

Exhibit No. ___ CT (CRM-1CT)
Dockets UE-140188/UG-140189
Witness: Chris McGuire
REDACTED VERSION

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

v.

AVISTA CORPORATION d/b/a AVISTA
UTILITIES,

Respondent.

DOCKETS UE-140188 and
UG-140189
(Consolidated)

TESTIMONY OF

Chris R. McGuire

STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION

Revenue Requirement, Attrition Studies, REC Revenues Rebate

July 22, 2014

Confidential Per Protective Order
REDACTED VERSION

TABLE OF CONTENTS

I. INTRODUCTION2

II. SCOPE OF TESTIMONY AND INTRODUCTION OF STAFF WITNESSES.....3

III. SUMMARY OF REVENUE REQUIREMENTS AND STAFF’S PROPOSED REC REVENUES TRACKING MECHANISM5

IV. ATTRITION7

 A. Definition of Attrition and Commission Policy on Attrition Adjustments.....7

 B. Staff’s Attrition Analysis10

 1. General Approach10

 2. Analysis of Growth in Revenue.....14

 3. Analysis of Growth in Rate Base, Expenses and Other Non-Retail Revenues16

 4. Results – Electric Attrition Study21

 5. Results – Natural Gas Attrition Study22

 C. Company’s Attrition Analysis24

 D. Detailed Explanation of Exhibit No.__(CRM-2).....33

 E. Detailed Explanation of Exhibit No.__(CRM-3).....40

V. REC REVENUES TRACKING MECHANISM.....47

LIST OF EXHIBITS

- Exhibit No. __ (CRM-2), Electric Attrition Analysis
- Exhibit No. __ (CRM-3), Natural Gas Attrition Analysis
- Exhibit No. __ (CRM-4), REC Revenues Rebate

1 **I. INTRODUCTION**

2

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

4 A. My name is Chris R. McGuire. My business address is The Richard Hemstad Building,
5 1300 S. Evergreen Park Drive S.W., Olympia, WA 98504.

6

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

8 A. I am employed by the Washington Utilities and Transportation Commission
9 (“Commission”) as a Regulatory Analyst in the Conservation and Energy Planning
10 Section of the Regulatory Services Division.

11

12 **Q. How long have you been employed by the Commission?**

13 A. I have been employed by the Commission since May 2012.

14

15 **Q. Would you please state your educational and professional background?**

16 A. I graduated from the University of Washington in 2002 with a Bachelor of Science
17 degree in Cell and Molecular Biology. I graduated from the University of Colorado in
18 2010 with Master’s degrees in Business Administration and Environmental Studies.
19 Prior to my employment with the Commission, I held various research and analysis
20 positions at the University of Washington, the University of Colorado and the National
21 Renewable Energy Laboratory’s Strategic Energy Analysis Center.

22

1 **Q. What are your responsibilities at the Commission?**

2 A. My responsibilities at the Commission involve analysis of resource acquisition prudence
3 and ratemaking policy, integrated resource planning, energy conservation program
4 development and implementation, and compliance with the conservation and renewable
5 portfolio standards of RCW 19.285, the Energy Independence Act.

6

7 **Q. Have you previously testified before the Commission?**

8 A. Yes. I testified as the Staff witness for pro forma capital additions policy in PacifiCorp's
9 2013 general rate case, Docket UE-130043.

10

11 **II. SCOPE OF TESTIMONY AND INTRODUCTION OF STAFF WITNESSES**

12

13 **Q. Please explain the purpose of your testimony.**

14 A. The primary purpose of my testimony is to provide an overview of Staff's direct case in
15 response to Avista's rate filings for gas and electric service in these dockets. I am
16 responsible for Staff's attrition analysis as well as presenting the overall rate year revenue
17 requirement. I make recommendations regarding: (1) the calculation of a proper attrition
18 adjustment; and (2) the rebate and tracking mechanism for renewable energy credits
19 (RECs).

20 I also introduce the remaining witnesses that provide testimony in this proceeding
21 on behalf of Commission Staff and briefly summarize their issue areas.

1 I respond to the Company's attrition analyses sponsored by Company witness Ms.
2 Andrews and the REC revenues tracking and rebate mechanism sponsored by Company
3 witness Mr. Johnson.
4

5 **Q. Please introduce the other Staff witnesses testifying in this proceeding and the**
6 **subjects of their testimony.**

7 A. The following witnesses present testimony and exhibits for Staff:

- 8 • Mr. Thomas E. Schooley serves as Staff's general policy witness and presents Staff's
9 decoupling proposal.
- 10 • Mr. Kenneth L. Elgin presents Staff's recommendation on a fair rate of return,
11 including adjustments to cost of capital to account for Staff's full decoupling
12 proposal.
- 13 • Mr. Christopher T. Mickelson presents Staff's recommendations for cost of service
14 studies and allocating Staff's recommended revenue requirement to Avista's rate
15 schedules for both electric and natural gas service. He also presents Staff's
16 recommended rate spread and rate design.
- 17 • Mr. Jason L. Ball presents Staff's recommendations on pro forma net power supply
18 expense, the Energy Recovery Mechanism, and load forecasting.
- 19 • Ms. Joanna Huang presents the electric and natural gas results of operations for the
20 Commission Basis Report ending December 31, 2013.
- 21 • Mr. David C. Gomez presents Staff's analysis of the Company's prospective capital
22 budget and pro forma rate base used to inform the pro-forma "cross-checks" to the
23 Company's attrition analyses.

- 1 • Ms. Betty A. Erdahl presents Staff's working capital adjustments for electric and
2 natural gas service.
- 3 • Ms. Juliana M. Williams addresses low income issues and presents Staff's
4 recommendation on Avista's Low Income Rate Assistance Program.
- 5 • Mr. Bradley T. Cebulko presents Staff's recommendation for a Service Quality and
6 Reliability program.

7
8 **Q. Have you prepared any exhibits in support of your testimony?**

9 A. Yes. I prepared Exhibit No. ___ (CRM-2) and Exhibit No. ___ (CRM-3). These exhibits
10 present my analysis of attrition and revenue requirements, for electric and natural gas
11 operations, respectively. These exhibits use the same models Avista uses in its direct
12 case. My Exhibit Nos. ___ (CRM-2) and ___ (CRM-3) correspond to Avista Exhibit
13 Nos. ___ (EMA-2) and ___ (EMA-3), respectively.

14 I also have prepared Exhibit No. ___ (CRM-4), which presents my calculation of
15 the REC revenues rebate and the customer-class specific REC rebate rates.

16
17 **III. SUMMARY OF REVENUE REQUIREMENTS AND STAFF'S PROPOSED REC**
18 **REVENUES TRACKING MECHANISM**
19

20 **Q. What is Avista's revenue requirement for electric service and gas service, and how**
21 **does this compare to Avista's current base rates?**

22 A. Staff's analysis demonstrates Avista has a total attrition-adjusted electric revenue
23 requirement for the 2015 rate year of \$472,695,000. As shown in Exhibit No. ___ (CRM-
24 2), page 1, column (g), line 7, this is a decrease of \$8,231,000 relative to 2014 base rate

1 revenues. This represents a 1.7 percent decrease in electric revenues relative to 2014
2 base rate revenues. I recognize these 2014 electric base rates expire at the end of 2014,
3 and discuss Staff's presentation relative to 2013 base rate revenues in Section IV(B)(1) of
4 this testimony.

5 Staff's analysis also demonstrates Avista has a total attrition-adjusted natural gas
6 revenue requirement for the 2015 rate year of \$157,114,000. As shown in Exhibit No. __
7 (CRM-3), page 1, column (g), line 7, this is an increase of \$7,085,000 relative to 2014
8 base rate revenues. This represents a 4.5 percent increase in natural gas revenues relative
9 to 2014 base rate revenues. I recognize these 2014 gas base rates also expire at the end of
10 2014, and discuss Staff's presentation relative to 2013 base rate revenues in Section
11 IV(B)(1) of this testimony.

12
13 **Q. Please summarize Staff's proposal for the REC revenues tracking and rebate**
14 **mechanism.**

15 A. I recommend the Commission accept Avista's proposed REC revenues tracking and
16 rebate mechanism with three modifications: 1) Interest on the account balance after
17 January 1, 2015, should accumulate at the Company's after-tax rate of return, and not the
18 Company's cost of debt; 2) the REC revenues rebate should be returned to customers at a
19 rate consistent with cost of service, and not on a uniform cents/kWh basis across all rate
20 classes; and 3) REC expenses that are not directly related to specific REC revenues
21 should be removed from the tracking account and be included instead as an element of
22 energy costs.

1 I recommend the Commission order Avista to return \$8,613,493 of net REC
2 proceeds to customers over the 18-month period January 1, 2015, to June 30, 2016.

3 4 IV. ATTRITION

5 6 A. Definition of Attrition and Commission Policy on Attrition Adjustments

7 8 Q. What is attrition?

9 A. In ratemaking, the term “attrition” typically refers to the erosion of a company’s rate of
10 return over time because the historical test period relationship in revenues, expenses and
11 rate base does not hold during a future rate year. If this erosion occurs, it can deprive the
12 utility of a reasonable opportunity to earn a fair rate of return. As the Commission has
13 observed:

14 Attrition is the change in relationships among revenues, expenses, and rate base
15 over time, in which growth in expenses exceeds growth in revenues from factors
16 beyond the company’s control.¹

17 Although attrition is usually referred to as causing an erosion in the rate of return, or
18 more specifically, “negative” attrition, “positive” attrition can occur if revenue growth
19 outpaces expense growth. For example, a highly efficient or productive company can
20 experience positive attrition.

21 22 Q. Has Staff conducted a review of the Commission’s historical practice with respect to 23 attrition adjustments?

¹ *Utilities and Transp. Comm’n v. Wash. Natural Gas Co.*, Docket UG-920840, 4th Supplemental Order (September 27, 1993), at 29.

