

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-17 _____

DOCKET NO. UG-17 _____

DIRECT TESTIMONY OF

SCOTT L. MORRIS

REPRESENTING AVISTA CORPORATION

1 **I. INTRODUCTION**

2 **Q. Please state your name, employer and business address.**

3 A. My name is Scott L. Morris and I am employed as the Chairman of the Board,
4 President and Chief Executive Officer of Avista Corporation (Company or Avista), at 1411
5 East Mission Avenue, Spokane, Washington.

6 **Q. Would you please briefly describe your educational background and**
7 **professional experience?**

8 A. Yes. I am a graduate of Gonzaga University with a Bachelors degree and a
9 Masters degree in organizational leadership. I have also attended the Kidder Peabody School
10 of Financial Management.

11 I joined the Company in 1981 and have served in a number of roles including customer
12 service manager. In 1991, I was appointed general manager for Avista Utilities' Oregon and
13 California natural gas utility business. I was appointed President and General Manager of
14 Avista Utilities, an operating division of Avista Corporation, in August 2000. In February
15 2003, I was appointed Senior Vice-President of Avista Corporation, and in May 2006, I was
16 appointed as President and Chief Operating Officer. Effective January 1, 2008, I assumed the
17 position of Chairman of the Board, President, and Chief Executive Officer.

18 I am a member of the Edison Electric Institute board of directors, a member of the
19 American Gas Association board of directors, a member of the Washington Roundtable, and
20 I also serve on the board of trustees of Greater Spokane Incorporated. I am also on the board
21 of directors of the Federal Reserve Bank of San Francisco, Seattle Branch, and Gonzaga
22 University board of trustees and I currently serve as Chair for both organizations.

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

2 A. I will summarize the Company’s proposal in this filing for a Three-Year Rate
 3 Plan, and general rate case “stay-out’ period. I will explain why there is a continuing need for
 4 retail rate increases, not just for Avista, but for the electric and natural gas utility industry in
 5 general. I will address our continuing capital investments, and how they are designed to
 6 accomplish, and balance, three primary objectives: 1) provide safe, reliable service; 2) achieve
 7 high customer satisfaction; and 3) maintain a reasonable cost to customers.

8 I will also briefly summarize the four ratemaking studies presented by Avista to
 9 demonstrate our need for electric and natural gas rate increases for the proposed Three-Year
 10 Rate Plan beginning May 1, 2018.

11 A table of contents for my testimony is as follows:

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21
 22 **Q. Are you sponsoring exhibits in this proceeding?**

23 A. Yes. I am sponsoring four exhibits: Exh. SLM-2 includes a summary of
 24 witnesses representing Avista in this proceeding; Exh. SLM-3 is Avista Utilities’
 25 “Infrastructure Investment Plan”; Exh. SLM-4 is an overview of Avista and its utility and

1 subsidiary operations, as well as a diagram of Avista’s corporate structure; and Exh. SLM-5
2 includes a map showing Avista’s electric and natural gas service areas.

3
4 **II. SUMMARY OF THREE-YEAR RATE PLAN AND STAY-OUT**

5 **Q. Would you please summarize the Company’s proposals included in this**
6 **electric and natural gas general rate case filing?**

7 A. Yes. In this filing the Company is proposing a Three-Year Rate Plan, which
8 would begin with new rates effective May 1, 2018, and run through April 30, 2021. Avista is
9 proposing electric and natural gas revenue increases to occur May 1, 2018, May 1, 2019 and
10 May 1, 2020.

11 The Three-Year Rate Plan is designed to accomplish a number of objectives. First,
12 this filing in late May 2017 will have the effect of changing the “cycle” of base rate
13 adjustments from the middle of winter to approximately May 1st – after the end of the winter
14 heating season. Customers will not experience a base rate increase in the middle of winter.

15 Second, the multi-year rate plan will reduce the burden to all stakeholders of
16 processing a general rate case every year. The Three-Year Rate Plan would result in a “stay-
17 out” period such that Avista would not file another general rate case prior to June 1, 2020.

18 Third, the rate plan will provide a degree of predictability of retail rates for customers
19 for the next three years. Finally, the multi-year plan will provide an incentive for Avista to
20 manage its costs in order to have the opportunity to earn the authorized rate of return during
21 the rate plan period.

1 **Q. What are the revenue increases proposed for Avista's electric operations?**

2 A. The proposed electric revenue increases for the Three-Year Rate Plan are
3 shown in Table No. 1 below:

4 **Table No. 1 – Three-Year Rate Plan Summary - Electric**

5		<u>Proposed Electric</u>	<u>Base %</u>	<u>Billed %¹</u>
6		<u>Revenue Increase</u>	<u>Increase</u>	<u>Increase</u>
7				
8	May 1, 2018	\$61.4 million	12.5%	8.8%
9				
10	May 1, 2019	\$14.0 million	2.5% ²	2.4%
11				
12	May 1, 2020	\$14.4 million	2.5% ²	2.5%
13				

14 The Company's electric and natural gas requests are based on a proposed rate of return
15 of 7.76%, with a common equity ratio of 50% and a 9.9% return on equity (ROE).

16 **Q. Why is the Billed percentage increase for May 1, 2018 of 8.8% so much
17 lower than the Base percentage of 12.5%?**

18 A. The primary reason for the difference is the proposed Power Cost Rate
19 Adjustment also filed by Avista on May 26, 2017, to become effective September 1, 2017.
20 Power supply costs were not updated at the conclusion of our last general rate case at the end
21 of 2016, and the costs in 2017 are significantly higher than in 2016, due primarily to the
22 expiration of the capacity sale agreement with Portland General Electric on December 31,
23 2016. If the proposed Power Cost Rate Adjustment is approved, billed rates will increase by

¹ The Billed percentage increase is lower than the Base percentage, because the Billed percentage calculation includes the revenues associated with other tariff schedules such as demand-side management (DSM) funding, and the Residential Exchange Credit. The larger difference between the Base and Billed percentages for May 1, 2018 is due primarily to the proposed Power Cost Rate Adjustment to become effective September 1, 2017, as explained immediately below in my testimony.

² The revenue increases for years 2 and 3 of the rate plan are proposed to be implemented through a separate tariff Schedule 96, and not through a change to base tariffs.

1 \$15.0 million (2.92%), on September 1, 2017, which would reduce the incremental (billed)
2 revenue increase needed for May 1, 2018.³

3 **Q. How is the Company proposing to spread the May 1, 2018 electric increase**
4 **to each of the customer rate schedules?**

5 A. The proposed electric increase to each customer rate schedule effective May 1,
6 2018 is shown in Illustration No. 1 below. The proposed increases to the Residential and
7 General Service schedules are different than the overall proposed increase, in order to move
8 the revenues for these schedules closer to the costs to serve these schedules.⁴

9 **Illustration No. 1 – Proposed % Electric Increase by Schedule**

<u>Rate Schedule</u>	<u>Increase in Base Rates</u>	<u>Increase in Billing Rates</u>
Residential Schedules 1/2	13.3%	9.4%
General Service Schedules 11/12	10.0%	6.6%
Large General Service Schedules 21/22	12.5%	9.0%
Extra Large General Service Schedule 25	12.5%	8.9%
Pumping Service Schedules 31/32	12.5%	9.0%
Street & Area Lights Schedules 41-48	<u>12.5%</u>	<u>9.0%</u>
Overall	<u>12.5%</u>	<u>8.8%</u>

16 **Q. Is Avista proposing to update power supply costs each year of the Three-**
17 **Year Rate Plan?**

18 A. Yes. It is important that the level of power supply costs in customers' rates
19 closely reflects the wholesale power and natural gas prices that Avista is actually

³ The Power Cost Rate Adjustment proposed under tariff Schedule 93 effective September 1, 2017, would end on May 1, 2018. The net effect would be an increase in base rates of 12.5% and elimination of the Schedule 93 rate, for a net billing revenue increase of approximately 8.8%.

⁴ Company witness Ms. Andrews provides details of the proposed revenue increases, and Company witness Mr. Ehrbar provides details of the proposed spread of the increase to each customer class for each year of the Three-Year Rate Plan.

1 experiencing, especially in the context of a multi-year rate plan. The opportunity to update
2 power supply costs on an annual basis is an integral part of the Three-Year Rate Plan.

3 The annual power supply cost updates would be essentially the same as those in the
4 Company's 2014 and 2015 general rate cases. As a part of settlements, Avista agreed to file
5 power supply updates 60 days before new rates were to go into effect. The purpose of the
6 power supply updates was to: 1) reflect the most recent natural gas and electricity wholesale
7 market prices; 2) include new short-term electric and natural gas contracts; and 3) update for
8 known changes to power and transmission contracts for the coming rate year. The proposed
9 annual power supply cost updates are very similar to the updates that Puget Sound Energy has
10 made through its Power Cost Only Rate Case (PCORC) mechanism.

11 The Company would file with the Commission electric tariff Schedule 93 on or before
12 February 15, 2019 for the May 1, 2019 update, and February 15, 2020 for the May 1, 2020
13 update, to reflect changes (up or down) in power supply costs.⁵

14 **Q. What are the revenue increases proposed for Avista's natural gas**
15 **operations?**

16 A. The proposed natural gas revenue increases for the Three-Year Rate Plan are
17 shown in Table No. 2 below:

⁵ Company witnesses Mr. Johnson and Mr. Ehrbar provide additional details related to the proposed annual power supply cost update.

1 **Q. For both the electric and natural gas operations, the proposed revenue**
2 **increases are higher for the first year of the Three-Year Rate Plan, than for years two**
3 **and three. Why is that the case?**

4 A. The electric and natural gas revenue increases for Year-1 of the Three-Year
5 Rate Plan are higher due primarily to the absence of revenue increases in January 2017. The
6 rejection of Avista's proposed revenue increases for 2017 compounds the need for revenue
7 increases at the conclusion of this case. Base retail rates were last adjusted in January 2016.⁹

8 It is also noteworthy that, for electric customers, the last base rate increase occurred in
9 January 2015. The base rate adjustment in January 2016 for electric customers was a rate
10 reduction of 1.6%, and as indicated above, no base rate increase was approved for customers
11 for 2017.

12 **Q. Are there some "checks and balances" as part of Avista's Three-Year Rate**
13 **Plan proposal to ensure that retail rates are fair for customers throughout the multi-**
14 **year plan?**

15 A. Yes. Through the existing electric and natural gas Decoupling Mechanisms
16 Avista is subject to separate one-way earnings tests for each of its Washington electric and
17 natural gas operations. If Avista were to over-earn during the Three-Year Rate Plan, Avista
18 would share half of the overearnings, protecting customers. However, if Avista under-earns
19 there is no protection for the Company under these circumstances; Avista simply would not
20 earn its authorized rate of return.

⁹ In its Order 06 in Dockets UE-160228 and UG-160229 (consolidated) the Commission determined that the existing rates were just and reasonable and should remain in effect, therefore, there was no change to either electric or natural gas base rates.

1 In addition, for Rate Years 2 and 3, beginning May 1, 2019 and May 1, 2020, the
 2 Company is proposing to file with this Commission an Annual Washington Electric and
 3 Natural Gas Capital Report by February 15, 2019 and February 15, 2020. The annual report
 4 would provide actual year-end (end of period) rate base balances as of December 31st of the
 5 recently completed year, and will provide an opportunity for review of the rate base additions
 6 prior to new rates going into effect. This would provide assurance to the Commission that the
 7 rate increases approved effective May 1, 2019 and May 1, 2020, would include utility plant
 8 that is in-service serving customers prior to new rates going into effect.¹⁰

10 **III. WHY THE CONTINUING NEED FOR RETAIL RATE INCREASES**

11 **Q. Why is there a continuing need for annual retail rate increases?**

12 A. A review of historical data goes to the “heart” of why there is a continuing
 13 need for annual rate increases. The illustrations below show the changes over time from 1889
 14 to 2016 for the following sets of data related to Avista’s electric utility operations:

- 15 a. Net plant investment (essentially rate base);
- 16 b. Number of residential customers;
- 17 c. Residential use-per-customer; and
- 18 d. Residential retail rate per kilowatt-hour (kWh).

