9T, p.6:18-23, Ms. Rosentrater refers to a project cost estimate of \$165.5 million from July 2015. This estimate, which was noted in footnote 297 in Order No. 05 in Docket Nos. UE-150204 and UG-150205, consisted of the upfront investment only, including 100 percent of the meter data management system but no future metering costs. The AMI costs of \$166.7 million included in this case consists of Washington's share of all AMI costs, including Washington's share of the meter data management system as well as future metering costs. The comparison of the July 2015 project cost to that included in this case (referencing only a \$1.2 million difference) was an improper comparison.

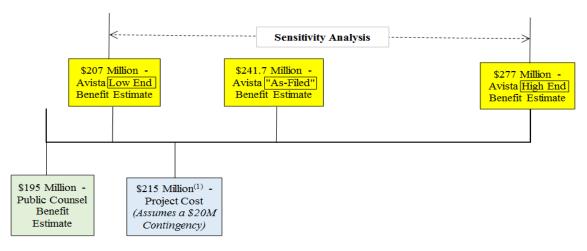
<sup>&</sup>lt;sup>201</sup> Exh. No. HLR-9T, p.7:5-8.

<sup>&</sup>lt;sup>202</sup> <u>Id</u>. at p.7:18-22.



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PC/EP Witness Ms. Alexander challenges several areas of customer benefits (discussed below) and states that: "As a result of my analysis, I conclude that a more realistic evaluation of the Company's assertions will result in a project whose costs will exceed its benefits by <u>at least \$20 million</u>." (Emphasis added)<sup>203</sup> The rebuttal testimony of Company Witness Rosentrater provides some perspective – even if <u>all</u> of her criticisms were accepted at face value. Diagram No. 1, as excerpted from Ms. Rosentrater's testimony, places Ms. Alexander's assessment of project net benefits alongside the other costs and benefits discussed by the Company in this case:<sup>204</sup>



(1) Includes Total Costs, i.e., Capital and Operating Expenses.

As shown in the above diagram, notwithstanding <u>all</u> of her criticisms, and giving her the benefit of every doubt, Ms. Alexander's estimate of total benefits is still within 10% of the estimated total project costs measured over the project's 21-year life. Even so, it <u>assumes</u>: (1) that <u>all</u> other criticisms of each assumed benefit are true (even if she were wrong about a few of her challenged

<sup>&</sup>lt;sup>203</sup> Exh. No. BRA-1T at p.11.

<sup>&</sup>lt;sup>204</sup> Exh. No. HLR-9T, p.9:7-16.

benefits it would "swing her analysis of net benefits" above break-even); (2) it ignores potential "up-side" net benefits of approximately \$62 million under the high-end of the Company's "sensitivity analysis"; (3) the total estimated cost of \$215 million includes a \$21 million "contingency," which, if not needed, would in and of itself offset all of Ms. Alexander's perceived \$20 million shortfall in net benefits; and (4) it ignores entirely all of the <u>unquantified benefits</u> of AMI.<sup>205</sup> At the end of the day, notwithstanding her efforts, Ms. Alexander has not demonstrated that the Company's Business Case is fundamentally unsound.

### B. <u>PC/EP Witness Alexander's Criticisms of Certain Benefits Are Unfounded.</u>

### 1. <u>Customer-Installed Energy Efficiency Measures</u>.

Customer savings resulting from the installation of energy efficient measures were developed by the Company, <u>not</u> based on anecdotal reports by others, as suggested by Ms. Alexander, but rather on detailed consideration of Avista-specific information and studies. It only used relevant industry information, in this regard, as part of its overall process of developing estimates. Ms. Rosentrater was clear that Avista made use of its <u>own</u> information relating to the conservation potential in its area, customer participation rates and savings experienced by customers who have taken actions to reduce their energy consumption.<sup>206</sup> These evaluations allowed Avista to reasonably estimate that 3% of its customers would achieve a 3% reduction in energy usage. This is conservative by any measure.<sup>207</sup>