1 A. Yes. In Puget Sound Energy's 2011 general rate case, Staff witness Mr. Elgin conducted
2 a comprehensive review of the Commission's historical practice with respect to attrition
3 adjustments. He found that historically, the Commission has considered attrition
4 adjustments, although predominantly in the 1980s and primarily to combat the impacts of
5 inflation. However, as a general Commission policy, Mr. Elgin summarized that:

6 [T]he Commission has provided a specific adjustment for attrition when the utility
7 alleging attrition has proven in its direct case that the adjustment is necessary to
8 provide an opportunity to earn a fair rate of return. This demonstration is based on
9 a detailed showing that the test year relationship between revenues, expenses and
10 rate base will not prevail in the rate year, and a calculation of the impact of that
11 erosion on rate of return. When the utility has made that demonstration, the
12 Commission has provided additional revenue, pursuant to the goal of providing
13 the utility a reasonable opportunity to earn a fair rate of return.²
14

15 As the Commission stated in Avista's 1981 rate case:

16 [I]n order to preserve and maintain the company's financial integrity and allow it
17 to generate sufficient cash flow consistent with its need for construction projects,
18 and to attract investors at a reasonable cost, the staff's attrition allowance should
19 be accepted.³
20

21 **Q. What has the Commission done in recent cases with respect to its policy regarding**
22 **the use of an attrition adjustment to provide utilities a reasonable opportunity to**
23 **earn a fair rate of return?**

24 A. In its recent policy statement on decoupling, the Commission stated that it would
25 consider an attrition adjustment in the ratemaking process to address earnings attrition:

26 The guidance provided in this policy statement does not imply that the
27 Commission would not consider other mechanisms in the context of a general rate

² *Utilities & Transp. Comm'n v. Puget Sound Energy, Inc.*, Dockets UE-111048 and UG-111049, Exhibit No. ___ (KLE-1T) at 69:8-16.

³ *Utilities & Transp. Comm'n v. Wash. Water Power Co.*, Cause U-81-15/16, 2nd Suppl. Order at 22 (November 25, 1981). ("Washington Water Power Co." was Avista's previous name).

1 case, including an appropriate attrition adjustment designed to protect the
2 company from lost margin to any reason.⁴
3

4 More recently, in approving the settlement agreement in Avista's 2012 general rate case,
5 the Commission stated:

6 The Commission finds, on the basis of the evidence presented, that consideration
7 of attrition in setting rates for 2013 is appropriate.⁵
8

9 **Q. Has the Commission in recent years provided any specific guidance with respect to**
10 **attrition adjustments in litigated proceedings?**

11 A. No. While both Avista and Staff presented attrition studies in Avista's 2012 general rate
12 case, that case was eventually settled. However, in its order accepting the multi-party
13 settlement agreement, the Commission indicated its intention to further examine the issue
14 of attrition:

15 Given the two different attrition methodologies both Staff and Avista employ to
16 arrive at their respective adjustments, and the lack of exploration in the merits of
17 the different approaches, we do not take a position on either but will open an
18 inquiry into this issue to allow for further examination.⁶
19

20 This proceeding provides the Commission with a comprehensive record in order to
21 evaluate attrition and provide policy guidance for future proceedings.
22

⁴ *Report and Policy Statement on Regulatory Mechanisms, Including Decoupling, to Encourage Utilities to Meet or Exceed Their Conservation Targets*, Docket U-100522 at 22, ¶ 34 (November 4, 2010).

⁵ *Utilities and Transp. Comm'n v. Avista Corp.*, Dockets UE-120436/UG-120437 and UE-110876/UG-110877, Order 09 at 4, ¶10 (December 26, 2012).

⁶ *Id.* at 3, ¶ 4.

1 **B. Staff's Attrition Analysis**

2
3 **1. General Approach**

4 **Q. Are there any preliminary issues that require clarification in order to understand**
5 **Staff's presentation in this case?**

6 A. Yes. In accepting the two year rate plan in Avista's last rate case, Docket Nos. UE-
7 120436 & UG-120437, the Commission determined that the rate increases that went into
8 effect on January 1, 2014, as a result of the settlement, should be temporary, and expire
9 on January 1, 2015.⁷ Accordingly, for purposes of presenting the overall revenue
10 requirement in this case, Staff believes it is appropriate to consider the rate changes
11 relative to the "permanent" 2013 rates. This is also appropriate when attempting to
12 identify an "attrition adjustment" which is meant to account for growth between the test
13 year used as the basis for the rate case and the rate year. The test year in Staff's case is
14 the 2013 calendar year. Therefore, the normalized revenues used as the basis for this
15 case are the normalized revenues at 2013 base rates.

16 However, Staff believes it is also appropriate to present the recommended rate
17 changes as changes to *current* rates. Therefore, Staff provides a parallel presentation that
18 treats the increases put into effect on January 1, 2014, as "permanent," solely for
19 purposes of presenting the rate change relative to the rates that are currently in effect.
20 This presentation is to recognize how a customer would view these rate changes.

21

⁷ *Id.* at 27, ¶ 72, Conclusion of Law 5.

1 **Q. Please describe generally how attrition is measured.**

2 A. Under the rate base, rate of return formula, the Commission uses historical test period
3 relationships in revenue, expenses and rate base, to determine the revenue requirement of
4 a utility. An attrition study evaluates prevailing rates of growth in each of these elements
5 to determine if there is evidence to indicate whether those relationships, known and
6 measured in the test period, are likely to be materially different than those in the rate
7 year.

8 The attrition analysis determines if additional revenue is necessary to provide the
9 utility an opportunity to earn a fair rate of return in the rate year. If rates determined
10 using test year relationships are unlikely to provide revenues sufficient to allow a
11 company a reasonable opportunity to achieve its authorized rate of return in the rate year,
12 the Commission should consider an attrition adjustment.

13
14 **Q. Please describe your attrition analysis in this case.**

15 A. To analyze historical growth rates in revenues, expenses and rate base, I used information
16 from the Commission Basis Reports Avista has filed with the Commission pursuant to
17 WAC 480-100-257 (electric) and WAC 480-90-257 (gas). These reports show Avista's
18 financial performance under normalized operating conditions and adjusting items based
19 upon prior Commission orders for expenses, net plant, and certain non-retail revenue data
20 for prior years. As Staff witness Ms. Huang notes, Staff reviews these Commission Basis
21 Reports each year.

1 The “base case,” or the “escalation base” for my attrition study is the Commission
2 Basis Report for the 12 months ending December 31, 2013. Staff witness Ms. Huang
3 describes Staff’s review of this Report.
4

5 **Q. What data did you use for developing a trend analysis to establish how the**
6 **relationships between revenue, expense and rate base change over time?**

7 A. I used data from prior Commission Basis Reports to develop annual rates of growth for
8 non-retail revenues, expenses and net plant. I then applied these historical annual rates of
9 growth to the 12 months ending December 31, 2013, levels of expense, net plant, and
10 non-retail revenues to derive estimated values for those categories for the 2015 rate year.
11 To estimate 2015 retail revenues, I used the Company’s 2015 retail load forecast.

12 I used these projected 2015 levels of expense, revenues and net plant to estimate
13 rate year net operating income and rate base, which I then used to calculate the
14 prospective rate year rate of return. Finally, I compared this projected rate of return to
15 Staff’s recommended fair rate of return to assess the likelihood of earnings attrition. To
16 the extent attrition is identified, I then calculate the incremental revenue necessary to
17 provide the Company an opportunity to earn a fair rate of return in the rate year.
18

19 **Q. Why did you use the Commission Basis Report for 12-months-ending December 31,**
20 **2013, as the basis for your attrition analysis, rather than the 12 months ending June**
21 **30, 2013, which Avista used?**

22 A. Avista’s 12-months-ending December 2013 Commission Basis Report is proper for
23 several reasons. First, that Report made it possible for Staff to incorporate the most

1 recent available data into the attrition analysis. Second, it provides consistent intervals of
2 data throughout the historical time series. Third, it eliminates issues with normalized
3 revenues because it captures the effect of the new rates that went into effect January 1,
4 2013. Fourth, it captures the full effects of expenses and rate base additions that were the
5 basis for the attrition analysis from the prior rate case. Finally, it includes the full year
6 effect of all other rate-normalizing and pro forma adjustments that were included in the
7 Company's attrition models from the prior rate case.

8 There are other reasons for using this data that were not considered in the prior
9 rate case. For example, the Company made several significant changes to its business
10 starting in 2013, in an effort to reduce operations and maintenance (O&M) and
11 administrative and general (A&G) expenses. As a result, the "split test period" used by
12 the Company does not adequately capture those cost savings across a full year, and so is
13 not an appropriate starting point for the attrition study. Also, the growth rates established
14 using 2012 (rather than 2013) as the final year of the historical time series will not
15 incorporate more recent data that are likely to meaningfully inform the trend analysis.

16 Incorporating all of 2013 into the test year results of operations and into the
17 evaluation of growth rates addresses all of these shortcomings.

18
19 **Q. Why did Staff's attrition analysis use a "base case" of restated 2013 results, rather
20 than a "base case" consisting of a restated and pro forma results of operations?**

21 **A.** It is preferable to use fully restated results of operations as the "base case" for a few
22 reasons. First, an attrition analysis, by nature of applying growth rates, will already
23 capture pro forma levels of expense and rate base.

1 Second, an attrition analysis should derive pro forma levels using methods that
2 are agnostic to events subsequent to the test year. Therefore, incorporating post-test year
3 “future” information into an attrition analysis would compromise the objectivity of the
4 analysis and undermine a key reason for the superiority of an attrition adjustment to
5 future test year ratemaking: it avoids the “self-fulfilling prophesy” problem associated
6 with budget-based ratemaking.

7 Finally, performing an attrition study based on pro forma results adds significant
8 complexity to the analysis because each growth rate in each category would have to be
9 individually adjusted to take into account the specific pro forma adjustments within each
10 trended category.

11

12 2. Analysis of Growth in Revenue

13

14 **Q. Please explain how you calculated retail revenue for the rate year 2015 in your**
15 **attrition study.**

16 **A.** I used the same data and methodology Avista used to estimate retail revenue for the rate
17 year 2015, which is from the Company’s 2015 load forecast. The revenue escalation
18 factor was derived from Avista’s expected growth rate of individual billing determinants
19 between June 2013 and December 2015.⁸ I made an adjustment to incremental revenue
20 to reflect revenue growth between December 31, 2013, and December 31, 2015,⁹ rather
21 than June 30, 2013, to December 31, 2015.