19 The level of retail rates is influenced heavily by changes in net plant investment over
 20 time, growth in the number of customers, and changes in the use-per-customer. The data

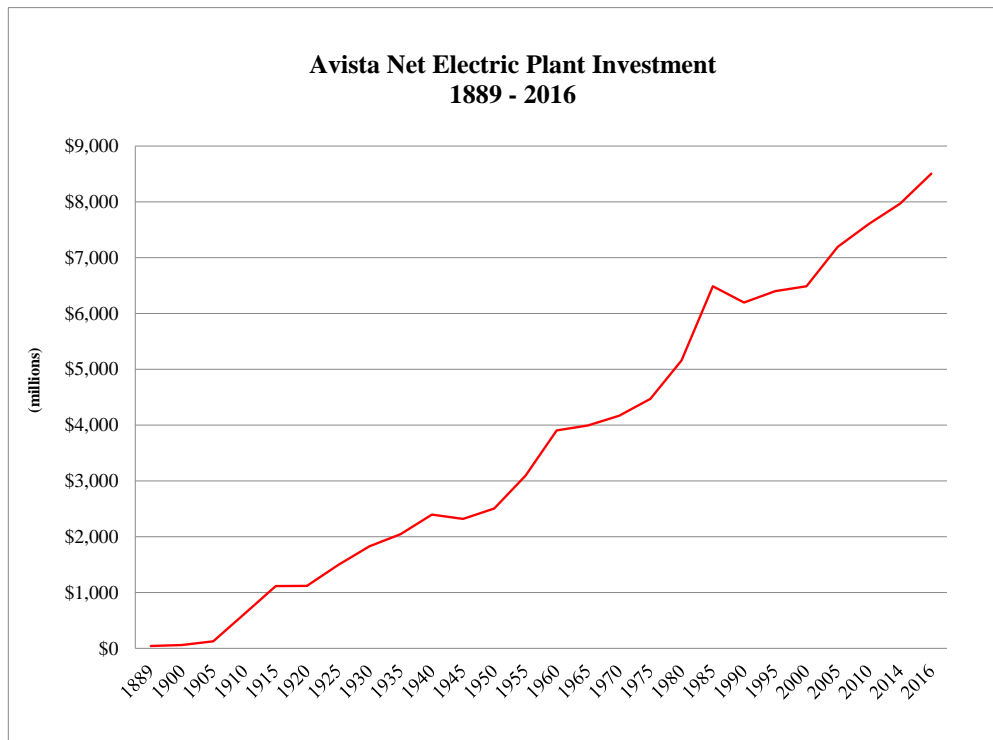
¹⁰ The Three-Year Rate Plan would not preclude tariff filings authorized by or contemplated by the terms of the Energy Recovery Mechanism (ERM), Purchased Gas Adjustment (PGA), Public Purpose Rider Adjustment (DSM/LIRAP) or similar adjustments. The Company is proposing that the Three-Year Rate Plan also not preclude the Company from filing for rate relief or accounting treatment for major changes in costs not reflected in this filing, such as the potential costs associated with participation in the Energy Imbalance Market, or new safety or reliability requirements imposed by regulatory agencies.

1 presented in the line graphs below illustrate visually why Avista, as well as many other
 2 utilities, are seeking retail rate increases on a regular basis.

3 **Q. How has Avista’s net plant investment for its electric operations changed**
 4 **from 1889 to 2016?**

5 A. The line graph in Illustration No. 3 below shows the cumulative growth in
 6 Avista’s net plant investment for its electric operations from 1889 to 2016. The data have
 7 been presented in five-year increments for ease of viewing.

8 **Illustration No. 3**



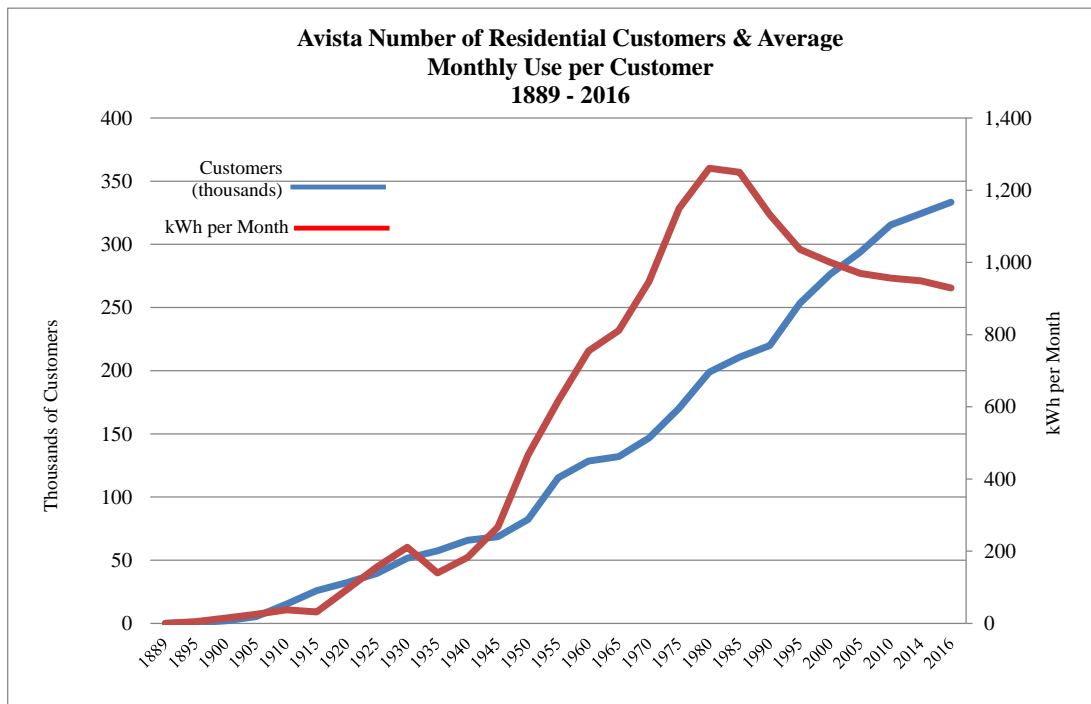
20 The line on the graph illustrates, among other things, the rapid expansion of net plant
 21 investment beginning in the 1950s following World War II, where net plant investment nearly
 22 doubled in a relative short period of time. The line also shows that net plant investment in
 23 recent years has continued to grow. Later in my testimony I will address how Avista identifies

1 and prioritizes capital investment to ensure that the capital investments are necessary in the
 2 time frame in which they are completed.

3 **Q. How have Avista’s number of customers and use-per-customer changed**
 4 **from 1889 to 2016?**

5 A. The line graph in Illustration No. 4 below shows the change over time in both
 6 the number of residential customers (blue line) and the residential use-per-customer (red line)
 7 for the period 1889 to 2016. The data, again, are presented in five-year increments for ease
 8 of viewing.

9 **Illustration No. 4**



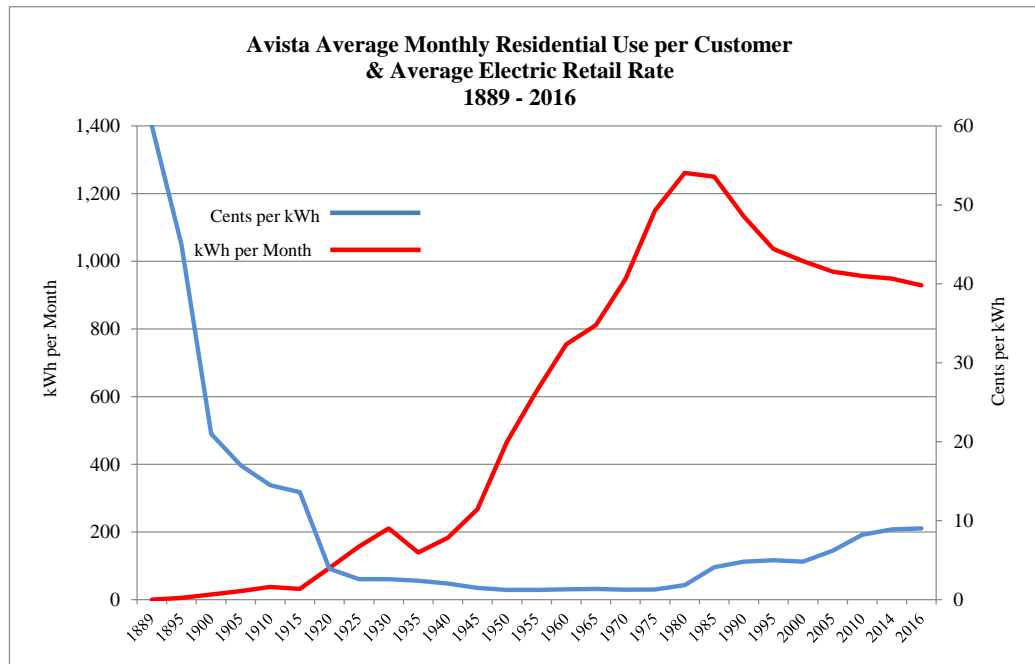
20 Among the observations from the line graph, two are very significant and quite
 21 relevant to retail rate adjustments during the 127 year period, as well as today. First, from the
 22 1950s through roughly 1980, there was steady growth in the number of customers (blue line),
 23 which was also combined with rapid growth in use-per-customer (red line). Second,

1 beginning around 1980, the use-per-customer began to decline dramatically. The decline in
2 use-per-customer was due in part to Avista's energy efficiency programs that began in 1978,
3 as well as the regional and national efforts generally to encourage consumers to use energy
4 more efficiently. The change from rapid growth in use-per-customer to a significant reduction
5 in use-per-customer beginning around 1980 had a direct impact on Avista's retail rates.

6 **Q. What were Avista's retail rates from 1889 to 2016, and how were they**
7 **affected by the growth in net plant investment, number of customers and use-per-**
8 **customer?**

9 A. The line graph in Illustration No. 5 below shows Avista's retail rate per kWh
10 for its residential customers (blue line) for the period 1889 to 2016. The red line on the graph
11 is the same use-per-customer line from the graph in Illustration No. 4 above. The graph shows
12 that Avista's retail rates were flat to declining for approximately 50-60 years, up until about
13 1980 when they began to rise.

1 **Illustration No. 5**



12 The three graphs above, taken together, illustrate the significance of the relationship
 13 over time of the rate of growth in net plant investment, number of customers, and use-per-
 14 customer. During the 1950s, for example, there was rapid growth in net plant investment, but
 15 it was accompanied by rapid growth in use-per-customer, combined with steady growth in the
 16 number of customers. The net result was retail rates that were either flat or declining, due in
 17 large part to the annual growth in revenues being sufficient to cover the annual growth in
 18 costs. During the 1950s, Avista added new major baseload generating resources (Cabinet
 19 Gorge in 1952, and Noxon Rapids in 1959), and yet retail prices continued to be flat or
 20 declining, due primarily to the strong growth in kWh sales.