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Ms. Alexander's reliance on the results of the Pullman Pilot Study as a basis for estimating the value of this benefit was also misplaced. The final report with respect to that Pilot Study, itself,

<sup>&</sup>lt;sup>205</sup> These "<u>unquantified benefits</u>" relate to a better understanding by customers of their energy use with the availability of interval data; an interface with the customer home area network; energy alerts; makes possible engineering and assets studies; contributes to employee safety; and enables a host of future benefits, including rate options, Micro Grids, additional data analytics, additional distributed generation, and demand response. (See Exh. No. HLR-9T, p.10:14-26)

<sup>&</sup>lt;sup>206</sup> See Exh. No. HLR-9T, p.13:4-19.

<sup>&</sup>lt;sup>207</sup> <u>Id.</u> at p.13:16-19. Ms. Alexander also criticized Avista's reliance on an AMI Business Case developed by BC Hydro. (See Exh. No. BRT-1T, pp. 40-41) While Avista reviewed the Business Case of BC Hydro, it accounted for differing assumptions around program implementation, and arrived at an estimate that was only <u>one-sixth</u> of the estimate developed by BC Hydro. (Exh. No. HLR-9T, p.14:22-30)

identified design flaws in the web portal undermining the usefulness of educating customers about energy use in their household.<sup>208</sup> Accordingly, the lack of any observed change in energy consumption in the treatment group of the Pullman Pilot Study was "not surprising."<sup>209</sup>

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This information was used by Avista for developing a new web portal that will provide interval usage data to customers. When such interval data is available, evidence suggests it will "<u>more than double the savings</u> reported compared with monthly billing only," according to Ms. Rosentrater.<sup>210</sup>

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2.

## Value of Reduced Energy Theft.

Ms. Alexander criticizes the Company for relying on anecdotal industry reports for the estimated value of reduced energy theft, rather than its own experience.<sup>211</sup> Again, this is misleading. While the Company reviewed industry-reported theft rates and determined that a percent of revenue loss of between 1% - 3% was the most commonly reported range, Avista then considered its own circumstances and arrived at a much lower rate of electric theft of between 0.25% and 0.50% of revenue.<sup>212</sup> It then used the "mid-point" of this range to estimate electric and natural gas loss revenues of 0.37% and 0.1875% as reasonably conservative estimates.<sup>213</sup> Accordingly, Avista's assumptions were <u>below the very bottom</u> of the reported range of industry-wide information.

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Ms. Alexander also argues that because the advanced meters will be equipped with "tamper alarms" that the reduction in lost revenue enabled by AMI might constitute only a "one-time" benefit.<sup>214</sup> This, of course, is nonsensical because the Company in this event would continue to

<sup>&</sup>lt;sup>208</sup> HLR-9T, p.15:8-15.

<sup>&</sup>lt;sup>209</sup> See Exh. No. BRA-19, p.9.

<sup>&</sup>lt;sup>210</sup> Exh. No. HLR-9T, p.16:11-24.

<sup>&</sup>lt;sup>211</sup> See Exh. No. HLR-9T, p.30.

<sup>&</sup>lt;sup>212</sup> <u>Id</u>. at p.17:5-15.

<sup>&</sup>lt;sup>213</sup> <u>Id</u>. at p.17:12-15.

<sup>&</sup>lt;sup>214</sup> Exh. No. BRA-1T, p.30.

avoid these costs of energy theft in <u>each</u> succeeding year, once it eliminated the theft activity. This is not unlike the continuing benefit of the "one-time" elimination of meter readers.<sup>215</sup>

## 3. Improved Outage Restoration Efficiency.

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Here again, Ms. Alexander creates a "strawman" by asserting that Avista relied entirely on anecdotal information from two other utilities, without any statistically valid information.<sup>216</sup> But Avista did much more than that: It examined <u>its own</u> existing work processes and systems for managing the work of outage restoration and assessed how the processes would be improved with the outage information provided by Advanced Metering.<sup>217</sup> As explained by Company Witness Rosentrater, this Avista-specific analysis, based on the experience of its own personnel who manage outages, allowed it to conclude that the outage restoration process overall would be improved by 10%, given the information provided by Advanced Metering.<sup>218</sup>

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4. <u>Benefits of Conservation Voltage Reduction (CVR)</u>.