22

⁸ See page 10 of Andrews Direct, Exhibit No. ___ (EMA-2), and Exhibit No. ___ (EMA-3).

⁹ This adjustment is shown in Exhibit No. ___ (CRM-2), pages 4-5, column [D], and Exhibit No. ___ (CRM-3), pages 4-5, column [C].

1 **Q. Are Avista's projections for rate year loads reasonable?**

2 A. Yes. Staff witness Mr. Ball addresses this issue. Additionally, as a reasonableness check
3 to Avista's revenue forecast, I constructed my own revenue growth model using only
4 historical billing determinant data (2001-2013). For this reasonableness check, I
5 calculated the weighted revenue growth using 2015 billing determinants, except I
6 estimated the 2015 billing determinants by applying historical rates of billing determinant
7 growth rather than using the Company's 2015 load forecast.

8 Using this approach, I estimated the weighted revenue growth between June 2013
9 and December 2015 to be 1.76 percent for electric service, which is lower than the
10 weighted revenue growth of 2.08 percent derived from the Company's 2015 load
11 forecast. I estimated the weighted revenue growth between June 2013 and December
12 2015 to be -0.37 percent for gas sales and 6.69 percent for gas transportation service,
13 which are lower than the respective weighted revenue growth rates of 2.88 percent and
14 6.78 percent derived from the Company's 2015 load forecast.

15 The fact that the Avista's revenue growth forecasts are higher than what would be
16 projected using historical rates of growth provides some amount of assurance that the
17 Company is not under-projecting rate year loads. Under-projected rate year loads could
18 cause rates to be set too high, as the Company would collect additional revenues in the
19 rate year from higher than forecasted loads not captured in the ratemaking formula.

20 In short, I conclude that in measuring attrition in this case, it is reasonable to rely
21 on the Company's 2015 load forecast for derivation of retail revenue growth factors.

22

1 3. **Analysis of Growth in Rate Base, Expenses and Other Non-Retail**
2 **Revenue**
3

4 **Q. How did you develop your growth rates and projections for rate base, expenses and**
5 **other non-retail revenue?**

6 A. I relied upon historical, normalized data from the Commission Basis Reports to estimate
7 rates of growth for: 1) net plant after deferred income taxes; 2) operating expense; 3) total
8 depreciation/amortization; 4) taxes other than income; and 5) other non-retail revenue.

9 Once I developed these rates of growth, I applied them to the escalation base (*i.e.*
10 the normalized test-year levels from the December 2013 Commission Basis Report) for
11 each corresponding category.

12
13 **Q. Please explain how you calculated rates of growth for expenses, net plant and non-**
14 **retail revenues.**

15 A. I calculated rates of growth using a weighted linear regression across 13 years (2001-
16 2013), with the rate of growth between 2007 and 2013 weighted more heavily.

17 Specifically, to calculate rates of growth for each of the categories to be escalated
18 (except for operating expense, as I explain below), I used the average slope of two linear
19 regressions: the first across 2001-2013, and the second across 2007-2013. The resulting
20 average slope therefore portrays the long-term (2001-2013) growth rates adjusted toward
21 the more recent (2007-2013) rates of growth.

22 My Exhibit Nos. __CRM-2 and CRM-3, pages 6-9, provide visual representations
23 of the rates over these two time periods. The rate of growth I used for each escalation
24 factor is the average of the two trend lines plotted on each graph.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

Q. How did you evaluate growth in operating expenses?

A. I accepted the Company's application of a 4.00 percent annual growth rate to operating expenses for electric operations, but rejected the 4.00 percent annual growth rate for operating expenses for natural gas operations.

Q. How did you determine 4.00 percent to be a reasonable rate of growth for operating expenses for electric operations?

A. Consistent with my general approach of relying upon historical data rather than budgets to evaluate growth rates, I compared the Company's 4.00 percent annual growth rate to growth rates that could be reasonably derived using linear regression on historical data. See page 10 of my Exhibit No. ____ (CRM-2) for regression analysis of adjusted operating expense for electric operations.

Avista's operating expenses appear to have grown at an unsustainable rate beginning in 2009 and progressing through 2012. Operating expenses in 2013 demonstrate that this unsustainable rate of growth was corrected. Therefore, in a trend analysis of historical data, to get a sense of what *would* have been the prevailing rate of growth across the time series had the unsustainable rate of growth never occurred, it is appropriate to de-weight, or remove data for, the period 2009-2012. I evaluated growth rates using each of these two approaches.

First, I performed a regression analysis on operating expenses over the period 2001-2013, with the period 2009-2012 removed. Operating expenses for 2013 were included in the regression analysis. This regression produced an annual growth rate of

1 3.9 percent. This is the analysis that is graphically presented on page 10 of Exhibit No. __
2 (CRM-2).

3 Second, I performed a weighted regression on operating expenses over the period
4 2001-2012, with the period 2009-2012 de-weighted (or, more precisely, I twice-weighted
5 the period 2001-2008). Operating expenses for 2013 were not included in this regression
6 analysis. This regression produced an annual growth rate of 4.0 percent.

7 Both growth rates I developed for electric operating expenses using historical data
8 support the Company's proposed 4.00 percent annual growth rate.

9
10 **Q. How did you determine 4.00 percent to be an unreasonable rate of growth for**
11 **operating expenses for natural gas operations?**

12 A. Again, consistent with my general approach of relying upon historical data rather than
13 budgets to evaluate growth rates, I compared the Company's 4.00 percent annual growth
14 rate to growth rates that could be reasonably derived using linear regression on historical
15 data. *See* page 10 of my Exhibit No. __ (CRM-3) for regression analysis of adjusted
16 operating expense for natural gas operations.

17 Similar to electric operations, Avista's operating expenses for natural gas
18 operations appear to have grown at an accelerated rate from 2009 to 2012. However,
19 simply de-weighting those years in a regression does not produce growth rates that are
20 consistent with the Company's proposal of 4.00 percent.

21 For example, I performed a regression analysis on operating expenses over the
22 period 2001-2013, with the period 2009-2012 removed, which produced an annual
23 growth rate of 3.2 percent. This is the analysis that is graphically presented on page 10 of

1 Exhibit No. __ (CRM-3). I also performed a regression analysis on operating expenses
2 over the period 2001-2012, with the period 2009-2012 de-weighted, which produced an
3 annual growth rate of 2.5 percent.

4 Even using a linear regression across the entire time series (2001-2013) produced
5 an annual rate of growth of only 3.5 percent. Therefore, it seems unlikely that the
6 expense growth rate going forward for natural gas will be higher than the growth rate
7 over the 13-year record, given the recent operational cost control measures Avista claims
8 will reduce the growth rate of operating expenses. A growth rate of 4.00 percent
9 therefore is not reasonable.

10
11 **Q. What did you determine to be the appropriate rate of growth for operating expenses**
12 **for natural gas operations?**

13 A. As I described above, a linear regression on operating expenses over the period 2001-
14 2013, with the period 2009-2012 removed produced an annual growth rate of 3.2 percent.
15 This method is consistent with my regression analysis that verified the 4.00 percent
16 growth rate for electric operations. Therefore, I use an annual growth rate of 3.2 percent
17 for natural gas operating expenses.

18
19 **Q. How are power supply expenses and revenues treated within your electric attrition**
20 **model?**

21 A. I removed all normalized energy-related costs and revenues from the base case (12
22 months ending December 2013 results of operations) so that only non-energy costs and
23 revenues are trended to the 2015 rate period. To incorporate net energy costs into the

1 revenue requirement calculation, I added the pro forma December 2015 net energy costs
2 back to the attrition model. *See* my Exhibit No. __ (CRM-2), pages 4-5, columns [B] and
3 [I] for the removal of December 2013 net energy costs and the addition of December
4 2015 net energy costs, respectively. Staff witness Mr. Ball testifies to the December
5 2015 pro forma net energy cost figures.

6
7 **Q. Did you make any adjustments to 2015 energy costs within your electric attrition**
8 **model?**

9 A. Yes. I incorporated into my attrition model the results of the Company's updated 2015
10 pro forma power supply costs.¹⁰ Due largely to the Company's upward revision to
11 projected natural gas costs, the updated 2015 pro forma power supply costs added an
12 additional \$6.3 million to the annual revenue requirement.

13
14 **Q. How are gas costs and revenues treated within your natural gas attrition model?**

15 A. Consistent with the treatment of energy costs and revenues in the electric attrition model,
16 I removed all normalized gas-related costs and revenues from the base case (12 months
17 ending December 2013 results of operations) so that only non-energy costs and revenues
18 are trended to the 2015 rate period. To incorporate net gas costs in the revenue
19 requirement calculation, I added the December 2013 net gas costs back to the attrition
20 model after escalating non-gas costs and revenues. *See* my Exhibit No. __ (CRM-3),
21 pages 4-5, columns [D] and [I] for the removal of December 2013 net gas costs and the
22 reintroduction of December 2013 net gas costs, respectively.

¹⁰ Provided in Avista response to Staff Data Request 171.

1 In the natural gas attrition model, the gas expenses and revenues added back after
2 other components are trended are identical to the gas expenses and revenues removed
3 prior to trending other components. Updates to projected gas costs are made outside of a
4 general rate case in the Company's annual purchased gas adjustment (PGA) filing, so I
5 did not pro form gas expenses and revenues in the attrition analysis.

6
7 **4. Results – Electric Attrition Study**

8
9 **Q. What are the results of your attrition study for Avista's electric operations?**

10 A. As shown in my Exhibit No. ____ (CRM-2), page 1, I estimate Avista's overall rate of
11 return for its electric operations in 2015 is 7.15 percent with a continuation of the
12 temporary 2014 rates, or 6.50 percent at the permanent 2013 rates:

	2015 (at 2013 rates)	2015 (at 2014 rates)
NOI (in thousands)	\$86,632	\$95,352
Rate Base (in thousands)	\$1,333,006	\$1,333,006
Rate of Return	6.50%	7.15%

13
14 **Q. Does the rate of return of 7.15 percent mean Avista likely will experience attrition**
15 **for its electric service in 2015 at 2014 base rates?**

16 A. No. The 7.15 percent rate of return I project for 2015 is higher than the 6.77 percent rate
17 of return being recommended by Staff in this case. Therefore, attrition is not likely to
18 occur in 2015 at base rates currently in effect, and revenues at current 2014 rates should

1 be lowered by \$8,231,000. This is shown in my Exhibit No. ___ (CRM-2) at page 1, line
2 7, column (g).