21 In contrast, retail prices began to increase in 1980 due, at least in part, to the significant
 22 decline in use per customer, which resulted in lower annual sales growth. Post-1980 – because
 23 annual costs were growing at a faster pace than revenues, it was necessary to increase retail

1 rates each year so that total revenues were equal to total costs. These are the circumstances
2 currently facing not just Avista, but many investor-owned and consumer-owned utilities
3 across the country, and it is the primary reason Avista has requested electric and natural gas
4 revenue increases through this filing.

5 **Q. As Avista removes old equipment and replaces it with new, does the**
6 **depreciation component currently included in retail rates cover the cost to replace**
7 **facilities?**

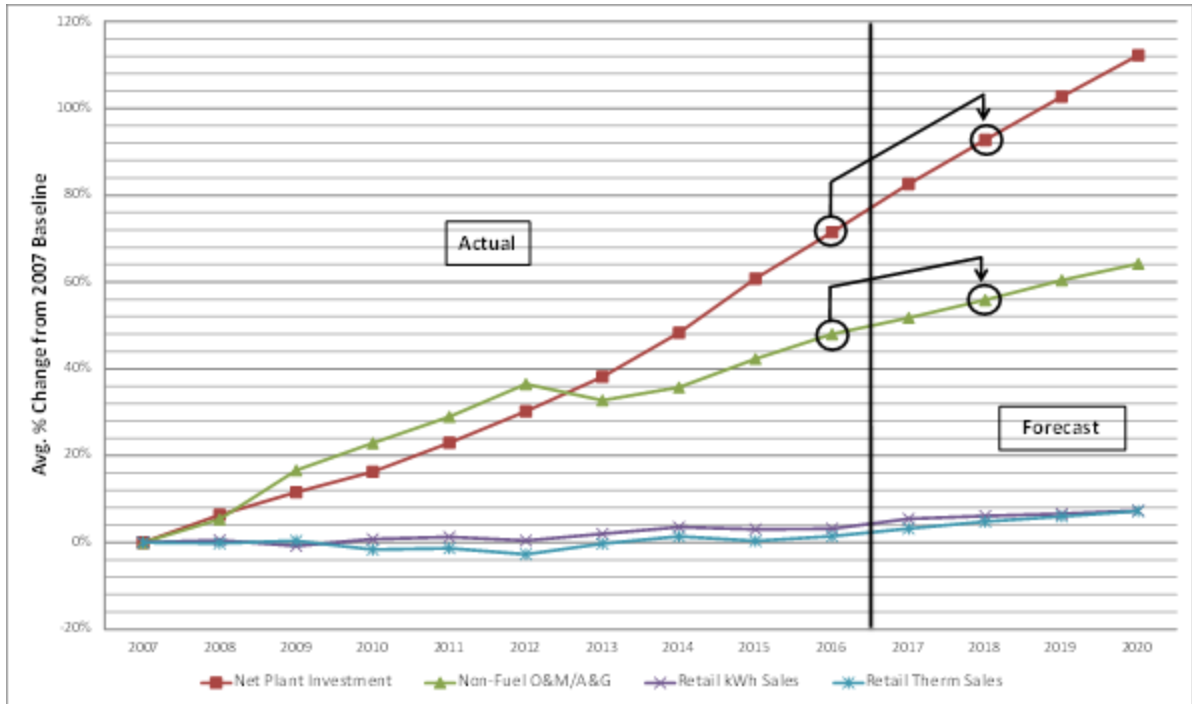
8 A. No. The depreciation component currently included in retail rates generally
9 covers a very small amount of the new facilities and equipment placed into service, especially
10 for the long-lived assets. Avista's retail rates are cost-based, which means the prices
11 customers are paying today for transformers, distribution poles, substations, and transmission
12 lines, among other facilities, are based on the cost to install those facilities, in some cases, 40,
13 50, and even 60 years ago. The costs of the same equipment and facilities today are many
14 times more expensive. The depreciation component built into retail rates today is based on
15 the much lower cost to install those facilities many years ago. Therefore, the depreciation
16 component in retail rates covers only a small fraction of the annual costs associated with the
17 new investment in facilities.

18 **Q. How does Avista's growth in net plant investment and operating expenses**
19 **compare with the growth in retail sales, for the more recent historical period as well as**
20 **in the near future?**

21 A. The graph in Illustration No. 6 below shows actual information for the period
22 2007 to 2016, and forecast information for 2017 to 2020. The information in the graph is for

1 all of Avista Utilities’ combined electric and natural gas operations in Washington, Idaho and
 2 Oregon.

3 **Illustration No. 6 - Avista Utilities’ System Electric and Natural Gas Operations**



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15 The red line on the graph shows the actual growth in net utility plant investment (which
16 is an indicator of rate base growth) from 2007 through 2016, and the expected growth for 2017
17 through 2020. The purple and blue lines on the graph show the changes in retail kilowatt-
18 hour (kWh) sales and retail therm sales, respectively, for the same time period.

19 The graph shows that net plant investment and non-fuel operations and maintenance
20 (O&M) expenses and administrative and general (A&G) expenses are growing faster than
21 sales. The growth in kWh sales and therm sales reflect the annual growth in revenue to the
22 Company, absent any rate increases. With costs growing faster than sales revenue, there is a

1 gap each year between costs, and the revenues to cover those costs, absent a rate increase. A
2 rate increase is necessary each year to cover that gap.¹¹

3 One of the reasons for this “gap” is Avista’s obligation to serve. Unlike other
4 businesses, Avista has a legal obligation to provide safe and reliable service to electric
5 customers that request service from the Company. When a new customer requests service,
6 we must hook them up even if the cost to serve that customer results in increased costs to all
7 other customers. Likewise, if the facilities serving an existing customer are deteriorating and
8 need repair, we must repair or replace them so that the customer continues to receive safe,
9 reliable service.

10 Without the obligation to serve, we could consider refusing to hook up new customers
11 in order to avoid increased costs to our existing customers, or no longer serve some of the
12 more remote, more costly areas to provide service, which would allow us to avoid further
13 investment, and reduce labor and other operating costs.

14 Unregulated businesses have the opportunity to shut down aging facilities or under-
15 producing retail outlets, eliminate product lines, and cut back on investment and maintenance.
16 As an example, on January 14, 2016, Walmart announced plans to close 269 underperforming
17 retail stores of which 154 stores are in the United States. In their news release¹² they explained
18 that:

¹¹ The Commission recognized this trend recently in Puget Sound Energy’s Order 06, at paragraph 20, stating: “Electric and natural gas utilities in Washington and throughout the United States face new and different business challenges today than they have through much of their history. Historically, utility revenues grew reliably, if not steadily, because load growth was significant year over year and typically equal to or greater than increasing capital and operating costs. Under such a regime, utilities usually could recover both their fixed costs embedded in rate base and their variable costs accounted for in volumetric rates.” (Dockets UE-151871 and UG-151872 (consolidated)) (emphasis added)

¹²https://www.nytimes.com/2016/01/16/business/walmart-to-close-269-stores.html?_r=0

1 Closing stores is never an easy decision, but it is necessary to keep the
2 company strong and positioned for the future, Doug McMillon, Walmart’s
3 president and chief executive, said in a statement.
4

5 In contrast, Avista has an obligation to continue to serve all existing customers with
6 safe, reliable service, as well as hook up new customers upon their request.

7 **Q. Are there other factors that contribute significantly to this “gap” between**
8 **the growth in costs and the growth in sales revenue?**

9 A. Yes. Electric and natural gas utilities, like Avista, are very unique businesses
10 in that we offer dollar incentives to customers to not use our product (through our energy
11 efficiency programs). Furthermore, our communication with our customers related to energy
12 usage is to use less of our product – not more.

13 Avista continues to run its successful energy efficiency programs, which help existing
14 and new customers, use less energy in their homes and businesses. Avista’s energy efficiency
15 programs include not only our direct incentive programs that help fund energy efficiency
16 measures for customers, and engineering assistance to help design and implement energy
17 efficient measures, but also extensive education and information to encourage customers to
18 take steps to use energy more efficiently.

19 In the long-term, this investment in energy efficiency is absolutely the right thing to
20 do and will allow us to avoid building or acquiring new, higher-cost generating resources in
21 the future. However, it also contributes to lower sales revenue growth, and contributes to the
22 “gap” in revenues to cover the costs associated with maintaining a safe, reliable utility system
23 to serve our customers.

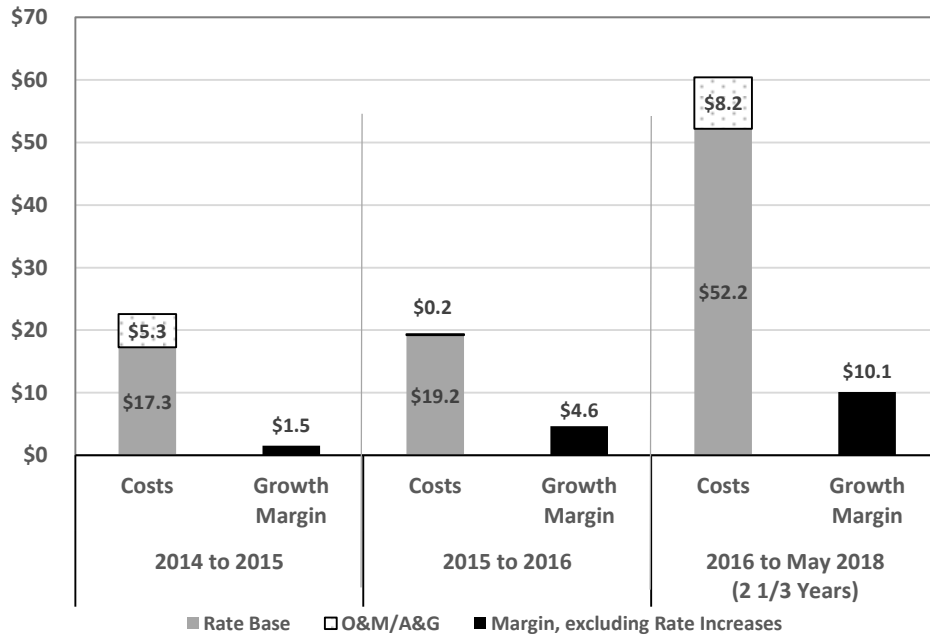
1 **Q. The net plant, O&M, and sales growth information in Illustration No. 6**
2 **above is for Avista Utilities as a whole. Has the Company prepared an analysis specific**
3 **to Washington utility operations that shows the changes in costs and sales revenue over**
4 **time?**

5 A. Yes. The chart in Illustration No. 7 below shows the growth in costs for
6 Avista's Washington electric operations in recent years, as compared to the growth in sales
7 revenue. The left side of the chart shows the growth in Rate Base and O&M/A&G costs, for
8 the one-year period from 2014 to 2015, as compared to the growth in sales revenue (Growth
9 Margin) to cover those costs. The chart shows that from 2014 to 2015 costs grew \$22.6
10 million, as compared to margin growth of \$1.5 million.

11 The middle section of the chart shows a similar comparison of the growth in costs
12 versus the growth in sales revenue, from 2015 to 2016. And the right side of the chart shows
13 the growth in costs versus sales revenue from 2016 through the first rate year in this case
14 beginning May 1, 2018. The illustration shows that costs are growing more than sales revenue
15 growth on an annual basis. Ms. Andrews provides additional information related to annual
16 cost and sales revenue changes.

1 **Illustration No. 7 - Washington Electric Operations**

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13 Annual rate increases are necessary to cover this “gap” between the growth in costs
14 and the growth in sales revenue.