Conservation Voltage Reduction (CVR) is a proven methodology for effectively reducing distribution energy consumption and thereby lowering the cost of providing service to our customers. It does so by reducing the overall voltage level on a feeder that reduces the amount of energy lost in its delivery, as explained by witness Rosentrater.<sup>219</sup> More precisely, CVR identifies specific actions for managing the electric distribution system, allowing the utility to reduce the operating voltage range for service delivery (<u>i.e.</u>, the voltage "buffer").

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Witness Rosentrater explained that advanced metering can be used to provide voltage data in the process of developing and implementing CVR strategies.<sup>220</sup> Although any CVR strategy

<sup>&</sup>lt;sup>215</sup> Exh. No. HLR-9T, p.18:15-19.

<sup>&</sup>lt;sup>216</sup> Exh. No. BRA-1T, p.35.

<sup>&</sup>lt;sup>217</sup> Exh. No. HLR-9T, p.19:23-28.

<sup>&</sup>lt;sup>218</sup> Exh. No. HLR-9T, p.19:23 – 20:10.Company Witness Rosentrater testified that, during the Company's windstorm event in November of 2015, it did not have the technology in place to accurately identify which feeders were out of service and how to most efficiently dispatch crews. The installation of AMI will provide just such a platform, to allow the Company to more efficiently respond to events such as widespread power outages, by dispatching crews in a more orderly fashion based on better information. (See Rosentrater TR. 204)

<sup>&</sup>lt;sup>219</sup> Exh. No. HLR-9T, p.20:16-21.

<sup>&</sup>lt;sup>220</sup> <u>Id</u>. at p.21.

relies on several factors, Avista only assessed the <u>incremental</u> benefit derived by having voltage data from advanced metering.<sup>221</sup>

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While the CVR benefits included in the Company's earlier 2015 Business Case were based on assumptions developed from earlier experience on certain electric feeders, the Company subsequently conducted a year-long study on six of its electric feeders in Pullman to document the actual savings potential created by voltage data provided by Advanced Metering.<sup>222</sup> Based on this subsequent study conducted, we found that the "<u>actual</u> incremental savings potential is <u>2%</u>, not the 0.5% assumed in our 2015 Business Case," as explained by Witness Rosentrater.<sup>223</sup> In summary, the Company has demonstrated that an additional 2% of energy savings can be achieved by integrating customer-level voltage data from the Advanced Metering System into its overall automated voltage control operation.<sup>224</sup>

100

## Value of Reduced Outage Duration.

PC/EP Witness Alexander argues that the entire value of improved reliability through reduced outage duration should be eliminated from consideration.<sup>225</sup> She criticizes the methodology used by Avista to estimate the economic value of this benefit. For its part, Avista used a mathematic model, known as the "Interruption Cost Estimator" (also known as "ICE") to estimate the customer value for reduced outage duration.<sup>226</sup> This model was part of a study first published in 2009 by the Lawrence Berkley National Laboratory, in cooperation with the U.S. Department of Energy.<sup>227</sup> A subsequent report was released in 2015 which contained improvements in the mathematical model and was based on 34 individual utility studies, rather than 28 individual studies previously used.<sup>228</sup>

5.

<sup>&</sup>lt;sup>221</sup> <u>Id</u>. at p.22:1-7.

 $<sup>^{222}</sup>$  <u>Id</u>. at p.22:17-20.

<sup>&</sup>lt;sup>223</sup> <u>Id</u>. at p.23:1-3.

<sup>&</sup>lt;sup>224</sup> Exh. No. HLR-9T, p.24:8-12.