3 However, assuming the 2014 rates expire, and rates revert back to 2013 levels, I
4 project Avista would earn a rate of return of 6.50 percent in 2015, which is below the rate
5 of return of 6.77 percent being recommended by Staff in this case. Therefore, attrition is
6 likely to occur in 2015 compared to 2013 base rate revenues and so, should the rates
7 revert back to 2013 levels, the Commission should provide Avista with an attrition
8 allowance of \$5,823,000. This is shown in my Exhibit No. ___ (CRM-2) at page 1, line 7,
9 column (e).

10
11 **Q. What factors are contributing to the revenue surplus in this case?**

12 A. There are several factors contributing to the reduction in overall revenue requirement for
13 Avista's electric operations in this case. First, pro forma 2015 net energy costs are
14 roughly \$2.1 million lower than those in the 2013 test period. Although net energy costs
15 are not trended within the attrition analysis, pro forma energy costs are included in the
16 overall revenue requirement. A decrease in net power supply costs between 2013 and
17 2015 will help mitigate attrition over that time period. Second is Staff's recommendation
18 for a fair rate of return. Mr. Elgin discusses the impact of this element of Avista's
19 revenue requirement on attrition.

20
21 **5. Results – Natural Gas Attrition Study**

22
23 **Q. What are the results of your attrition study for Avista's natural gas operations?**

1 A. As shown in my Exhibit No. ____ (CRM-3), page 1, I estimate Avista's overall rate of
2 return in 2015 for natural gas operations is 5.00 percent with a continuation of the
3 temporary 2014 rates, or 4.66 percent at the permanent 2013 rates.
4

	2015 (at 2013 rates)	2015 (at 2014 rates)
NOI (in thousands)	\$11,536	\$12,379
Rate Base (in thousands)	\$247,796	\$247,796
Rate of Return	4.66%	5.00%

5
6

7 **Q. Does your projected rate of return suggest Avista will experience attrition for its**
8 **natural gas service in 2015 at 2014 rates?**

9 A. Yes. The 5.00 percent rate of return I project for 2015 is lower than the 6.77 percent rate
10 of return being recommended by Staff in this case. Therefore, attrition is likely to occur
11 in 2015 at 2014 base rates, and the Commission should provide Avista with an attrition
12 allowance of \$7,085,000. This is shown in my Exhibit No. ____ (CRM-3_ at page 1, line 7,
13 column (g).

14 If the 2014 rates expire, and rates revert back to 2013 levels, I project Avista
15 would earn a rate of return of 4.66 percent in 2015, which is also below the rate of return
16 of 6.77 percent being recommended by Staff in this case. Should rates revert back to
17 2013 levels, the Commission should provide Avista with an attrition allowance of
18 \$8,443,000. This is shown in my Exhibit No. ____ (CRM-3) at page 1, line 7, column (e).
19

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

C. COMPANY'S ATTRITION ANALYSIS

Q. According to Avista, what are the current circumstances facing the Company regarding attrition?

A. According to Company witness Mr. Norwood, the Company is experiencing ongoing earnings attrition because net plant investment and non-fuel O&M/A&G continue to grow at a faster rate than revenues.¹¹ Company witness Ms. Andrews reiterates this general theme, stating:

The increase in overall costs to serve customers is driven primarily by two major factors: 1) the continuing need to replace and upgrade the facilities and technology we use every day to serve our customers, and 2) low revenue growth.¹²

Q. What test period does Avista use in its direct case?

A. Avista uses the 12-months-ending June 30, 2013, for the test period in its direct case. Avista then measures attrition through the 2015 rate year.

Q. Please summarize the results of Avista's electric and natural gas attrition studies.

A. Avista's attrition studies show a projected 2015 rate of return of 6.89 percent (for its electric operations¹³ and 4.68 percent for its natural gas operations).¹⁴ These returns are below the Company's proposed rate of return of 7.71 percent.

¹¹ Norwood Direct, Exhibit No. ____ (KON-1T), at 14:3-4.
¹² Andrews Direct, Exhibit No. ____ (EMA-1T), at 8:6-8.
¹³ Andrews Direct, Exhibit No. ____ (EMA-2), at 5:50, column K.
¹⁴ Andrews Direct, Exhibit No. ____ (EMA-3), at 5:48, column K.

1 As a result, Ms. Andrews projects that the total revenue requirement for electric
2 operations is \$499,127,000, or a revenue deficiency of \$18,201,000.¹⁵ Ms. Andrews also
3 projects that the total revenue requirement for natural gas operations is \$162,164,000, or
4 a revenue deficiency of \$12,135,000.¹⁶

5
6 **Q. Did Avista provide any updates to its direct case and attrition analysis?**

7 A. Yes. The Company provided updates to correct a number of errors that were in its direct
8 case. In response to Staff Data Request 091, Avista provided an initial update to its
9 attrition analysis.¹⁷

10
11 **Q. What other updates to its attrition analysis and results of operations did Avista
12 provide?**

13 A. In Staff Data Request 115, Staff requested Avista to update its presentation and attrition
14 analysis for a new test period ending December 31, 2013, to incorporate the results of the
15 Company's December 2013 Commission Basis Report.¹⁸ This analysis is important,
16 because it provides evidence giving full effect to the attrition rate year results from the
17 2012 rate case settlement.

18

¹⁵ Andrews Direct, Exhibit No. ___ (EMA-2), at 1:7, column g.

¹⁶ Andrews Direct, Exhibit No. ___ (EMA-3), at 1:7, column g.

¹⁷ Corrections to Exhibit No. EMA-2 included a formula error in the accumulated depreciation calculation for 2011 and 2012, an error in federal income tax on the BPA/Reardan write off, an error in deferred debits and credits, an error in working capital balances, and removal of O&M offsets as after-attrition adjustments. Corrections to Exhibit No. EMA-3 included an error in federal income tax on the BPA/Reardan write off.

¹⁸ Dockets UE-140529 and UG-140530, December 2013 Commission Basis Reports, filed with the Commission March 31, 2014. Avista filed an updated electric 2013 Commission Basis Report on April 24, 2014 in Docket UE-140529.

1 **Q. What were the results of the Company's revised June 2013-December 2015 attrition**
2 **studies provided in response to Staff Data Request 091?**

3 A. Using the corrected attrition models, and maintaining its proposed test year of the 12-
4 months-ending June 2013, the Company projected a rate of return of 6.25 percent for its
5 electric operations and 4.31 percent for its natural gas operations. Using these updated
6 attrition studies, the Company projects that the revenue deficiency is \$17,881,000 for
7 electric operations and \$12,177,000 for natural gas operations.

8
9 **Q. What were the results of the Company's revised December 2013-December 2015**
10 **attrition studies provided in response to Staff Data Request 115?**

11 A. Using the 12-months-ending December 2013 as the test period, and calculating growth
12 rates using 2013 data, but otherwise using the same growth rate methodology, the
13 Company's projected 2015 rate of return was 6.23 percent for electric operations and
14 4.03 percent for natural gas operations. These attrition studies show the Company
15 projects a revenue deficiency of \$18,234,000 for electric operations and \$13,780,000 for
16 natural gas operations.

17 The Commission should note here that these revenue requirement presentations
18 were provided prior to the update to 2015 pro forma energy costs. The update to 2015
19 pro forma energy costs will add approximately \$6.3 million to Avista's proposed revenue
20 deficiency. This update in power supply costs of \$6.3 million is incorporated into Staff's
21 case.

22

1 **Q. Please summarize the key differences between your attrition study and the**
2 **Company's attrition study.**

3 A. As I explain earlier in this testimony, I relied upon Commission Basis Report restated
4 totals for the year ending December 2013, while the Company relied upon Commission
5 Basis Report restated totals for the year ending June 2013. I also relied upon the
6 Company's 2015 attrition studies that used the 12 months ending December 2013 as the
7 test period, which it provided in response to Staff Data Request 115. With certain
8 alterations that I discussed in the previous sections, I provide these attrition studies as my
9 Exhibit No.__(CRM-2) for electric service and Exhibit No.__(CRM-3) for natural gas
10 service.

11 In addition, I developed growth rates in a significantly different manner than the
12 Company.

13
14 **Q. Please list the primary differences between how you calculated growth rates and**
15 **how the Company calculated growth rates in the attrition studies.**

16 A. There are three primary differences. First, I used weighted linear regressions between
17 2001 and 2013 to describe historical rates of growth. The Company used compounded
18 growth rates between 2007 and 2012 for this same purpose.

19 Second, as I explained earlier, I did not use the Company's budgeted 4.00 percent
20 compounding annual growth rate in operating expenses for natural gas service. Instead, I
21 derived a more reliable rate I developed from a modified regression analysis.

22 Third, I applied a growth factor to "other non-retail revenues" for natural gas
23 service. The Company did not apply any growth rate to this item.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

Q. Please describe the Company's general method for calculating growth rates.

A. The Company used a compounding growth rate using only two years (2007 and 2012 in its direct case).¹⁹ In the Company's direct case, it calculates the growth rate as the annual compounding rate that when applied to actual 2007 values over five periods gives actual 2012 values. The Company did not consider data from other years in developing its growth rates. The Company then compounded this calculated growth rate over 2.5 periods to escalate certain revenues, expenses and net plant to the rate year.

Q. Should the Commission accept the Company's use of compounding growth rates?

A. No. There are two reasons why the Commission should not accept the Company's use of compounding growth rates: 1) a compounding growth rate does not describe the underlying data with reasonable accuracy; and 2) Avista's use of only two data points (in this case, 2007 and 2012) generates a growth rate that is unreliable.