16 **IV. NEED FOR CONTINUING CAPITAL INVESTMENT**

17 **Q. In the last rate case, questions were raised related to the need for and**
18 **timing of capital investments. Please explain how Avista identifies and prioritizes capital**
19 **investments, and why the investments are made in the time frame they are completed.**

20 A. I will summarize why Avista is making capital investments in the time frame
21 they are being completed, and the process we use for identifying and prioritizing those
22 investments. Company witnesses Mr. Kinney, Ms. Rosentrater, and Mr. Kensok provide
23 details of our capital projects in progress, as well as planned projects, and address why they

1 need to be done in the planned time frame, and what the risks and consequences are of not
2 completing the projects in that time frame.

3 Our process to identify and prioritize capital investment is designed to meet the overall
4 need for investment, in the appropriate time frame, in a manner that best meets the future
5 needs and expectations of our customers, in both the short-term and long-term. The
6 Company's practice has been to constrain the level of capital investment each year, such that
7 not all of the prioritized projects and programs¹³ will be funded in a given year at the level
8 requested. Avista believes that holding capital spending below the level requested
9 accomplishes several important objectives, including:

- 10 • **Promotes Innovation** - Encourages ways to satisfy the identified investment needs in
11 a manner that may identify potential cost savings, defer implementation, or other
12 creative options or solutions.
- 13 • **Balances Cost and Risk** – Captures the customer benefits of deferring needed
14 investments by prudently managing the cost consequences and risks associated with
15 such deferrals.
- 16 • **Efficiently Allocates Capital** – Ensures that the highest-priority needs are adequately
17 funded in the most efficient and effective way.
- 18 • **Reduces Variability** - Moderates the magnitude of year-to-year variability to avoid
19 excessive rate impacts, and more efficiently optimizes the number and cost of
20 personnel necessary to carry out the capital projects.

22 Avista currently has chosen to stabilize the level of annual capital spending at what
23 can be described as a constrained level of \$405 million, in an effort to accomplish the
24 objectives described above.

25 Whether the investment touches the customer directly, such as our customer service or
26 metering systems, or indirectly, such as improving the capability and efficiency of our

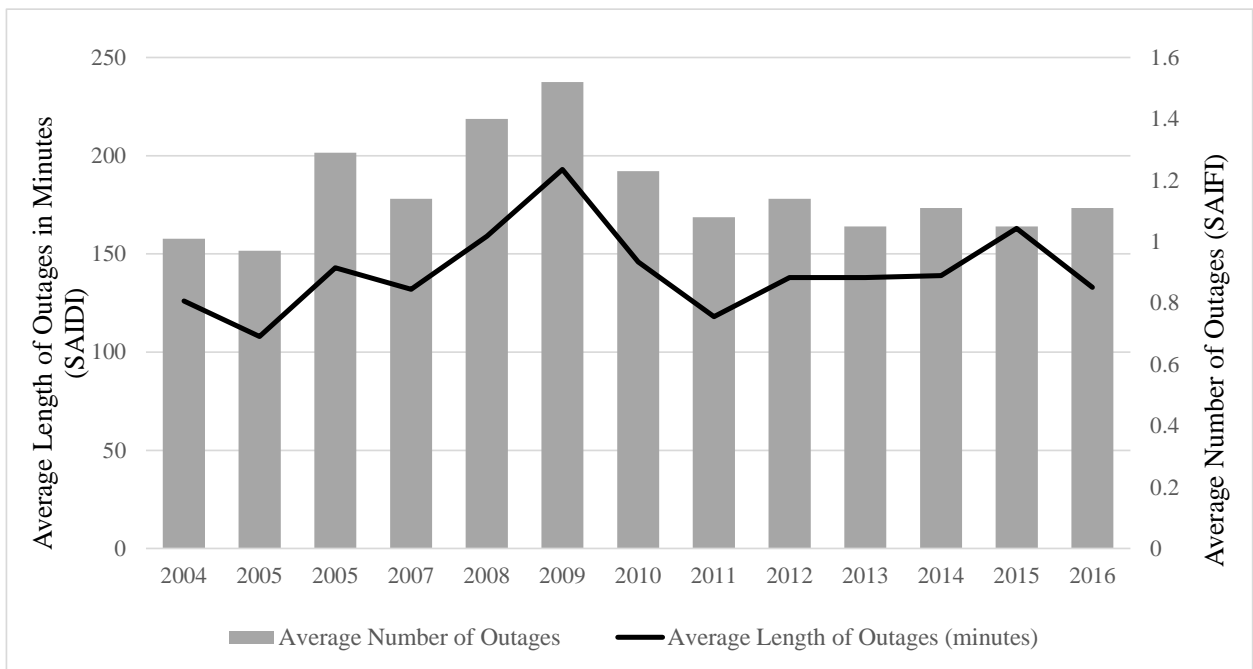
¹³ "Project" refers to an individual investment for a specific period of time. "Programs" represent investments that address systemic needs that are ongoing with no recognized endpoint, such as the wood pole management program. For ease of reference, the term "capital project" will be used to represent both capital projects and capital programs.

1 employees and internal work processes, each dollar we invest ultimately supports three
 2 primary objectives:

- 3 1) to deliver **safe and reliable service** to customers;
- 4 2) achieve **high customer satisfaction**; and
- 5 3) at a **reasonable cost to customers**.

6
 7 **1. Safe and Reliable Service** – “Reliability” encompasses every aspect of our service
 8 and the many infrastructure systems we rely on, along with a priority on the safety of our
 9 employees, our customers, and the communities we serve. Each year we track and report on
 10 how well our system has performed as measured by the number of service interruptions or
 11 electric outages (SAIFI), and the duration or length of time in minutes of interruptions (SAIDI)
 12 that are experienced by our customers. The Company’s annual reliability performance for
 13 the years 2004 through 2016 is shown in Illustration No. 8 below.

14 **Illustration No. 8 – Avista Electric System Reliability (2004 – 2016)**



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1 As shown in Illustration No. 8 above, the Company’s annual level of reliability will
2 vary from year-to-year. This fluctuation in outages is common in utility electric systems, and
3 for Avista, is caused by events such as wind and ice storms, fires, heavy snowfall, animals,
4 vehicles striking our poles and equipment, etc.¹⁴ Our capital investment plan is designed to
5 achieve a reasonable balance of reliable service, which contributes to a high level of customer
6 satisfaction, while at the same time keeping costs reasonable for customers. The reliability of
7 our system is relatively stable, and we believe is at a level which effectively achieves this
8 balance of reliability, customer satisfaction, and at a reasonable cost.

9 This assessment is evidenced by our high level of customer satisfaction from our
10 customer satisfaction surveys, by the low number of complaints we receive (and the state
11 commissions receive) each year that are related to reliability issues, and by our measured level
12 of reliability based on benchmarking with similar utilities. As an example, in a preliminary
13 study conducted by the Washington Utilities and Transportation Commission (WUTC),
14 Avista’s reliability was compared with similar utilities across the country. Avista’s results
15 were generally within the range expected given the particulars of our system, including terrain,
16 weather, and customer density, among other factors.¹⁵ Our planned level of capital investment
17 is designed to preserve the existing level of reliability, and generally not to improve it.

18 **2. High Customer Satisfaction** – Each year the Company surveys customers who
19 have had recent contact with our customer service and field service employees to gauge the
20 level of their satisfaction with the quality of our service and their experience doing business

¹⁴ The measuring protocol for SAIDI and SAIFI excludes outages caused by very large outage events such as the windstorm of November 2015. These major events are referred to a “major event days.”

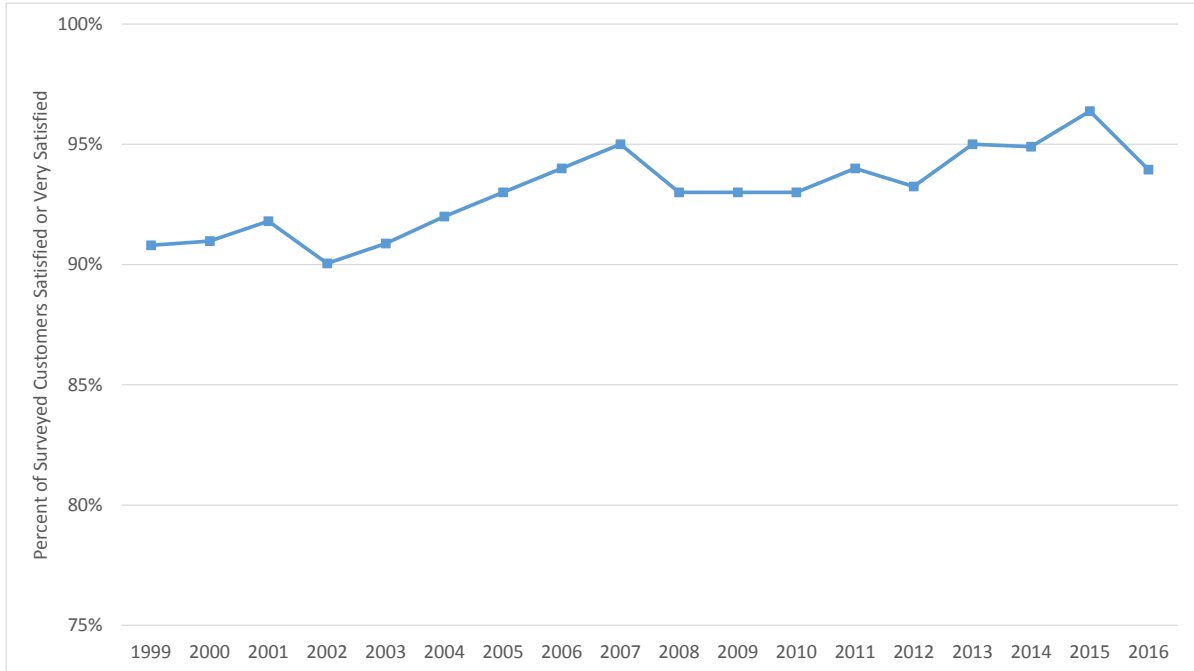
¹⁵ “Reliability Targets for Washington’s Three Investor-Owned Utilities”. Power System Engineering Inc., March 7, 2017.

1 with the Company. This survey, known as “Voice of the Customer,” tracks many key service
2 metrics such as wait time on the phone and the knowledge, experience and helpfulness of
3 employees. In addition to equipping our employees to provide excellent service, we have also
4 made major re-investments in technology systems, such as our new customer care and billing
5 system, which enables us to deliver service more tailored to the preferences of our individual
6 customers. The Company’s performance in meeting our objective to provide high customer
7 satisfaction is measured, in part, by the results of the Voice of the Customer survey.

8 As shown in Illustration No. 9 below, our most recent 2016 year-end results show an
9 overall customer satisfaction rating of 94% for both electric and natural gas service across all
10 our jurisdictions. This 94% rating reflects customers that are either “satisfied” or “very
11 satisfied” with the service they receive from Avista.

12 We believe our stable-to-improving performance in achieving high levels of customer
13 satisfaction reflects a reasonable level of investment in infrastructure and technology to
14 deliver quality customer care.

Illustration No. 9 – Avista Total Customer Satisfaction Ratings



In addition, in 2015, working closely with WUTC Staff and others, Avista implemented a service quality measures program for tracking and reporting our performance in meeting a range of customer service benchmarks. The annual results are reported to our customers and to the WUTC each year. For 2016 Avista reported the following results:

Service Quality Performance – Avista exceeded each of the six performance targets used to measure the quality of our customer service, including contact center and field services satisfaction, number of Commission complaints, and meeting call answer and field response time goals.