<sup>&</sup>lt;sup>225</sup> Exh. No. BRA-1T, p.42.

<sup>&</sup>lt;sup>226</sup> Exh. No. HLR-9T, p.26:6-17.

<sup>&</sup>lt;sup>227</sup> <u>Id</u>. at p.26:6-17.

<sup>&</sup>lt;sup>228</sup> <u>Id</u>. at p.27:1-5.

Ms. Alexander, however, argues that the results of these studies are not reliable because they rely on faulty "contingent valuation" or "avoided cost" survey methods to collect the customer cost information.<sup>229</sup> To put her criticism into perspective, however, the total benefit derived using this contingent valuation survey method represented just \$1.2 million or 3.6% of the total life cycle economic value of this benefit. Conversely, greater than 96% of the total economic benefits were derived by "direct cost estimation." Nowhere does she discuss or otherwise contest the use of the "direct cost estimation" technique which accounted for 96% of the total economic benefits.<sup>230</sup>

102

She also asserts that Avista's estimate of reducing outage duration by 5% is not based on actual experience, but is rather a reflection of other anecdotal information from other utilities.<sup>231</sup> Again, she paints with too broad a brush. In fact, the Company relied on its own information in estimating that the advanced notice provided by AMI will reduce its average notification to dispatch process time by seven minutes or 5.5% of the average outage duration time. For estimating the direct customer value Avista used an average outage reduction of 5%.<sup>232</sup>

### 6. <u>Remote Service Connectivity</u>.

103

# Ms. Alexander also asserts that customer savings resulting from "remote service connectivity" should be rejected as somehow being improper.<sup>233</sup> This is based on her concern that the number of credit and collection disconnects will increase with advanced metering. Even though she points to the Pullman Study as support, the difference between the average monthly number of disconnects in the two years prior to implementation of remote operation (54.1) as compared to

the average of the four years following the use of remote disconnects (57.1) was small.<sup>234</sup>

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There is no outright prohibition on remote service disconnections in the Commission's Rules, and even though the number of disconnects in Pullman made available through Advanced

<sup>&</sup>lt;sup>229</sup> Exh. No. BRA-1T, pp. 44-48.

<sup>&</sup>lt;sup>230</sup> Exh. No. HLR-9T, p.28:7-18.

<sup>&</sup>lt;sup>231</sup> See Exh. No. BRA-1T, p.51.

<sup>&</sup>lt;sup>232</sup> Exh. No. HLR-9T, p.29:20-23.

<sup>&</sup>lt;sup>233</sup> Exh. No. BRA-1T, p.23.

<sup>&</sup>lt;sup>234</sup> Exh. No. HLR-9T, p.31.

Metering has remained relatively stable, Avista "remains sensitive to this issue, because it involves the disruption of a service for often-times our most vulnerable customers," as explained by Witness Rosentrater.<sup>235</sup> She describes the myriad of ways that the Company has reached out to customers with flexible payment arrangements and the use of "CARES" service representatives who interact with the Company's most-vulnerable customers.

### 7. <u>Measuring and Reporting</u>.

105

Finally, Ms. Alexander faults the Company for the lack of measuring and reporting of the status of project costs and benefits during deployment.<sup>236</sup> In the rebuttal testimony of Ms. Rosentrater, the Company set forth a detailed list of measures that it intends to implement to track and report its costs and benefits.<sup>237</sup> This includes a variety of <u>annual</u> reporting requirements throughout the deployment period (2017-2020) concerning capital investments, operating expenses, customer outreach and education, customer "opt-outs" and ongoing tracking of customer benefits. This will be followed by a final report issued within 18 months of the full deployment of the system in 2021, which will summarize the total cost of deployment and the customer benefits that have been achieved. This reporting should provide the Commission and interested parties with useful information about the implementation and to assess the relative costs and benefits of the project.

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In summary, the Company has demonstrated that its Advanced Metering Business Case is well documented and supported with reasonable assumptions. The Company understands that its subsequent requests to recover the incremental annual investment and operating costs will be subject to ongoing review in future rate proceedings.