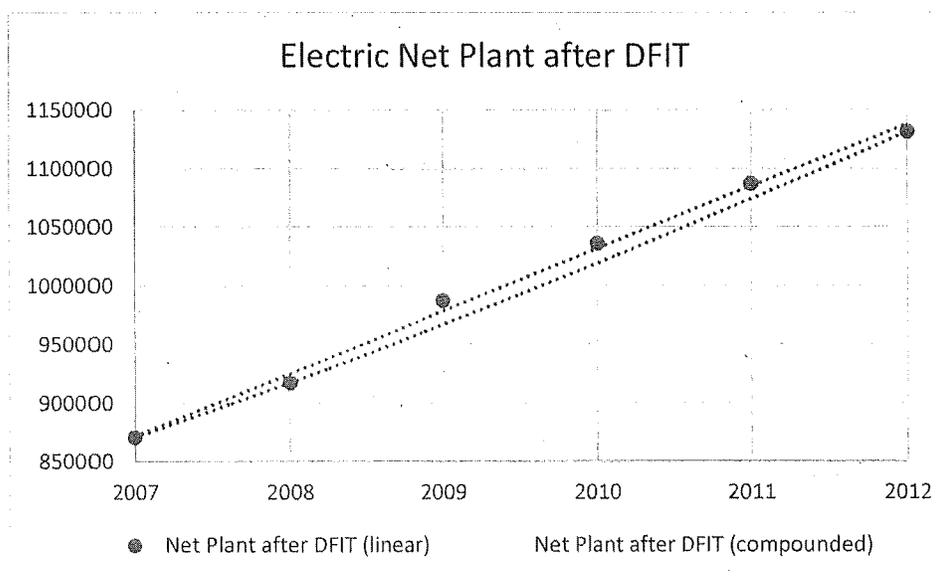
Q. Please explain how Avista's compounding growth rates do not describe the underlying data with reasonable accuracy.

A. Avista used a compounding growth rate calculated as the annual compounding rate that, when applied to actual 2007 values over five periods, gives actual 2012 values. If the underlying data were to follow the compounding annual growth rate suggested by these two points (2007 and 2012), then data from 2008, 2009, 2010, and 2011 could be

¹⁹ Avista also provided updated attrition analyses in response to Staff Data Request 115, in which they used 2007 and 2013 as the only two years of the trend analysis.

1 reasonably imputed by applying the compounding growth rate formula from 2007 to
2 those years.

3 However, the data from those years can be better imputed using a simple least
4 squares linear regression. For example, I provide below a graph of electric net plant after
5 deferred income tax over the period 2007-2012. The upper line is the least squares linear
6 regression over 2007 to 2012 inclusive, and the lower curve is the compounding curve
7 calculated from the two data points of 2007 and 2012; the method Avista used.



8
9 What this graph demonstrates is that the least squares linear regression produces a better
10 fit over the whole data series than does a compounding curve. Although the
11 compounding curve perfectly describes the first and the last data point in the time series,
12 it does not provide a reasonably accurate description of the data in between those two
13 points. Statistically speaking, the model "error" produced from a compounding curve is
14 greater than the error produced from a linear regression.

15 When choosing a shape for describing historical growth rates, it is important to
16 choose a shape that is appropriate for the underlying data. From the graph above, it is

1 clear that the data are better described by a linear rate of growth than a compounding
2 curve.

3
4 **Q. Please explain why Avista's use of only two data points (i.e., 2007 and 2012)**
5 **generates a growth rate that is unreliable.**

6 A. Avista's use of only two data points (i.e., from 2007 and 2012) to estimate a trend is
7 unreliable because the apparent growth rate is unduly influenced by only two years of a
8 much larger data series. In addition to relying too heavily upon limited and potentially
9 non-representative data, any irregularity, abnormality or error in either of those two data
10 points will be fully reflected in the apparent rate of growth across the time series. By
11 using a larger data set when performing a trend analysis, the impact of an anomaly in a
12 single data point is dampened by the diminished weight of an individual data point.

13
14 **Q. Can you provide examples demonstrating the problems you mention above**
15 **associated with relying upon just two data points to calculate a growth rate?**

16 A. Yes. If I were to use only data from 2007 and 2012, and if 2007 had been a below-
17 average year in terms of transfers to plant in service and 2012 had been an above-average
18 year, then the rate of growth in plant would appear to be substantially larger than a
19 complete record would otherwise indicate. In a plot of the historical net plant data (*See*
20 *my Exhibit No. __CRM-2, page 6, and my Exhibit No. __CRM-3, page 6*), it appears that
21 2007 may in fact have been an irregularly slow year in terms of transfers to plant for both
22 electric and natural gas service. Thus, the rate of growth calculated using 2007 levels as
23 the starting data point may well generate an artificially high apparent rate of growth.

1 To further illustrate this point, had Avista used 2006 instead of 2007 in its electric
2 attrition study as the starting point for its growth rate analysis, Avista would have
3 presented the 2015 revenue requirement above 2014 rates as \$13.9 million instead of
4 \$17.8 million.²⁰ That is a change in proposed annual revenue requirement of \$3.9
5 million, simply by “anchoring” the growth rate analysis to 2006 instead of 2007.
6

7 **Q. Can you provide an example that confirms your approach to calculating growth**
8 **rates yields more reliable results than Avista’s approach?**

9 A. Yes. Avista discovered a single error in its December 2013 – 2015 electric attrition study
10 in the final year (2013 in this version of the attrition analysis) of the trend analysis data.
11 Correcting this error decreased the revenue requirement by \$2.5 million in the
12 Company’s attrition model that used compounding growth rates. However, in my
13 regression-based attrition analysis, correcting the same error decreased the revenue
14 requirement by only \$350,000, thus demonstrating how regression-based models are less
15 sensitive to spurious data than a compounding model that uses only two data points.
16

17 **Q. Are there other problems with using compounding growth rates?**

18 A. Yes. Compounding growth rates imply a continuous acceleration of growth in the
19 absolute levels of expenses and transfers to plant into the future. However, this
20 continuous acceleration of growth is not represented in the historical data. The Company
21 seems to use compounding growth rates to justify a planned increase in expenditures in
22 future years relative to the historical record. As Ms. Andrews states: “Based on the

²⁰ Avista provided the values generated using the electric attrition model in its response to Staff Data Request 091.

1 Company's plan for higher capital expenditures in future years, it is appropriate to use the
2 compound annual growth rates for the 2007-2012 period..."²¹ [Emphasis added]

3 However, consistent with the notion that attrition studies should rely upon
4 historical rates of growth, the Commission should reject methods that are justified by
5 alignment with a desired outcome. Methods should be selected based on appropriateness
6 for the data being analyzed and on analytical objectivity. Accordingly, the Commission
7 should reject methods that use compounding growth rates on the grounds that they fail to
8 meet both of these standards.

9
10 **Q. How did your application of the growth rate for other (non-retail) revenue for
11 natural gas service differ from that of the Company?**

12 A. Avista did not apply a growth rate for "other non-retail revenue" in its natural gas
13 attrition analysis (although it did so in its electric attrition analysis). Avista's rationale
14 for not using a growth rate for non-retail gas revenue is because the Company claims "de
15 minimus values that resulted in extraordinary variability."²² However, although the data
16 for adjusted other revenue are indeed variable, a statistically significant positive slope
17 was still identifiable. Therefore, it is appropriate to identify and apply a growth rate for
18 adjusted other revenue in the natural gas attrition study.

19
20 **Q. Are there any other notable differences between the Company's and your
21 incremental revenue requirement calculations?**

²¹ Andrews Direct, Exhibit No. ___ (EMA-1T), at 23:8-9.

²² Andrews Direct, Exhibit No. ___ (EMA-3), at 9:20.

1 A. Just one. Whereas the Company divided the attrition revenue requirement by a revenue
2 growth factor of 1.020771 to reflect the dollar amount needed to be recovered from the
3 year ending June 2013 levels of retail loads and customers, I did not divide by a revenue
4 growth factor. In this case, Staff proposes to apply any rate change to the rate year levels
5 of retail loads and customers. Therefore, no adjustment of attrition revenue requirement
6 was necessary in my attrition study.

7

8 **D. Detailed Explanation Exhibit No. __ (CRM-2) – Staff’s Attrition Analysis for**
9 **Electric Operations**

10

11 **Q. Do you have any general remarks before you provide a detailed explanation of your**
12 **electric attrition study in Exhibit No. __ (CRM-2)?**

13 A. Yes. I developed Exhibit No. __ (CRM-2) from the attrition model Avista provided in
14 response to Staff Data Request 115. This revised attrition study conforms very closely to
15 the structure of the attrition study in Avista’s direct case in Exhibit No. __ (EMA-2). As a
16 result, the description that follows here is largely repetitive, in many cases verbatim, of
17 the description provided in Company Exhibit No. __ (EMA-1T), on pages 14-24.

18 However, there are significant differences, primarily regarding the different test
19 period Staff used, as well as differences in the analytical approach for certain components
20 of the attrition studies. I described those difference when I critiqued the Company’s
21 attrition study.

22

23 **Q. Please explain what is shown on page 1 of Staff’s Electric Attrition Study, Exhibit**
24 **No. __ (CRM-2).**

1 A. Exhibit No. __ (CRM-2), page 1, shows the calculation of the electric general revenue
2 requirement, based on Staff's Electric Attrition Study, to earn the 6.77 percent rate of
3 return proposed by Staff.

4 Column (e), line 7, shows the 2015 incremental electric revenue requirement, or
5 "attrition adjustment" of \$5,823,000 over 2013 base rate revenues; column (f) shows the
6 temporary (2014) revenue increase of \$14,054,000 presently in effect; and column (g)
7 shows the incremental revenue decrease needed for 2015 of \$8,231,000, relative to 2014
8 base rate revenues.

9 As I explained earlier, Staff's revenue requirement analysis does not demonstrate
10 the need for a continuation of the 2014 temporary revenue increase of \$14,054,000.
11 Staff's analysis supports a revenue decrease of \$8,231,000 relative to 2014 levels, or a
12 revenue increase of \$5,823,000 relative to 2015 levels.

13 Column (a) of page 1, labeled "Attrition Balances," shows the electric Attrition
14 Net Operating Income and Attrition Rate Base balances from page 5 of Exhibit
15 No. __ (CRM-2), column [K], lines 31 and 49.