Customer Guarantees – Avista met 68,630 successful “Customer Service Guarantees” (which includes keeping our appointments, restoration of routine outages within 24 hours, and customer request deadlines, etc.) for an overall success rate of 99.5%.

The 2016 Service Quality Measures Report Card is attached as the last page of Exh. SLM-3. These results are another indication of the Company’s success in delivering quality

1 services to our customers that meet our objectives of providing safe, reliable service, with a
2 high level of customer satisfaction.

3 **3. Reasonable Cost to Customers** – The third primary objective related to our capital
4 investments is to be mindful of the overall cost impacts to our customers over time. In recent
5 years Avista has chosen to not fund all of the capital investment projects requested by the
6 various departments in the Company, driven in large part by the Company’s desire to mitigate
7 the retail rate impacts to customers. The decision to delay funding on certain projects is made
8 only in cases where the Company believes the amount of risk associated with the delay is
9 reasonable and prudent. As new, unexpected, high-priority capital projects arise, the capital
10 projects for the year must be reprioritized to limit the total spend for the year to fall within the
11 constrained overall capital spending level. In other instances, some scheduled capital projects
12 will encounter unexpected delays due to such things as permitting issues, delays in receipt of
13 materials and equipment, etc. A delay in one project may allow another project to be
14 accelerated in time as part of managing the availability of our workforce and to continue to
15 make progress on projects next in the “queue” that need to be done. The continuing progress
16 on projects in the queue is very important to avoid the creation of a large “bow-wave” of
17 investment that needs to be done in a relatively short period of time. This reprioritization
18 occurs within the Capital Planning Group (CPG),¹⁶ which is charged with ensuring that the
19 total capital spend for the year stays within the constrained spending limit established by the
20 Company.

¹⁶ The CPG is a group of Avista employee directors that represent all capital intensive areas of the Company. The CPG meets to review the submitted Business Cases and prioritize funding to limit the capital spend to the level set by senior management. The CPG meets monthly to review the status of the capital projects, and approves or declines new Business Cases as well as monitors the overall capital budget.

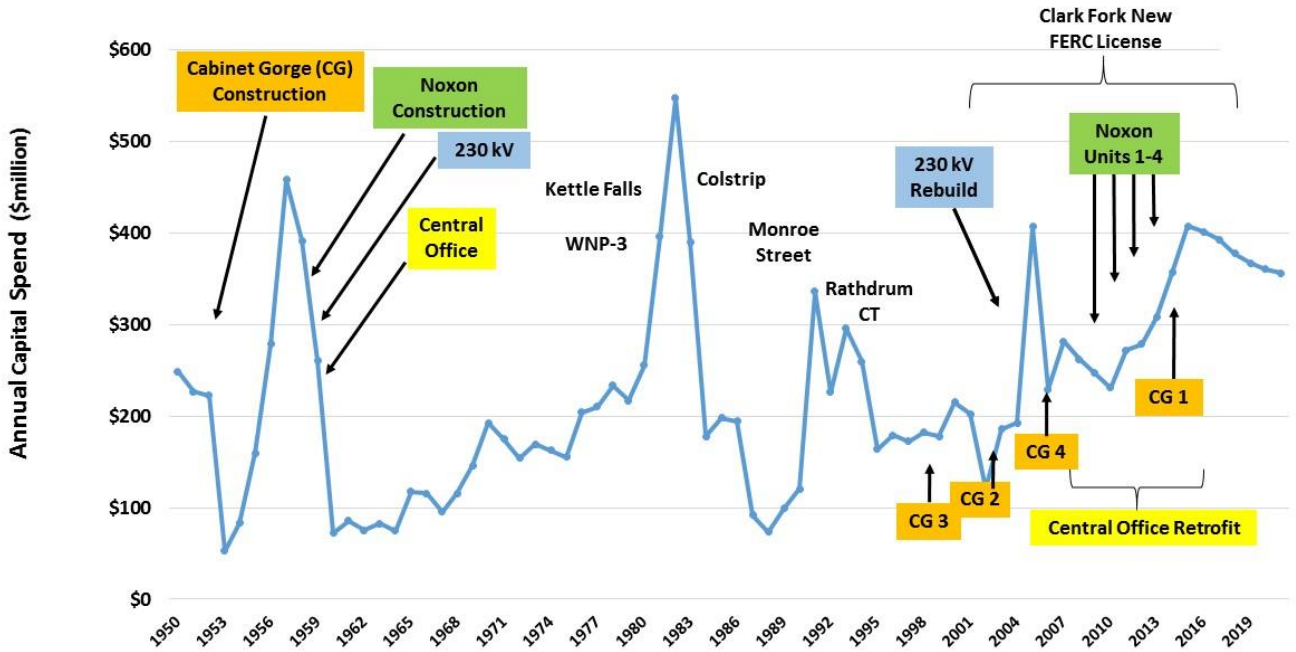
1 The dollar amount of capital projects requested by departments with the amounts
 2 approved by the Company is provided in Table No. 3 below. The dollar amounts for projects
 3 that were delayed (not approved) are also shown:

4 **Table No. 3 – Capital Project Requests/Approvals**

<u>Year</u>	<u>Requested</u>	<u>Approved</u>	<u>Delayed</u>
2012	\$268,974,720	\$250,000,000	\$18,974,720
2013	\$319,552,833	\$250,000,000	\$69,552,833
2014	\$386,256,808	\$331,000,000	\$55,256,808
2015	\$403,864,170	\$355,000,000	\$48,864,170
2016	\$450,595,906	\$375,000,000	\$75,595,906
2017	\$461,111,714	\$405,000,000	\$56,111,714

11 The infrastructure investment we face today arises, in part, from the re-investment that
 12 is necessary to rebuild or replace facilities that were installed many years ago. The line graph
 13 in Illustration No. 10 below shows Avista's capital spending on an annual basis from 1950 to
 14 2016, along with investment plans for 2017 – 2021. The dollars have been adjusted for
 15 inflation to reflect equivalent dollars in 2016 for comparison purposes, e.g., the dollars spent
 16 in 1983 have been adjusted (increased) to reflect what it would have cost to complete the same
 17 projects in 2016. The graph shows our Cabinet Gorge and Noxon Rapids major hydroelectric
 18 projects, originally built in the 1950s, being refurbished 40 to 50 years later; as well as our
 19 230kV transmission system receiving major upgrades 40 to 50 years later. Our Central Office
 20 building was completed in 1958, and we recently remodeled and replaced the original HVAC
 21 system 50 years later, in order to continue to use these same facilities for the foreseeable
 22 future.

1 **Illustration No. 10 – Avista Annual Capital Spend 1950 – 2021 (2016 Dollars)**



12 It is informative to view the line graph in Illustration No. 10 above on a per-customer

13 basis. The graph in Illustration No. 11 below represents Avista’s annual capital spending, in

14 2016 dollars (from Illustration No. 10 above) divided by the number of customers for each

15 respective year. Avista’s annual capital spending has grown in recent years, but so has the

16 number of customers being served by the Company. The graph below illustrates that our

17 current level of capital spending on a per-customer basis is in line with the per-customer

18 capital spending for approximately the last 30-years. That is, if a trend-line for the last 30-

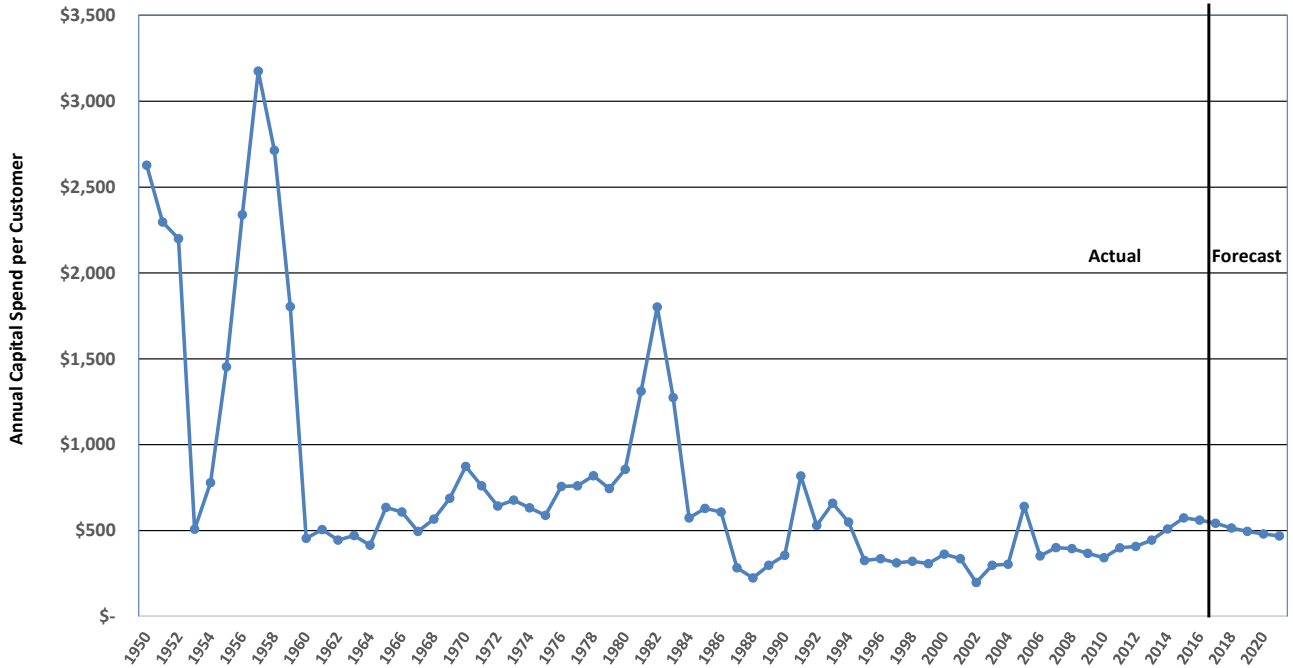
19 years were to be calculated and over-laid on the graph, it would show that capital spending on

20 a per-customer basis has been nearly flat for the last 30-years. In addition, for the period

21 2017-2021, the graph shows the planned capital spending on a per-customer basis declining

22 to the future.

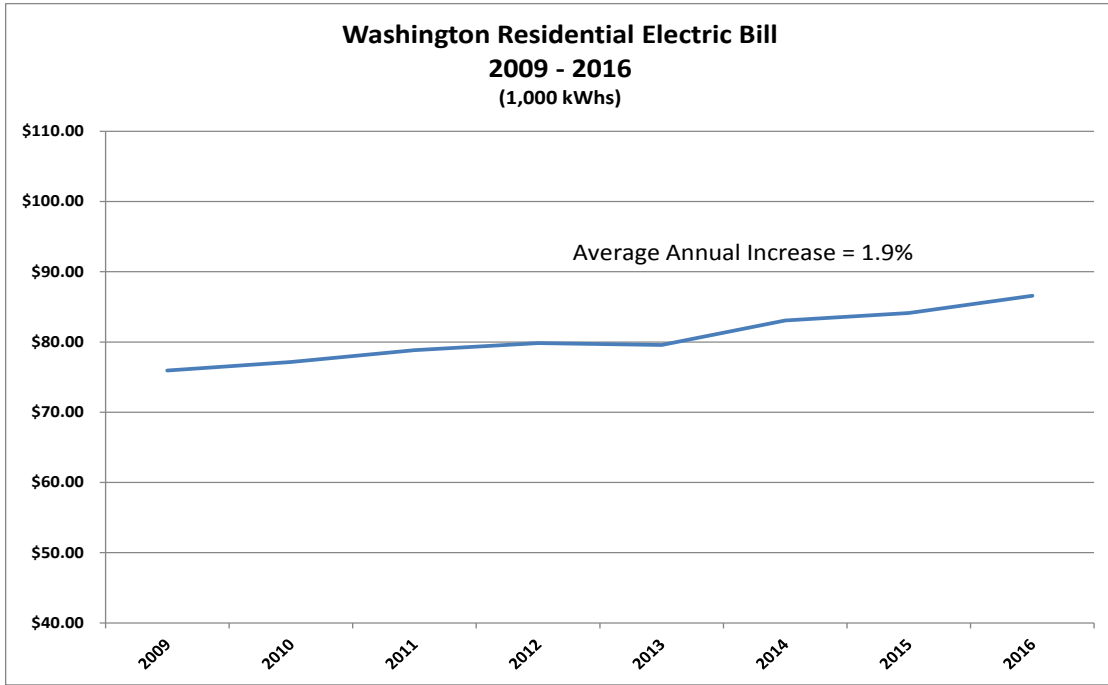
Illustration No. 11 – Avista Annual Capital Spend per Customer - 1950-2021 (2016 Dollars)



Q. How have customers’ electric and natural gas bills changed in recent years as Avista has continued to make necessary investments in its utility systems?