### VI. RATE SPREAD/RATE DESIGN

The Company's proposed electric rate spread for January 1, 2017 and for January 1, 2018 rate changes is set forth in Exhibit No. PDE-1T, pages 6-10 and Exhibit No. PDE-4.

<sup>&</sup>lt;sup>235</sup> <u>Id</u>. at p.31:5-13.

<sup>&</sup>lt;sup>236</sup> Exh. No. BRA-1T, p.57.

<sup>&</sup>lt;sup>237</sup> Exh. No. HLR-9T, pp 32-33.

<sup>8</sup> The Company's electric cost-of-service results clearly demonstrate that some customers, such as those served on Schedules 11/12 and 21/22 are well above unity and therefore should receive a lower increase than the overall system increase.<sup>238</sup> This is evident from the excerpted table below:

	Present	Proposed
Rate Schedule	Relative ROR	Relative ROR
Residential Schedule 1	0.55	0.63
General Service Schedules 11/12	1.98	1.81
Large General Service Schedules 21/22	1.49	1.40
Extra Large General Service Schedule 25	1.03	1.03
Pumping Service Schedules 31/32	0.83	0.86
Street & Area Lights Schedules	0.88	0.90
Overall	1.00	1.00

While the net effect of Staff's proposal would result in Schedules 11/12 and 21/22 moving closer to unity (although not as far as Avista's proposal), two other schedules (Schedule 25 and 41/48) actually move further away from unity, as demonstrated by Company Witness Ehrbar.<sup>239</sup> Avista believes that it is not reasonable for certain schedules to move further away from unity, as would occur with Staff's proposal.

109

Avista notes that Staff is generally supportive of Avista's final cost-of-service study. Indeed, Mr. Ball, on behalf of Staff, believes that the Company's cost-of-service study "should be considered <u>directionally accurate</u> for the purpose of setting rates." (Emphasis added)<sup>240</sup>

110

The Company, however, does not support <u>ICNU's</u> rate spread proposal. As it relates to the Company's electric cost of service study which the Company relied upon for purposes of developing its rate spread proposal, Avista used a peak credit approach to classify production and transmission costs. While ICNU Witness Stephens objects to this methodology, the peak credit approach is intended to provide a balance between the way the system is designed to meet peak

<sup>&</sup>lt;sup>238</sup> Exh. No. PDE-1T, p. 7.

<sup>&</sup>lt;sup>239</sup> Exh. No. PDE-8T, p.4:10-24.

<sup>&</sup>lt;sup>240</sup> Exh. No. JLB-1T, p.9:19-22.

load and how the system is used to provide energy every hour of every day.<sup>241</sup> This approach reflects what the customers receive from the system, which is both energy all year long, as well as all the energy they need at the time they need it the most.<sup>242</sup> Further, the Commission "has long preferred the Peak Credit methodology and consistently has approved its use in cost of service studies for Pacific Power, and for both PSE and Avista," according to Ms. Knox.<sup>243</sup>

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In addition, the Company disagrees with ICNU as it relates to the application of the peak credit method to transmission costs, and notes that in the State of Washington the transmission function has consistently been treated as an extension of the production function since the 1980's.<sup>244</sup> Finally, Avista demonstrates that the twelve month coincident peak ("12CP") demand allocator provides a more balanced approach that is less likely to vary widely from year to year due to extraordinary weather conditions versus ICNU's proposed summer/winter 4CP demand allocator.<sup>245</sup>

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Should the revenue increase approved by the Commission be less than the Company's original request, the effects of ICNU's rate spread would disproportionally impact Residential Schedule 1 customers. Instead, the Company's proposed rate spread would move all customers gradually toward unity, which is a more fair way to spread the revenue increase in this case.<sup>246</sup>

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With regard to the natural gas rate spread, the Company disagrees with Staff's rate spread proposal which would not sufficiently address Schedules 111/112 and 121/122, which are currently well above unity, and, at the same time, would move Schedule 146 further away from unity.<sup>247</sup> The Company's proposal is set forth in the table below:<sup>248</sup>

<sup>&</sup>lt;sup>241</sup> Exh. No. TLK-4T, p. 2.