16 Column (b) of page 1, labeled "Revenue Growth Factor," shows the revenue
17 growth factor of 1.00, reflecting application of rates to the Company's forecasted 2015
18 billing determinants (rather than test year billing determinants). Avista used a revenue
19 growth factor of 1.020771, reflecting application of rates to the 12-months-ending June
20 30, 2013, test period billing determinants.

21 Column (c), labeled "Attrition Adjusted Balances," shows the calculation of the
22 \$5,466,000 revenue requirement at the proposed 6.77 percent rate of return, based on the

1 Electric Attrition Study "Attrition Rate Base" and "Attrition Net Operating Income"
2 balances in column (a) unadjusted for the revenue growth factor in column (b).

3 Column (d), labeled "After Attrition Adjustments," includes an increase of
4 \$357,000 to the Attrition Revenue Requirement amount in column (c), resulting from
5 adjustments Avista states is necessary to restate the attrition-adjusted subtotal for the
6 Lake Spokane deferral which was outside of the attrition-adjusted revenue requirement
7 proposed in this case, but set to begin amortization in 2015. Staff does not contest this
8 adjustment.

9 Column (e), labeled "Final Balances," shows the electric attrition adjusted
10 revenue requirement after reflecting the After Attrition Adjustments included in column
11 (d), resulting in an adjusted electric attrition total of \$5,823,000. Line 11 shows the
12 attrition-based 2015 overall revenue requirement of \$472,695,000

13 Column (f) shows the 2014 Temporary Rate Increase approved in Docket UE-
14 120436 of \$14,054,000, which is currently in effect, but expires at the end of 2014. Due
15 to the total attrition revenue need in 2015 (over 2013 levels) as shown in column (e) of
16 \$5,823,000, which is lower than the 2014 temporary rate increase of \$14,054,000, the
17 Commission should allow the 2014 revenue increase to expire and replace it with a
18 revenue increase of \$5,823,000 over 2013 rates. This represents a 1.25 percent increase
19 in revenues relative to 2013 rates.

20 Column (g), labeled "2015 Revenue Requirement," shows the 2015 incremental
21 revenue decrease of \$8,231,000 relative to the 2014 temporary rates. This represents a
22 1.71 percent decrease in revenues relative to 2014 rates.
23

1 **Q. Please explain page 2 of Exhibit No. __ (CRM-2).**

2 A. Page 2 shows the proposed cost of capital and capital structure used by Staff resulting in
3 a weighted average cost of capital of 6.77 percent. Staff witness Mr. Elgin presents
4 Staff's proposed cost of capital, including capital structure.

5
6 **Q. Please explain page 3 of Exhibit No. __ (CRM-2).**

7 A. Page 3 shows the derivation of the electric net-operating-income-to-gross-revenue
8 conversion factor. This conversion factor is identical to the conversion factor used by the
9 Company and presented on page 3 of Exhibit No. __ (EMA-2).

10
11 **Q. Please explain pages 4 and 5 of Exhibit No. __ (CRM-2).**

12 A. Pages 4 and 5 present the normalized income statement and rate base for Washington
13 electric operations, with the cost, revenue and rate base detail that is found in Avista's
14 December 2013 Commission Basis Report. These pages show the escalation of
15 December 2013 Commission Basis Report results of operations to the 2015 rate year.

16 Column [A], labeled "12.2013 Commission Basis Report Restated Totals,"
17 provides the results of the December 2013 Commission Basis Report that includes
18 normalized cost and revenue data for Avista's Washington electric operations for the
19 period twelve-months-ended December 31, 2013. This column shows that on a
20 Commission Basis Report normalized basis for this historical test period, the Company's
21 earned rate of return for its Washington electric operations was 7.57 percent.

22 Column [B], labeled "12.2013 Normalized Net Power Supply," is subtracted from
23 column [A], removing all normalized energy related cost and revenues from the

1 December 2013 Commission Basis Report values (pro forma level net power supply costs
2 are added back later, as I discuss further below.) This removal ensures only non-energy
3 costs are trended to the 2015 rate period.

4 Column [C], labeled "Proposed Working Capital & Restated Def. Deb/Cred," is
5 an addition to column [A], restating Working Capital balance to December 2013 Average
6 of Monthly Averages (AMA) balances and Deferred Debits and Credits to December
7 2015 AMA balances. Working capital was not an item subject to my trend analysis,
8 because Avista has not included working capital in most years of the Commission Basis
9 Reports I used, making trending unreliable. Furthermore, in this case, Staff and the
10 Company are including certain pension-related items for the first time. The working
11 capital adjustment is sponsored by Staff witness Ms. Erdahl.

12 Deferred Debits and Credits are adjusted to reduce debit and credit balances
13 according to expected amortization balances for the 2015 rate period. No escalation of
14 Deferred Debits and Credits occurs in the attrition study because they do not grow from
15 year to year in a predictable manner.

16 Column [D], labeled "Incremental Revenue Normalization Adjustment," adjusts
17 the Commission Basis normalized revenue to the 2013 base rate revenue produced by the
18 billing determinants used in the Company's initial filing. This adjustment is necessary to
19 account for the fact that Staff's case begins at the December 2013 Commission Basis
20 Report restated totals while the Company's case begins at the June 2013 Commission
21 Basis Report restated totals. Revenue growth is adjusted to 2015 using the billing
22 determinant index, not trend analysis.

1 Column [E], labeled "December 2013 Escalation Base," is the sum of the
2 previous columns [A] through [D], providing the December 2013 escalation base rate
3 base and costs excluding net energy costs. This escalation base provides the balances
4 from which the escalation factors are applied to determine the 2015 final attrition revenue
5 requirement.

6 Column [F], labeled "Escalation Factor," shows the two year escalation rates for
7 revenues, expenses and net plant. I describe the determination of each of these factors
8 earlier in this testimony.

9 Column [G], labeled "Non-Energy Cost Escalation Amount," shows the
10 incremental change between the December 2013 escalation base and the 2015 rate year
11 levels, calculated by multiplying the December 2013 base amounts from column [E] by
12 the escalation factors in column [F].

13 Column [H], labeled "Trended 2015 Non-Energy Cost," shows the 2015 trended
14 amounts prior to including the impact of pro formed net power supply and 2015 revenue
15 growth, and is calculated by adding the non-energy cost escalation amount in column [G]
16 to the December 2013 base amounts in Column [E].

17 Column [I], labeled "2013 Pro-Formed Net Energy Cost," adds the energy
18 costs and sales for resale revenue produced by the Aurora model. These values reflect
19 fuel prices and market conditions for the 2015 rate year, and include the costs associated
20 with incremental load growth from the historical test year to the 2015 rate year. Staff
21 witness Mr. Ball presents the pro forma net energy costs I use in this attrition analysis.

22 Column [J], labeled "Revenue Growth," reflects Avista's revenue growth between
23 the test year and the 2015 rate year, calculated by multiplying the retail revenue in

1 column [E] times the weighted revenue growth escalation factor in column [F]. The
2 calculation of the weighted revenue growth escalation factor is shown on page 10 of
3 Company Exhibit No. __ (EMA-2).

4 Column [K], labeled "2015 Revenue and Cost," is the sum of the pro-formed net
5 energy cost in column [I], revenue growth in column [J], and trended 2015 non-energy
6 cost in column [H]. This is the final column of the 2015 electric Attrition Study
7 calculation, providing the 2015 attrition net operating income of \$86,821,000 and
8 attrition total rate base of \$1,332,533,000, at lines 31 and 49, respectively. These totals
9 are brought forward to page 1, column (a), of Exhibit No. __ (CRM-2).

10
11 **Q. Please describe pages 6 through 9 of Exhibit No. __ (CRM-2), your electric attrition**
12 **study.**

13 A. Pages 6-9 of Exhibit No. __ (CRM-2) show the derivation of the escalation factors used
14 for escalating adjusted other revenue, net plant after deferred income taxes, adjusted taxes
15 other than income, and adjusted depreciation/amortization.

16 As I explained earlier in my testimony, each growth rate is calculated as the
17 average of the slopes for the least-squares linear regressions across: a) 2001-2013; and b)
18 2007-2013. I converted the slope of each regression (in thousands of dollars) to an
19 annual growth rate by dividing by the 2013 level. As the rate of growth is linear, to
20 arrive at the escalation factor to apply to 2013 levels for derivation of 2015 levels, the
21 calculated annual rate of growth is multiplied by two (years). These escalation factors
22 are carried forward to column [F] of page 4 of Exhibit No. __ (CRM-2).

1 **Q. Please describe page 10 of Exhibit No. __ (CRM-2).**

2 A. Page 10 of Exhibit No. __ (CRM-2) shows the derivation of the escalation factor used for
3 escalating adjusted operating expense.

4 I calculated the growth rate as the slope of the least-squares linear regression
5 across 2001-2013 with years 2010-2012 omitted. I converted the slope of the regression
6 (in thousands of dollars) to an annual growth rate by dividing by the 2013 level. As the
7 rate of growth is linear, to arrive at the escalation factor to apply to 2013 levels for
8 derivation of 2015 levels, I multiplied the calculated annual rate of growth by two
9 (years). This escalation factor is carried forward to column [F] of page 4 of Exhibit
10 No. __ (CRM-2).

11

12 **E. Detailed Explanation of Exhibit No. __ (CRM-3) – Staff’s Attrition Study for**
13 **Gas**

14

15 **Q. Do you have any general remarks before you provide a detailed description of your**
16 **gas attrition study in your Exhibit No. __ (CRM-3)?**

17 A. Yes. My Exhibit No. __ (CRM-3) was developed from the 2015 natural gas attrition
18 model that Avista provided in response to Staff Data Request 115. This revised attrition
19 study conforms very closely to the structure of the attrition study provided in Avista’s
20 direct case as Exhibit No. __ (EMA-3). As a result, the description that follows here is
21 largely repetitive of the description provided in Company Exhibit No. __ (EMA-1T) on
22 pages 24-28.

23 However, as with the electric attrition studies, there are significant differences,
24 primarily regarding the different test period Staff used, as well as differences in the

1 analytical approach for certain components of the attrition studies. I described these
2 differences when I critiqued the Company's attrition study.