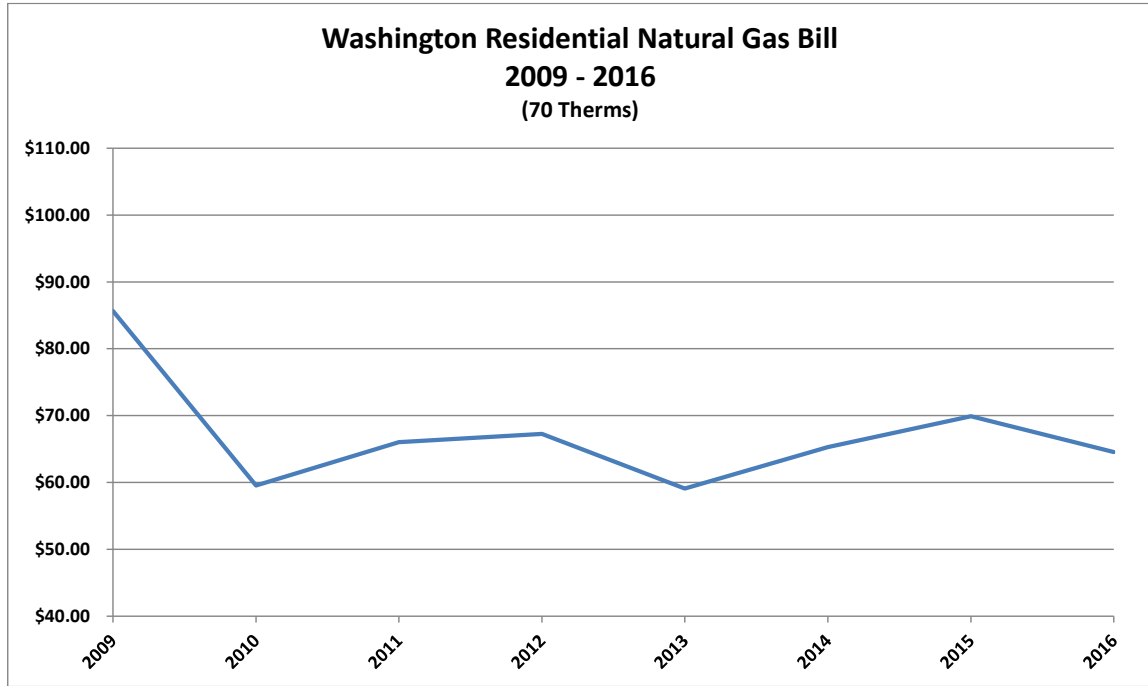
A. The line graph in Illustration No. 12 below shows the change in the monthly bill, from 2009 to 2016, for a Washington residential electric customer using an average of 1,000 kilowatt-hours per month. The graph shows that the average increase over time has been 1.9% per year. Although this average increase is a little higher than the level of inflation during the same period, the increase to customers during this period is less than it otherwise would have been due to the Company choosing to fund less than the dollar amounts of capital projects requested by the various departments of the Company.

Illustration No. 12 – Washington Residential Electric Bill (2009-2016)



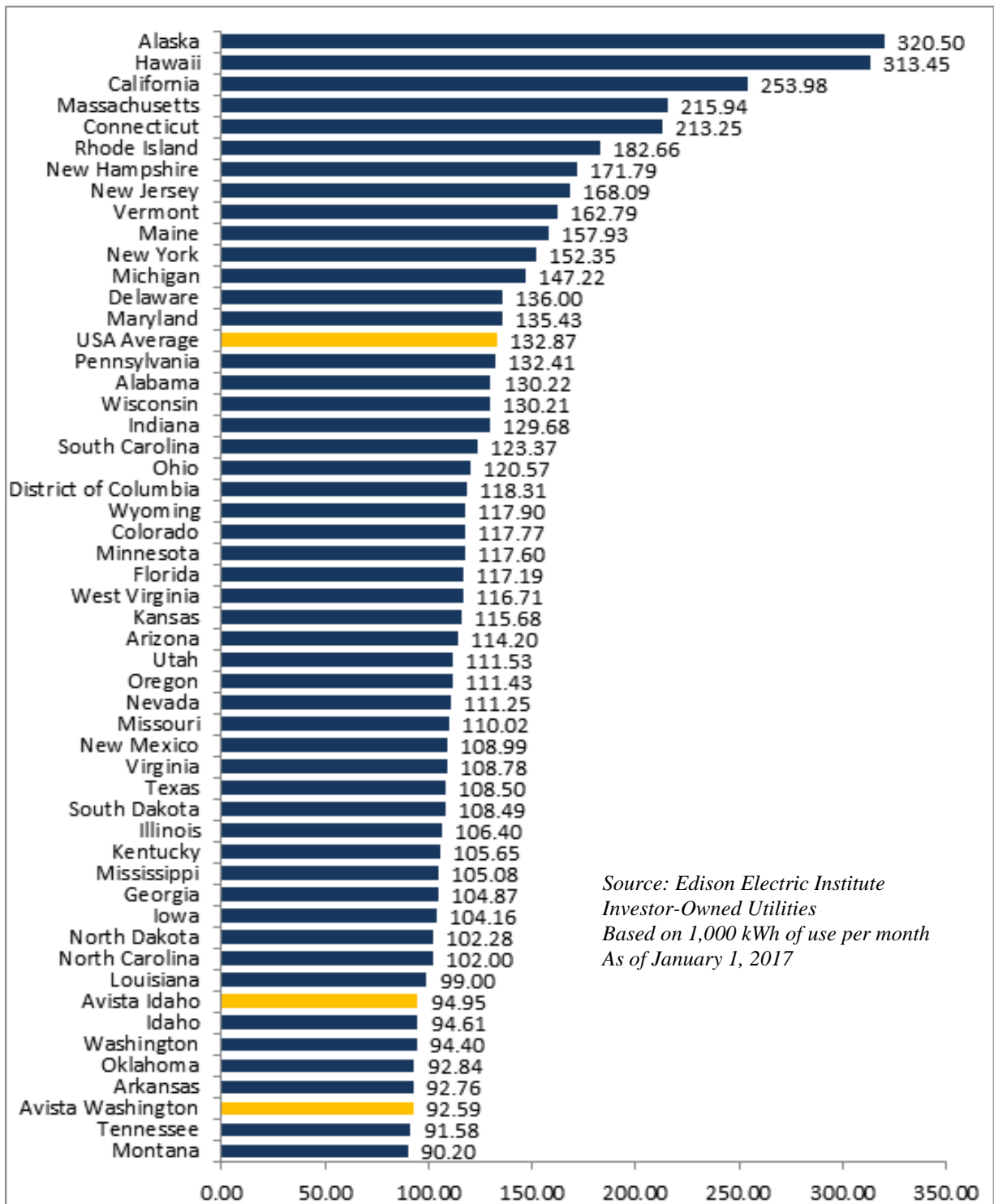
With regard to natural gas, the line graph in Illustration No. 13 below shows the change in the monthly bill, from 2009 to 2016, for a Washington residential natural gas customer using an average of 70 therms per month. The graph shows that customer bills have dropped from approximately \$85 per month in 2009, to approximately \$65 per month in 2016. The graph shows that bills have decreased significantly for this time period, even as Avista has continued to make the necessary investments to maintain its delivery system and invest in new technology. The decrease in customers’ natural gas bills is driven primarily by the decline in natural gas commodity costs, as well as a decrease in interest costs during the period.

Illustration No. 13 – Washington Residential Natural Gas Bill (2009-2016)



With regard to Avista’s retail rates compared to other investor-owned utilities, Edison Electric Institute periodically prepares a comparison of residential electric bills for investor-owned utilities across the country. Illustration No. 14 below provides a comparison of an Avista residential customer’s monthly bill in Washington and Idaho with utility bills in other states. The chart shows that Avista’s residential customers’ rates are among the lowest in the Country for investor-owned utilities.

Illustration No. 14 – Average Residential Monthly Electric Bill



Source: Edison Electric Institute
 Investor-Owned Utilities
 Based on 1,000 kWh of use per month
 As of January 1, 2017

1 Our relatively low retail rates are due in large part to a history of our Company
2 aggressively pursuing the acquisition and preservation of a diversified portfolio of low cost
3 resources for the benefit of our customers. They are also a result of Avista’s efforts to control
4 its capital investment costs and utility operating costs, in order to keep retail rates as low as
5 reasonably possible.

6 **Q. How does Avista identify and prioritize its capital investments?**

7 A. Avista’s capital investments originate from the following six major
8 “investment drivers”:

- 9 1. Respond to customer requests for new service or service enhancements;
- 10 2. Meet our customers’ expectations for quality and reliability of service;
- 11 3. Meet regulatory and other mandatory obligations;
- 12 4. Address system performance and capacity issues;
- 13 5. Replace infrastructure at the end of its useful life based on asset condition; and
- 14 6. Replace equipment that is damaged or fails, and support field operations.

15 An explanation of each of these drivers, as well as examples of specific capital projects
16 under these drivers, is provided in the Infrastructure Investment Plan, attached as Exh. SLM-
17 3. In addition, Company witnesses Mr. Kinney, Ms. Rosentrater, and Mr. Kensok provide
18 details on the specific capital projects planned and in progress, why the projects need to be
19 done in the time frame they will be completed, as well as what the risks and consequences are
20 of not completing the projects.