<sup>&</sup>lt;sup>242</sup> <u>Ibid</u>.

<sup>&</sup>lt;sup>243</sup> Exh. No. TLK-4T, p. 2-3.

 $<sup>^{244}</sup>$  <u>Id</u>. at p. 3.

<sup>&</sup>lt;sup>245</sup> <u>Ibid</u>.

<sup>&</sup>lt;sup>246</sup> Exh. No. PDE-8T.

 $<sup>\</sup>frac{247}{248}$  <u>Id</u>. at p.7:9-16

<sup>&</sup>lt;sup>248</sup> The present and proposed relative rates of return do not include the AMI adjustment as discussed by Mr. Miller (Exhibit No. JDM-4T, p.3). The AMI adjustment had minimal impact on the cost of service results and would not change the proposed rate spread in this case.

	Present	Proposed
	Relative	Relative
Rate Schedule	ROR	ROR
General Service Schedule 101	0.84	0.88
Large General Service Schedules 111/112	1.80	1.60
Ex. Lg. General Service Schedules 121/122	1.70	1.51
Interruptible Sales Service Schedules 131/132	1.37	1.28
Transportation Service Schedule 146	0.82	0.86
Overall	1.00	1.00

### Table No. 8 – Present and Proposed Relative Rates of Return

Here again, it is important to recognize that Staff Witness Ball generally agrees that the "results of the Company's gas COSS can be used to inform rate spread for customers."<sup>249</sup>

114

Nor does the Company support the rate spread proposal of <u>NWIGU</u> whereby the entire increase would be applied to Schedules 101-102. NWIGU Witness Mr. Collins, in his analysis, uses a coincident demand method to allocate certain costs which has the effect of shifting certain distribution costs away from high load factor customers (i.e., Schedule 146) to lower load factor customers (Schedules 101-102 residential and small commercial customers).<sup>250</sup> Instead, Company Witness Miller supports a peak and average allocation methodology which is a preferable means for allocating distribution costs.<sup>251</sup> Avista, and all other IOU's have consistently used this methodology over time. It provides a necessary balance between the way the system is designed (to meet peak demand) and the way it is used on an annual basis (throughput based on gas usage that occurs during all conditions, not only peak conditions).<sup>252</sup> The Company's position is also supported by Staff.<sup>253</sup>

Finally, the Company disagrees with NWIGU's suggestion that the Company's cost of service study should classify a portion of distribution main costs as "customer-related" and allocate

<sup>&</sup>lt;sup>249</sup> Exh. No. JLB-1T, p.12:19-20.

<sup>&</sup>lt;sup>250</sup> See Exh. No. PDE-8T, p.8:14-16.

<sup>&</sup>lt;sup>251</sup> Exh. No. JDM-4T, pp.4-7. Avista does agree with NWIGU's testimony, however, that all AMI-related costs should be allocated to FERC Account 381 (Meters). Doing so, however, will have a minimal impact on the cost of service results, as shown in Company Witness Miller's testimony. (Exh. No. JDM-4T, p.3:26-32.)

<sup>&</sup>lt;sup>252</sup> Exh. No. JDM-4T, p.4:5-11.