3
4 **Q. Please explain what is shown on page 1 of Staff's Natural Gas Attrition Study,**
5 **Exhibit No. __ (CRM-3).**

6 A. Exhibit No. __ (CRM-3), page 1, shows the calculation of the natural gas general revenue
7 requirement, based on Staff's Natural Gas Attrition Study, to earn the 6.77 percent rate of
8 return proposed by Staff.

9 Column (e), line 7, shows the 2015 natural gas revenue requirement of \$8,443,000
10 over 2013 base rate revenues; column (f) shows the temporary (2014) revenue increase of
11 \$1,358,000 presently in effect; and column (g) shows the incremental revenue increase
12 needed for 2015 of \$7,085,000, relative to 2014 base rate revenues.

13 As I explained earlier, Staff's analysis supports a revenue increase of \$8,443,000
14 relative to 2013 base rate revenues or, equivalently, a revenue increase of \$7,085,000
15 relative to 2014 base rate revenues. For consistency with rate treatment of electric
16 service, Staff recommends the Commission allow the 2014 temporary natural gas rates to
17 expire and develop 2015 rates relative to 2013 base rate revenues.

18 Column (a) of page 1, labeled "Attrition Balances," shows the natural gas
19 Attrition Net Operating Income and Attrition Rate Base balances from page 5 of Exhibit
20 No. __ (CRM-3), column [K], lines 31 and 47.

21 Column (b) of page 1, labeled "Revenue Growth Factor," shows the revenue
22 growth factor of 1.00, reflecting application of rates to the Company's forecasted 2015
23 billing determinants (rather than 2013 billing determinants). Avista used a revenue

1 growth factor of 1.021600, reflecting application of rates to the 12-months-ending June
2 30, 2013, test period billing determinants.

3 Column (c), labeled "Attrition Adjusted Balances," shows the calculation of the
4 \$8,167,000 revenue requirement at the proposed 6.77 percent rate of return, based on the
5 Natural Gas Attrition Study "Attrition Rate Base" and "Attrition Net Operating Income"
6 balances in column (a) unadjusted for the revenue growth factor in column (b).

7 Column (d), labeled "After Attrition Adjustments," includes an increase of
8 \$276,000 to the Attrition Revenue Requirement amount in column (c), resulting from
9 adjustments that Avista states is to restate the attrition-adjusted subtotal for atmospheric
10 testing expenses not included in the December 31, 2013, Commission Basis results, and
11 not captured in trend analysis. Staff does not contest this adjustment.

12 Column (e), labeled "Final Balances," shows the natural gas attrition adjusted
13 revenue requirement after reflecting the After Attrition Adjustments included in column
14 (d), resulting in an adjusted electric attrition total of \$8,443,000.

15 Column (f) shows the 2014 Temporary Rate Increase approved in Docket UE-
16 120436 of \$1,358,000, which is currently in effect, but expires at the end of 2014. For
17 consistency of treatment with electric service, the Commission should allow the 2014
18 natural gas revenue increase to expire and replace it with a revenue increase of
19 \$8,443,000 over 2013 base rate revenues. This represents a 5.68 percent increase in
20 revenues relative to 2013 base rate revenues.

21 Column (g), labeled "2015 Revenue Requirement," shows the 2015 incremental
22 revenue increase of \$7,085,000 relative to the 2014 temporary rates. This represents a
23 4.51 percent increase in revenues relative to 2014 base rate revenues.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Q. Please explain page 2 of Exhibit No. __ (CRM-3).

A. Page 2 shows the proposed cost of capital and capital structure used by Staff resulting in a weighted average cost of capital of 6.77 percent. Staff witness Mr. Elgin presents Staff's proposed cost of capital, including capital structure.

Q. Please explain page 3 of Exhibit No. __ (CRM-3).

A. Page 3 shows the derivation of the electric net-operating-income-to-gross-revenue conversion factor. This conversion factor is identical to the conversion factor used by the Company and presented on page 3 of Ms. Andrews' Exhibit No. __ (EMA-3).

Q. Please explain pages 4 and 5 of Exhibit No. __ (CRM-3).

A. Pages 4 and 5 present the normalized income statement and rate base for Washington natural gas operations, with the cost, revenue and rate base detail that is found in Avista's December 2013 Commission Basis Report. These pages show the escalation of December 2013 Commission Basis Report results of operations to the 2015 rate year.

Column [A], labeled "12.2013 Commission Basis Report Restated Totals," provides the results of the December 2013 Commission Basis Report that includes normalized cost and revenue data for Avista's Washington natural gas operations for the period twelve-months-ended December 31, 2013. This column shows that on a Commission Basis Report normalized basis for this historical test period, the Company's earned rate of return for its Washington electric operations was 6.23 percent.

1 Column [B], labeled "Proposed Working Capital AMA 12.2013" is an addition to
2 column [A], restating Working Capital balance to December 2013 Average of Monthly
3 Averages (AMA) balances. Working Capital is not an item subject to my trend analysis
4 because Avista has not included working capital in most years of the Commission Basis
5 Reports I used, making trending unreliable. Furthermore, in this case, Staff and
6 Company are including certain pension-related items for the first time. The working
7 capital adjustment is sponsored by Staff Witness Ms. Erdahl.

8 Column [C], labeled "Incremental Revenue Normalization Adjustment," adjusts
9 the Commission Basis normalized revenue and gas costs to the 2013 base rate revenue
10 and pro forma gas costs produced by the billing determinants used in the Company's
11 initial filing. This adjustment is necessary to account for the fact that Staff's case begins
12 at the December 2013 Commission Basis Report restated totals while the Company's
13 case begins at the June 2013 Commission Basis Report restated totals. Revenue growth
14 is adjusted to 2015 using the billing determinant index, not trend analysis.

15 Column [D], labeled "Exclude Normalized Gas Costs and Revenue," is
16 subtracted from column [A], removing all normalized gas costs and revenues from the
17 December 2013 Commission Basis Report values. (Pro forma levels of gas costs and
18 revenues are added back later, as discussed further below.) This removal ensures only
19 non-gas costs and revenues are trended to the 2015 rate period.

20 Column [E], labeled "December 2013 Escalation Base," is the sum of the
21 previous columns [A] through [D], providing the December 2013 escalation base rate
22 base and costs excluding normalized gas costs and revenues. This escalation base

1 provides the balances from which the growth rates (i.e. “escalation factors”) are applied
2 to determine the 2015 final attrition revenue requirement.

3 Column [F], labeled “Escalation Factor,” shows the two year growth
4 (“escalation”) rates for revenues, expenses and net plant. The determination of each of
5 these factors is described in a previous section of this testimony.

6 Column [G], labeled “Escalation Amount,” shows the incremental change
7 between the December 2013 escalation base and the 2015 rate year levels, calculated by
8 multiplying the December 2013 base amounts from column [E] by the escalation factors
9 in column [F].

10 Column [H], labeled “Trended 2015 Non-Energy Cost,” shows the 2015 trended
11 amounts prior to including the impact of pro formed gas costs and revenues and 2015
12 revenue growth, and is calculated by adding the non-gas cost escalation amount in
13 column [G] to the December 2013 base amounts in Column [E].

14 Column [I], labeled “12.2013 Pro-Formed Gas Cost/Revenue,” adds the gas costs
15 and revenues from the Company’s most recent purchased gas adjustment filing.

16 Column [J], labeled “Revenue Growth,” reflects Avista’s revenue growth between
17 the test year and the 2015 rate year, calculated by multiplying the general business and
18 transportation revenue in column [E] times the corresponding weighted revenue growth
19 escalation factors in column [F]. The calculation of the weighted revenue growth
20 escalation factors are shown on page 10 of Company Exhibit No. __ (EMA-3).

21 Column [K], labeled “2015 Revenue and Cost,” is the sum of the pro-formed gas
22 cost and revenue in column [I], revenue growth in column [J], and trended 2015 non-gas
23 cost in column [H]. This is the final column of the 2015 electric Attrition Study

1 calculation, providing the 2015 attrition net operating income of \$11,707,000 and
2 attrition total rate base of \$247,796,000, at lines 31 and 47, respectively. These totals are
3 brought forward to page 1, column (a), of Exhibit No.__(CRM-3).

4
5 **Q. Please describe pages 6 through 9 of Exhibit No.__(CRM-3), your gas attrition**
6 **study.**

7 A. Pages 6-9 of Exhibit No.__(CRM-3) show the derivation of the escalation factors used
8 for escalating adjusted other revenue, net plant after deferred income taxes, adjusted taxes
9 other than income, and adjusted depreciation/amortization.

10 As I explained earlier in my testimony, I calculated each growth rate as the
11 average of the slopes for the least-squares linear regressions across a) 2001-2013 and b)
12 2007-2013. I converted the slope of each regression (in thousands of dollars) to an
13 annual growth rate by dividing by the 2013 level. As the rate of growth is linear, to
14 arrive at the escalation factor to apply to 2013 levels for derivation of 2015 levels, I
15 multiplied the annual rate of growth is by two (years). These escalation factors are
16 carried forward to column [F] of page 4 of Exhibit No.__(CRM-3).

17
18 **Q. Please describe page 10 of Exhibit No.__(CRM-3).**

19 A. Page 10 of Exhibit No.__(CRM-3) shows the derivation of the escalation factor used for
20 escalating adjusted operating expense.

21 The growth rate is calculated as the slope of the least-squares linear regression
22 across 2001-2013 with years 2010-2012 omitted. The slope of the regression (in
23 thousands of dollars) is converted to an annual growth rate by dividing by the 2013 level.

1 As the rate of growth is linear, to arrive at the escalation factor to apply to 2013 levels for
2 escalation to 2015 levels, the calculated annual rate of growth is multiplied by two
3 (years). This escalation factor is carried forward to column [F] of page 4 of Exhibit
4 No.__(CRM-3).

5
6 **V. REC REVENUES TRACKING MECHANISM**

7
8 **Q. Is Avista proposing a mechanism to return renewable energy credit (REC) revenues**
9 **to its customers in this general rate case?**

10 A. Yes. In Order 09 in Avista's last general rate case (Docket UE-120436), the Commission
11 ordered Avista to propose a mechanism for returning REC sale proceeds to its customers
12 in its next rate case,²³ which is this case.