21 A breakdown of planned investments for each driver for 2017-2021 is shown in
22 Illustration No. 15 below.
23

1 **Illustration No. 15 – Planned Investments by Capital Investment Driver (2017 – 2021)**

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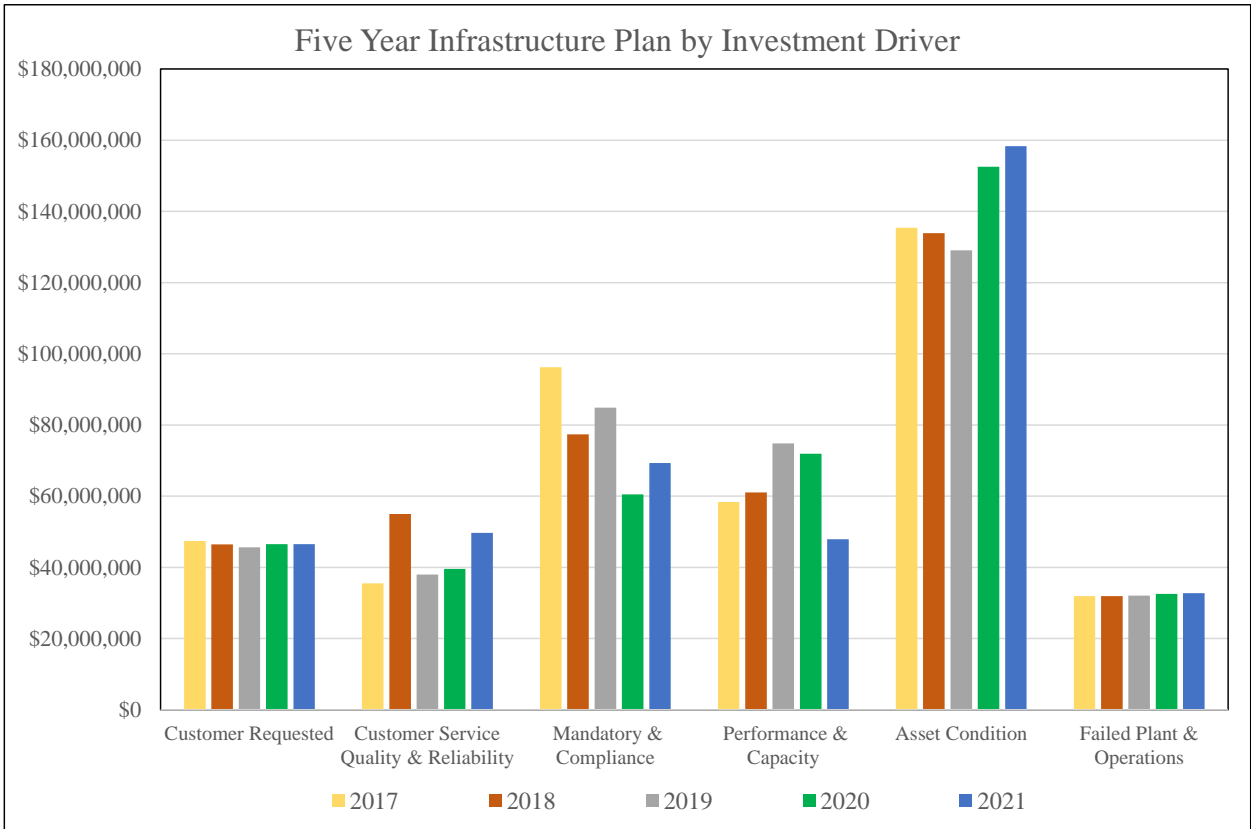
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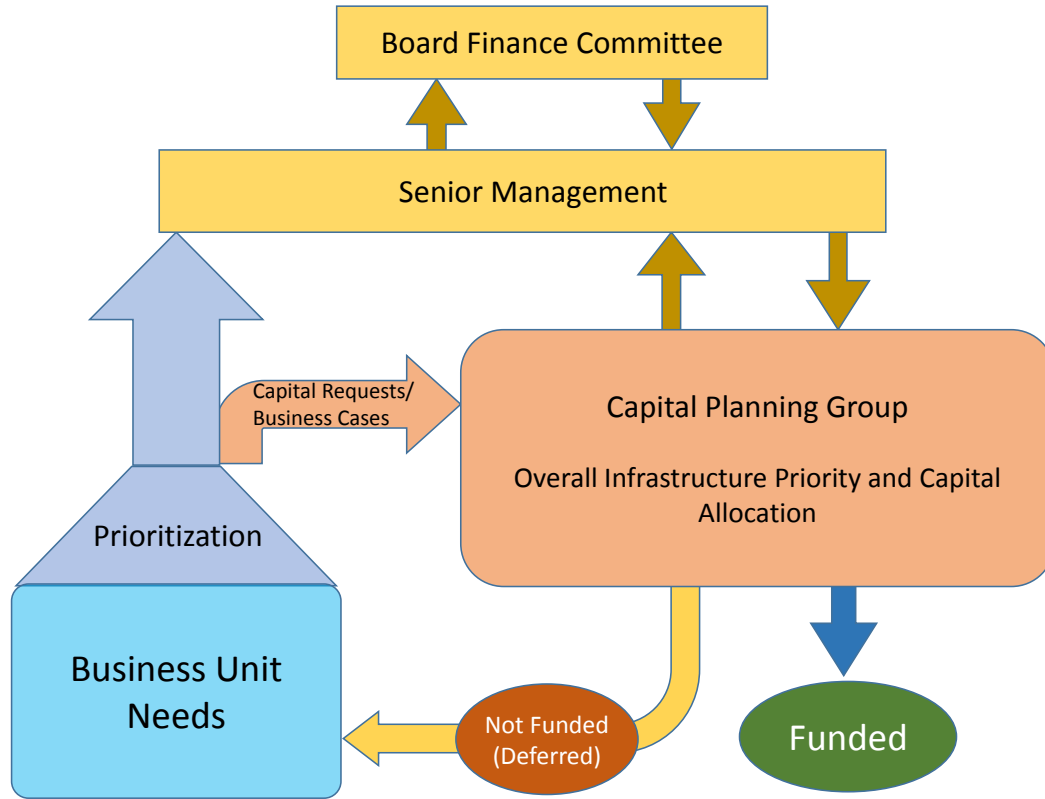
15

16



The process under which Avista’s planned capital expenditures are identified and prioritized is illustrated in Illustration No. 16 below.

1 **Illustration No. 16 - Identification and Prioritization Process**



15 The capital projects are identified in the lower-left portion of the diagram labeled

16 “Business Unit Needs,” and are then prioritized within each department. This prioritization

17 occurs with the knowledge of the continuing constraint on the capital spend level for the

18 Company, while at the same time the leadership of each department informs Senior

1 Management of both the near-term and longer-term needs that are being delayed.¹⁷ For the
2 prioritized projects, Business Cases¹⁸ are developed for each of the Capital Requests that go
3 to the Capital Planning Group (CPG) (as illustrated in the diagram). The CPG prioritizes the
4 Capital Requests across departments, such that the overall planned capital spend stays within
5 the constrained spend level established by Senior Management. The highest priority Capital
6 Requests are Funded, and a portion of the Capital Requests are Not Funded (Deferred), as
7 shown on the diagram. The Board Finance Committee reviews and approves the first year of
8 the five-year capital investment plan. Under this Identification and Prioritization Process, the
9 capital projects are screened and prioritized twice; once within the departments, and then a
10 second time across departments within the CPG. This Identification and Prioritization Process
11 is explained in more detail in the Infrastructure Investment Plan in Exh. SLM-3.

12

13

V. O&M AND A&G COST MANAGEMENT

14

15

Q. Please briefly explain some of the ways the Company is managing its operating expenses for the benefit of customers.

16

17

A. A few examples of how the Company manages its operating expenses for the benefit of customers involve labor, benefits, and IS/IT expenses. As explained in more detail

¹⁷ Examples of deferred and underfunded projects include, 1) the Company's Hatwai-Lolo #2 230kV transmission line re-conductor and rebuild, and 2) rebuilding electric distribution feeders at the end of their useful life. The Hatwai-Lolo project, which is required to comply with federal transmission planning standards, has been deferred in order to balance the overall demand for investment across the Company. Avista's engineers are evaluating other possible short-term solutions for complying with the planning standards until this project can be completed. The Company's grid modernization program for rebuilding distribution feeders is optimized on a 60-year cycle, however, it has not been funded at a level to achieve that cycle time, in order to accommodate other priority investment needs in Avista's electric distribution system. The planned funding for 2017 – 2021 supports an 84 year cycle.

¹⁸ A Business Case is a summary document that defines the business problem addressed by a project or program, along with a proposal and recommended solution. The Business Case explains why the work is necessary, and the risks associated with not making the investment, as well as the alternatives considered, the selected alternative and the timeline associated with the project.

1 by Company witness Ms. Andrews (Exh. EMA-2), the Company carefully evaluates each
2 component of overall compensation in order to provide total compensation which will be cost-
3 effective for the Company, as well as attract and retain employees. In an effort to
4 appropriately manage our staffing requirements, we have a hiring restriction which requires
5 approval by myself, the President of the Utility, the CFO, and the Sr. VP for Human Resources
6 for all replacement or new hire positions

7 In order to manage medical costs, several measures have been implemented to manage
8 costs. The Company made changes to the medical plan for employees hired on or after
9 January 1, 2014 such that upon retirement the Company no longer provides a contribution
10 towards his/her medical premiums. The Company will provide access to the retiree medical
11 plan, but the retiree will pay the full cost of premiums upon retirement. In addition, beginning
12 in January 1, 2020 the method for calculating health insurance premiums will shift more
13 expenses to our retirees, lowering Company medical expense.

14 In an effort to keep medical office visits down, we offer access to phone or web-based
15 24/7 telemedicine and we have an on-site clinic. Beginning in 2017, Avista offered a self-
16 insured High Deductible Health Plan (“HDHP”) in addition to the current self-insured plan.
17 The HDHP requires plan participants to pay all costs of medical care up to defined deductible
18 limits. Over time we expect this plan to result in lower overall medical costs to the Company.

19 The Company has also made changes to its retirement plan. Effective January 1, 2014,
20 the defined benefit pension plan was closed to all non-union employees hired or rehired on or
21 after January 1, 2014, and was replaced with a defined contribution 401(k) plan. Under the
22 defined contribution plan the Company will provide a non-elective contribution as a
23 percentage of each employee's pay based on his or her age. In addition to the above changes,

1 the Company also revised our lump sum calculation for non-union retirees under the defined
2 benefit pension plan to provide non-union participants who retire on or after January 1, 2014
3 with a lump sum amount equivalent to the present value of the annuity based upon applicable
4 discount rates. This reduces the future costs and risks to the Company of funding and
5 managing the annual pension benefit (annuity) for retirees.

6 As discussed by Company witness Mr. Kensok, to mitigate operating expense
7 increases in IS/IT, Avista works to automate our systems through technology where
8 reasonable and prudent to do so, and we work to negotiate discounted multi-year contracts
9 with vendors that result in discounted maintenance and support rates. As an example, in 2016
10 we introduced a cloud-based business performance monitoring tool that automates a portion
11 of the labor performed by our IS teams. This subscription-based license model resulted in a
12 significant reduction of internal labor costs over a three year period, allowing us to redeploy
13 our IS operations team labor resources and providing immediate cost savings.

14 A second example where the Company has successfully managed its IS/IT O&M
15 expenses, is related to a 2017 telecommunications contract, which had two years remaining
16 on its term. We renegotiated early in the term to commit to a longer, five year term which
17 resulted in approximately \$215,000 in annual savings over the life of the agreement. These
18 two examples of cost reductions required no changes to service or quality, no equipment
19 deployments, and were implemented by changing the delivery model in one instance, and
20 committing to a longer term in the other. Both are continuous improvement practices to
21 manage expenses over time.

1 **VI. AVISTA RATEMAKING STUDIES**

2 **Q. Is there guidance related to ratemaking practices that address the**
 3 **difference in growth over time between costs and sales revenue that Avista, as well as**
 4 **other utilities, are experiencing?**

5 A. Yes. One source of guidance is the Rate Case and Audit Manual (NARUC
 6 Manual), prepared by the NARUC Staff Subcommittee on Accounting and Finance (Summer
 7 2003). The NARUC Manual states as follows:

8 In looking at the months beyond the end of the test year, have the growth rates for rate
 9 base, expenses and revenues all remained fairly close and constant, maintaining the
 10 test year relationship among these three elements, or has one element change
 11 dramatically, making the test year out of kilter with current operations? If so, can this
 12 situation be resolved through adjustments to the test year? . . . (Page 10) (emphasis
 13 added)

14 Whether using a future or historic test year, the auditor should judge the
 15 appropriateness of the test year that has been proposed. Is it representative, after
 16 adjustments, of the period in which rates take effect? . . . (Page 10) (emphasis added)

17 A utility's rate filing commonly begins with test year booked numbers, which are then
 18 adjusted to represent anticipated, normalized operations for the period that the rates
 19 will take effect. (Page 15) (emphasis added)

20 This guidance highlights the importance of making appropriate adjustments in the
 21 ratemaking process so that the retail rates established at the conclusion of a rate case, reflect
 22 the "anticipated, normalized operations for the period that the rates will take effect."