<sup>&</sup>lt;sup>253</sup> See Exh. No. JLB-1T Revised, p.11:1-4.

those costs based on the number of customers.<sup>254</sup> This approach fails to recognize that even the smallest size of pipe (2" or smaller) has a considerable amount of load-carrying capability and, in fact, is used to meet <u>all</u> customers design day demands that are connected to a minimum-sized pipe.<sup>255</sup> However, if the Commission were to agree that a customer component is appropriate at some level, the Company's modified customer component allocation as detailed by Company witness Mr. Miller is a more reasonable approach than that proposed by NWIGU.<sup>256</sup>

115

With regard to Staff's recommendation for cost-of-service workshops involving all utilities, Avista would fully participate, but does have some concerns. A "one size fits all" approach is not necessarily appropriate, or even feasible, given the differing circumstances of each utility.<sup>257</sup>

### VII. INCREASES TO THE BASIC CHARGE

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The Company proposed a one dollar increase in the monthly basic charge for Residential Schedules 1 (\$8.50 to \$9.50) and a two dollar increase in the monthly basic charge for the General (Schedules 11/12) and Pumping (Schedules 31/32), from \$18 to \$20. For the natural gas monthly basic charges, the Company proposed a 50 cent increase for general service schedules (\$9 to \$9.50) and a \$25 increase for transportation service (Schedule 146) from \$525 to \$550. Other than Staff, no party filed testimony opposing the proposed increases in basic charges.

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While Staff opposes the increase in basic charges for Schedules 1 and 101, this ignores the evidence demonstrating that the present level of electric customer-related costs is \$15.94 per month and is \$16.93 per month under proposed rates.<sup>258</sup> And for natural gas customers, the customer-related costs per month are \$27.94 under current rates, and at proposed rates are

<sup>&</sup>lt;sup>254</sup> See Exh. No. JDM-4T, pp.7-10.

<sup>&</sup>lt;sup>255</sup> Exh. No. JDM-4T, p.8:12-19. The implications of NWIGU's proposal are that 98.25% of the customer component of the Company's investment in distribution mains would be allocated to Schedule 101/102 customers, with very little cost allocated to other rate schedules, even though all customers benefit from this load-carrying capability of small distribution mains. (Exh. No. JDM-4T, p.9:8-13)

<sup>&</sup>lt;sup>256</sup> Exh. No. JDM-4T, pp. 9-11.

<sup>&</sup>lt;sup>257</sup> Exh. No. PDE-8T.For example, Puget Sound Energy (PSE) is an electric winter-peaking utility, while Avista is nearly a dual peaking utility. Therefore, the proper allocation of demand-related costs may appropriately differ. (See Exh. No. PDE-8T, p.9:7-10)

<sup>&</sup>lt;sup>258</sup> See Exh. No. TLK-3, p.3.

\$29.08.<sup>259</sup> These studies demonstrate that the modest increases in monthly basic charges are well supported.

### VIII. DEMAND SIDE MANAGEMENT FUNDING FOR SCHEDULE 25

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ICNU Witness Stephens presented three alternatives related to Schedule 25 DSM funding: (1) DSM opt-out; (2) a self-directed option; and (3) a reduction in DSM funding.<sup>260</sup> The Company, however, does not believe that customers should be able to opt-out of DSM funding. As explained by Mr. Ehrbar, <u>every customer</u> benefits from the Company's DSM programs through an avoidance of increased generation costs over time. These system benefits "accrue to all customers, and therefore all customers should pay," as explained by Mr. Ehrbar.<sup>261</sup>

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Secondly, Avista would agree that a "self-direction option" may be of value to the Company's largest customers. With that in mind, Avista is willing to introduce this concept in its next DSM Advisory Group meeting scheduled for the first-half of 2017.<sup>262</sup>

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Finally, Avista does not agree with ICNU's proposal that the usage in the third block of Schedule 25 be fully exempt from funding DSM programs. The Company would agree, however, that a reduction in funding for the third block to recover <u>one-half</u> of the present DSM rate, with any shortfall spread to other schedules, including Blocks 1 and 2 of Schedule 25, could also be seen as a reasonable funding option.<sup>263</sup>

## IX. NATURAL GAS TRANSPORTATION SERVICE

NWIGU Witness Collins proposes that Avista should create a new rate schedule giving smaller commercial and industrial customers the ability to transport natural gas.<sup>264</sup> Avista does not agree. Mr. Collins provided no testimony on how such a schedule would be established other than generally referring to "commercial" and "industrial" customers. The Company's rate schedules,

<sup>&</sup>lt;sup>259</sup> See Exh. No. JDM-3.