13
14 **Q. How has Avista tracked REC sale proceeds since the last general rate case?**

15 A. Per the Commission's requirements in Order 09 in Docket UE-120436, Avista has
16 deferred in an account separate from the ERM, any actual REC sale proceeds above or
17 below the REC sale proceeds included in the base rates of the ERM.²⁴

18 Therefore, the actual REC sales proceeds currently accumulated in this tracking
19 account are the 2012 and 2013 REC sale proceeds net of the level of REC sale proceeds
20 embedded in 2012 and 2013 base rates, and the estimated REC proceeds in excess of the
21 2014 base rates.

²³ *Utilities and Transp. Comm'n v. Avista Corp.*, Dockets UE-120436 and UG-120437, Order 09 (December 26, 2012) at 32, ¶ 83.

²⁴ *Id.* at 3, ¶ 3.

1 The Company currently tracks REC sale proceeds, including accumulated
2 interest, in FERC Account 186.322 (Miscellaneous Deferred Debits and Credits – WA
3 REC Deferral).

4
5 **Q. How did the Commission order REC sale proceeds be treated beyond the**
6 **Company’s next filed rate case?**

7 A. The Commission ordered Avista, in 2015 and beyond, to remove REC sale proceeds from
8 base rates,²⁵ such that the proceeds included in the tracking account would not be netted
9 against proceeds in base rates. Also, the Commission ordered Avista to project REC
10 revenues expected in the rate year and defer those revenues to the tracking account.²⁶

11
12 **Q. In this docket, has Avista proposed a tracking and rebate mechanism that is**
13 **generally consistent with the requirements set forth by the Commission in Docket**
14 **UE-120436?**

15 A. Yes. The Company proposes a rebate based on actual and projected REC revenues from
16 2012 through June 2016. Although the Commission ordered Avista to project REC
17 revenues expected in the rate year (2015 in this case), projecting to June 2016 will enable
18 alignment of REC revenues rebate rate changes with the Company’s annual ERM filing.
19 The proposed initial amortization period then would be 18 months (January 2015 through
20 June 2016).

21

²⁵ *Id.* at 32, ¶ 84.

²⁶ *Id.*

1 **Q. Please summarize which years' REC sale proceeds will be amortized over the period**
2 **January 2015 to July 2016.**

3 A. The REC sale proceeds to be amortized over the period January 2015 to July 2016 are: a)
4 the actual REC revenues in excess of the amount in base rates for 2012 and 2013; b) the
5 estimated REC revenue in excess of the amount in base rates for 2014; and c) the total
6 estimated REC revenue for the period January 2015 through June 2016.

7
8 **Q. What is the Company's estimate of the REC revenue rebate that will go into effect**
9 **on January 1, 2015?**

10 A. The Company estimates the total rebate amount to be \$7,754,377 (Washington
11 Allocation), based on actual 2012 and 2013 REC revenue plus the estimated REC
12 revenue for the period 2014 through June 2016.²⁷

13
14 **Q. Does Staff support the Company's proposal?**

15 A. Yes, but with a few modifications.

16
17 **Q. Please summarize Staff's recommended modifications.**

18 A. There are three modifications the Commission should make to the Company's proposal:
19 1) Interest on the account balance after January 1, 2015, should accumulate at the
20 Company's after-tax rate of return, and not the Company's cost of debt; 2) the REC
21 revenues rebate should be returned to customers at a rate consistent with cost of service,
22 and not on a uniform cents/kWh basis across all rate classes; and 3) REC expenses that

²⁷ From Attachment A of Avista response to Public Counsel Data Request 210. The total rebate amount in the Company's direct case (Exhibit No. ___ (WGJ-6); \$7,841,726) did not include certain REC-related expenses.

1 are not directly related to specific REC revenues should be removed from the tracking
2 account and be included instead as an element of energy costs.

3
4 **Q. At what rate does interest accrue on the balance of the REC revenues tracking**
5 **account currently?**

6 A. The Company currently calculates interest at its cost of debt. For the purpose of
7 calculating accumulated interest the Company has used an estimated rate of 5.2 percent.

8
9 **Q. Is the cost of debt the appropriate rate at which to accrue interest on REC sale**
10 **proceeds going forward?**

11 A. No. In Order 09 of Docket UE-120436, the Commission directed Avista to return to
12 ratepayers REC sales proceeds via a mechanism consistent with those used by Puget
13 Sound Energy and PacifiCorp.²⁸ The mechanisms approved for Puget Sound Energy and
14 PacifiCorp both use each company's respective after-tax rate of return for interest accrual
15 on REC revenues balances.²⁹ Therefore, for consistency, and compliance with the
16 Commission's order, I recommend that the Commission order Avista to accrue interest
17 on REC revenues balances at its after-tax rate of return, beginning January 1, 2015.

18
19 **Q. Is the Company's cost of debt the appropriate rate at which to accrue interest on**
20 **REC sale proceeds balances prior to January 1, 2015?**

²⁸ *Utilities and Transp. Comm'n v. Avista Corp.*, Dockets UE-120436 and UG-120437, Order 09 (December 26, 2012) at 32, ¶ 84.

²⁹ *Utilities and Transp. Comm'n v. Puget Sound Energy*, Dockets UE-111048 and UG-111049, Order 08 (May 7, 2012), Appendix C at 6, ¶ 16, and PacifiCorp Compliance Filing in Docket UE-100749, "Annual Report of Proceeds from the Sale of Renewable Energy Credits," Attachment A (May 1, 2014) at 4.

1 A. Yes. In Order 09 of Docket UE-120436, the Commission ordered that, beginning
2 January 1, 2013, the deferral accrue interest consistent with other ERM balances,³⁰ which
3 accrue interest at the Company's cost of debt.

4 However, rather than apply a rate of 5.2 percent as Avista did, I calculated the
5 accumulated interest on the account balance prior to January 1, 2015, using an interest
6 rate of 5.56 percent, which is the AMA 2013 cost of debt identified in the Company
7 workpapers supporting the electric attrition analysis presented in Ms. Andrews Exhibit
8 No. ___ (EMA-2).

9
10 **Q. How does the Company propose to implement the REC revenues rebate across rate**
11 **classes?**

12 A. The Company proposes to implement the rebate on a uniform (12 cents/kWh) basis
13 across all rate classes.

14
15 **Q. Is a uniform cents/kWh basis appropriate for rebating REC revenues to customers?**

16 A. No. The REC rebate level should be consistent with each customer class's contribution
17 to the underlying REC-generating asset. As Staff Witness Mr. Mickelson is proposing a
18 generation-level consumption cost allocation for wind resources based on his cost of
19 service study, the REC revenue rebate should be returned to customers at a level
20 consistent with that cost allocation. My Exhibit No. ___ (CRM-4), page 2, shows the
21 calculation of the schedule-specific rebate rates.

³⁰ *Utilities and Transp. Comm'n v. Avista Corp.*, Dockets UE-120436 and UG-120437, Order 09 (December 26, 2012) at 13-14, ¶ 37.

1 **Q. Does the Company propose to include REC expenses in the tracking account, and**
2 **net REC revenues against those REC expenses?**

3 A. Yes. The Company proposes to include such expense items as WREGIS fees, Green-e
4 fees, broker fees, any REC purchases, and other specific out-of-pocket expenses required
5 to support REC sales.

6
7 **Q. Are all of these expenses generally appropriate to include in the REC revenues**
8 **tracking account?**

9 A. Not all. Specifically, REC purchases should not be included as expenses in the tracking
10 account if those RECs were used (or will be used) for compliance purposes.

11 As a general rule, expenses should be netted against REC revenues only if those
12 expenses are directly related to specific REC revenues. As long as an Avista-purchased
13 REC is also sold by Avista, that specific purchase expense is appropriate to net against
14 the revenue from the sale. However, if Avista uses a REC for compliance purposes, that
15 REC cannot generate revenue and, as such, there can be no revenue-related expenses.

16
17 **Q. Does Avista include any REC purchase expenses in the tracking mechanism that**
18 **should be netted against REC revenues?**

19 A. Yes. For example, Avista entered into a contract to purchase RECs from [REDACTED]
20 [REDACTED] from 2012 through 2015. Avista purchased these RECs
21 to comply with the Washington EIA. However, when Avista entered into a PPA for
22 Palouse Wind, the [REDACTED] RECs became surplus. Avista sold these surplus RECs from
23 2013 and 2014 so, accordingly, the purchase expense for 2013 and 2014 [REDACTED] RECs

1 are directly related to the revenues from the sale of 2013 and 2014 ██████ RECs.

2 Therefore, the purchase expense for 2013 and 2014 ██████ RECs should be included in
3 the tracking mechanism and netted against REC revenues.

4
5 **Q. Does Avista include any REC purchase expenses in the tracking mechanism that are**
6 **inappropriate to be netted against REC revenues?**

7 A. Yes. Avista has stated its intention to hold the 2015 ██████ RECs it has purchased for
8 2016 RPS compliance. Yet, although Avista does not plan to sell these RECs, Avista
9 includes the related REC purchase expense in the REC revenues tracking account and
10 nets these expenses against REC revenues. Unlike the ██████ RECs from 2013 and
11 2014, the 2015 ██████ RECs will be used for Washington EIA compliance purposes and
12 so they will not generate revenue. Therefore, the \$725,000 in ██████ expenses related to
13 the 2015 ██████ RECs must be removed from the tracking account.

14
15 **Q. Should Avista be allowed to recover the 2015 ██████ purchase expenses?**

16 A. Yes, assuming they were reasonable, but not via this mechanism. I recommend that, on
17 compliance, the Company include this expense as an element of energy costs.

18
19 **Q. What is the estimated net REC revenue rebate Staff recommends go into effect on**
20 **January 1, 2015?**

21 A. As shown in my Exhibit No. __ (CRM-4), Staff's estimate of the net REC revenue rebate
22 is \$8,613,493, to be amortized over the period January 1, 2015 to June 30, 2016.

1 Q. Does this conclude your testimony?

2 A. Yes.

3