<sup>&</sup>lt;sup>260</sup> See Exh. No. RRS-ITC. .

<sup>&</sup>lt;sup>261</sup> Exh. No. PDE-8T, p.13:17-22.

<sup>&</sup>lt;sup>262</sup> <u>Id</u>. at p.14.

 $<sup>\</sup>frac{263}{\text{Id.}}$  at p.15:1-5. The effect of this option would be to shift \$0.35 million from the third energy block of Schedule 25. (Id. at p.15).

<sup>&</sup>lt;sup>264</sup> See Exh. No. BCC-1T, p.27 – p.28:19.

however, as constructed over time, are based on the usage characteristics of our customers and are not based on any easy classification of "commercial" or "industrial." There are some of both on several schedules.<sup>265</sup> Moreover, as discussed by Company Witness Ehrbar, Avista would be required to track each applicable customer's usage and PGA deferrals on a monthly basis, which would be unduly burdensome. It could also contribute to "potential gaming" by large customers who may want to switch to transportation service to avoid an increase in the PGA deferral account, or otherwise switch back to sales service in order to benefit from a PGA deferral rebate.<sup>266</sup> In short, such a proposal is not fully developed and should not be implemented in this proceeding.

# X. <u>DEFERRAL OF THE ONGOING COSTS ASSOCIATED WITH THE MONTANA</u> <u>RIVERBED LEASE ACCEPTABLE ALTERNATIVE</u>

Staff Witness O'Connell recommended that the Montana Riverbed Lease expense be removed, resulting in a reduction in revenue requirement of \$3,526,475.<sup>267</sup> Avista disagrees with this adjustment. (Avista understands, however, that on brief, Staff may no longer recommend removal, in its entirety, of the lease expense - only the current year escalation component based on CPI. If Staff continues to recommend removal, Avista directs the Commission's attention to Mr. Norwood's rebuttal testimony, Exhibit No. KKN-1T, pp. 37-45, where he discusses this issue.)

<sup>123</sup> <u>As an alternative</u>, however, if the Commission were to remove the 2017 rate year expense under the Montana Riverbed Lease, the Company requests <u>deferred accounting</u> for actual lease expenses incurred beginning in 2017 and beyond, until conclusion of the litigation or settlement resolving this matter.<sup>268</sup>

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<sup>267</sup> Exh. No. ECO-1T, p.11.

<sup>&</sup>lt;sup>265</sup> Exh. No. PDE-8T, p.15:19 - 16:6.

<sup>&</sup>lt;sup>266</sup> <u>Id</u>. at p.16.

<sup>&</sup>lt;sup>268</sup> Exh. No. KON-1T, p.42:13-19. Deferred accounting would allow removal of the expense for ratemaking purposes in each affected year, but provide the opportunity for recovery in the future, protecting both customers and the Company, pending resolution of the ongoing litigation. (Exh. No. KON-1T, p.42:16-19) This Commission has previously approved deferred accounting treatment of the Montana Lease expense in a prior rate proceeding, in Docket No. UE-072131. Therein, the Commission allowed Avista to defer its first two annual Montana Lease expense payments (2007 and 2008) until those actual expenses could be reviewed and included in a future proceeding. In Docket No. UE-080416 (Order No. 08), the Commission approved the Company's accounting treatment of the deferred payments, including accrued interest, and allowed amortization of the deferred balance over the remaining eight years of the initial 10 years of the agreement. (Exh. No. KON-1T, p.43)

# XI. CONCLUSION

124 Avista respectfully requests that the Commission grant the requested rate relief, based on

well-founded Attrition Studies.

RESPECTFULLY SUBMITTED this Z day of November, 2016.

AVISTA CORPORATION

David J. Meyer, WSBA No. 8717 VP and Chief Counsel for Regulatory and **Governmental Affairs**