23 This Commission has also recognized the importance of setting retail rates to reflect
 24 expected costs during the rate year as follows:

25 In prior orders, the Commission has made clear that while its ratemaking practice starts
 26 with known data that are "historical" by definition, these data are adjusted using
 27 various approaches to set rates based on expected costs the utility will experience
 28 during the rate year following the effective date of the new rates. Whatever tools are
 29 proposed for use in a given case, however, must be chosen with specific reference to

1 the needs of the case and the appropriateness of using each tool selected must be
2 demonstrated by applicable evidence.¹⁹ (emphasis added)
3

4 **Q. How has Avista developed its proposed retail rates in this case such that**
5 **they are “based on expected costs the utility will experience during the rate year**
6 **following the effective date of the new rates?”**

7 A. The Company has developed and presented four separate studies to
8 demonstrate the revenue increases necessary for each year of the Three-Year Rate Plan. Each
9 of these studies are explained in detail by Ms. Andrews. A summary of the studies is as
10 follows:

- 11 1. **Traditional Pro Forma Study** – This study includes the restating and pro forma
12 adjustments beyond the historical test year (2016), traditionally accepted and
13 approved by this Commission. The results from this study do not provide the
14 necessary rate relief to allow the Company the opportunity to earn the authorized
15 rate of return, and therefore, on its own, is not the basis of the Company’s revenue
16 increase request.
17
- 18 2. **Rate Year Study** – This study includes the Company’s planned rate period costs,
19 offset by revenues from increased sales to customers, through each rate year of the
20 Three-Year Rate Plan, May 1, 2018 through April 30, 2021. This Study provides
21 additional evidence demonstrating the need for revenue increases for the Three-
22 Year Rate Plan. This study is similar to the use of a forward-looking test year
23 employed by other state jurisdictions. The dollar amounts in the study reflect the
24 actual planned investments and operating costs for each of the three rate years,
25 along with expected revenue growth from sales to customers. These dollar amounts
26 are the amounts presented to our Board of Directors and the Rating Agencies, and
27 represent our actual planned operations for the three-year period.
28
- 29 3. **EOP Rate Base Study** – This study starts with the electric and natural gas
30 Traditional Pro Forma Study results, noted in (1) above, which is then adjusted to
31 include end of period (EOP) 2017 rate base, and an adjusted capital structure. The
32 EOP Rate Base Study is the basis of the Company’s requested electric and natural
33 gas rate relief for the first rate year in this case. For Rate Years 2 and 3, an annual
34 “K-Factor” revenue escalator is applied to non-ERM and non-gas cost revenues to
35 determine the proposed revenue increases for Rate Years 2 and 3. The use of a K-
36 Factor for a multi-year rate plan is similar to that used in Puget Sound Energy’s
37 (PSE’s) multi-year plan approved by the Commission.

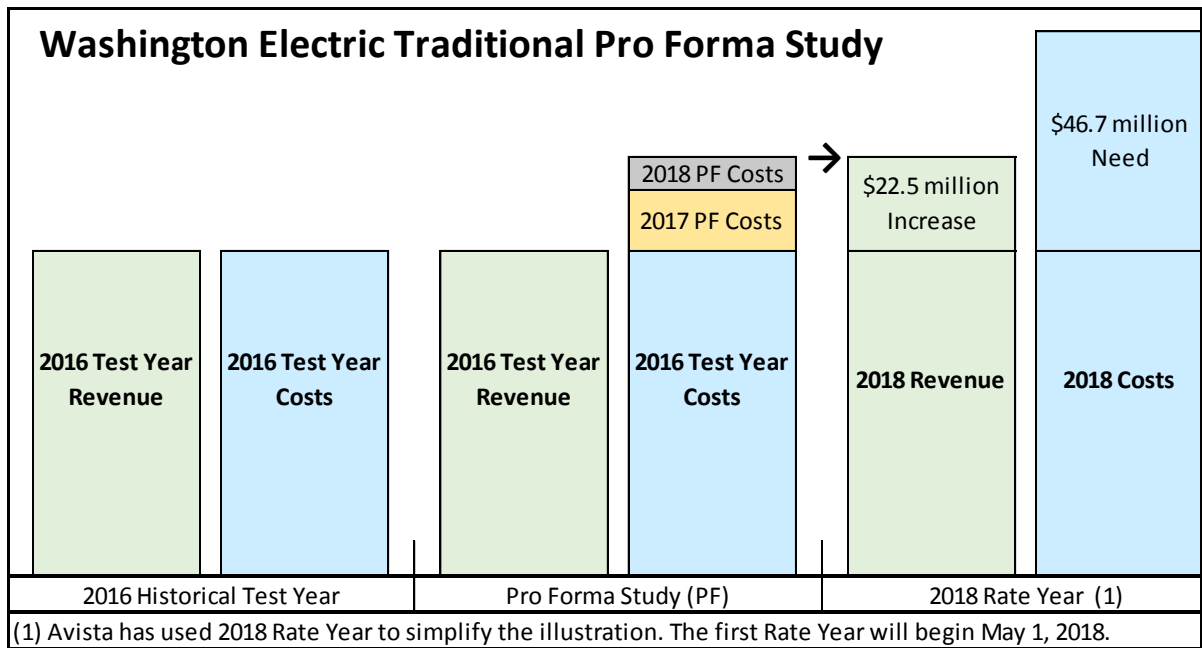
¹⁹ Order 06, page 49, paragraph 82, Dockets UE-160228/UG-160229

1
 2 4. **K-Factor Study** – For this study, a K-Factor, or escalation rate, is developed based
 3 on the historical trend of changes in rate base components, operating expenses and
 4 revenues, using normalized data from prior Commission Basis Reports. For Rate
 5 Year 1, normalized 2016 non-ERM and non-gas cost revenues are multiplied by
 6 the proposed K-Factor for each year from 2016 to Rate Year 1 (from 2016 through
 7 the first rate year beginning May 1, 2018). For Rate Years 2 & 3, the annual K-
 8 Factor is applied to the non-ERM and non-gas cost authorized revenues at the time
 9 Year 2 and 3 rate changes go into effect. As indicated earlier, the use of a K-Factor
 10 is similar to that used in PSE’s multi-year plan approved by the Commission.
 11
 12

13 **Q. What are the results from the four ratemaking studies, and how do we**
 14 **know that the results from the Traditional Pro Forma Study do not yield sufficient**
 15 **revenues for the rate year beginning May 1, 2018?**

16 A. Illustration No. 17 below shows the results of the electric Traditional Pro
 17 Forma Study versus the Company’s need for an electric revenue increase beginning May 1,
 18 2018.

19 **Illustration No. 17**



1 As shown in Illustration 17, the Traditional Pro Forma Study will include some
2 increases in costs beyond the end of the 2016 historical test year, for 2017 and 2018 (as
3 indicated by 2017 PF Costs and 2018 PF Costs), but it does not include all changes in costs
4 and revenues. The electric Traditional Pro Forma Study would result in a revenue increase of
5 \$22.5 million, which falls \$24.2 million short of the electric revenue increase needed by Avista
6 for the first rate year beginning May 1, 2018.

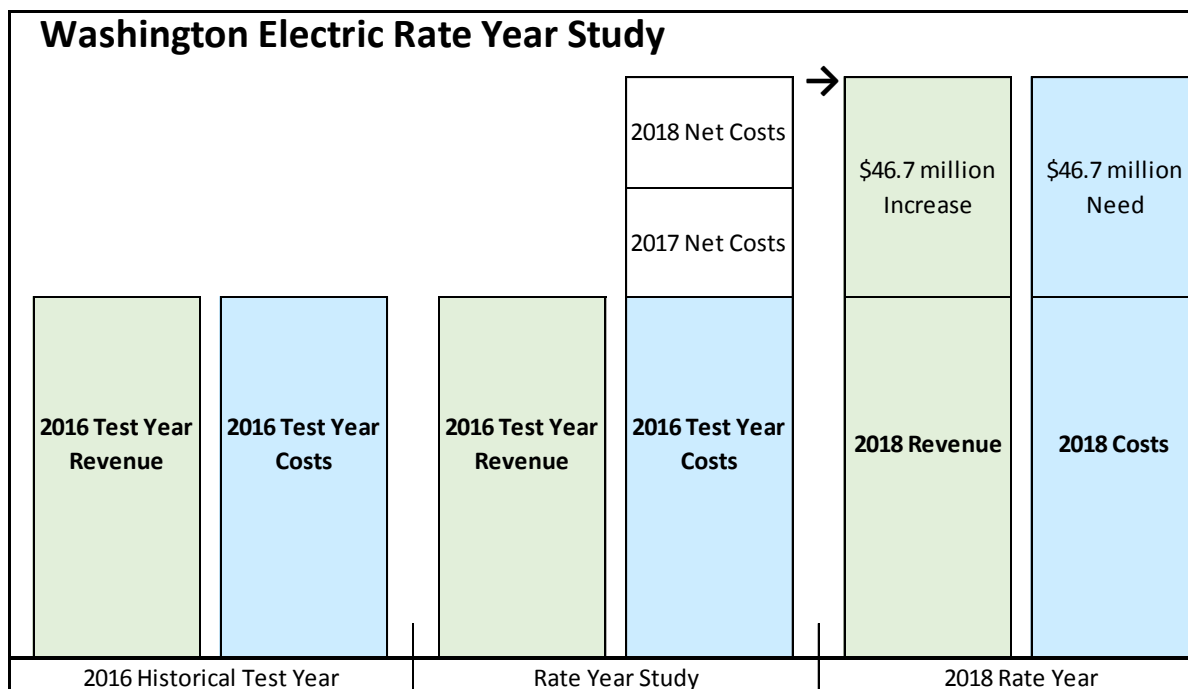
7 **Q. How do we know the \$22.5 million result from the Traditional Pro Forma**
8 **Study is less than the revenue increase needed for the first rate year beginning May 1,**
9 **2018?**

10 A. The revenue increase needed for the rate year beginning May 1, 2018 is directly
11 related to the planned investment and operating costs that will be in place serving customers
12 during the actual rate year; net of the revenues expected from customers during the same
13 period.

14 The Rate Year Study includes all of the planned investment, operating expenses, and
15 revenues for the Three-Year Rate Plan beginning May 1, 2018. This information is the same
16 information presented to Avista's Board of Directors and Rating Agencies, and reflects the
17 planned operations for Avista for the specific rate years. Therefore, the results of the Rate
18 Year Study reflect the revenue increases actually needed by Avista during the three-year
19 period in order for revenues to be sufficient during the rate years to cover Avista's costs, and
20 have a reasonable opportunity to earn the allowed return on investment.

21 Illustration No. 18 below shows the "need" of \$46.7 million during the rate year
22 beginning May 1, 2018, as determined by the electric Rate Year Study.

1 **Illustration No. 18**



12 The Rate Year Study adds 2017 and 2018 planned costs (both expenses and capital
 13 additions), net of increased revenue from sales growth, to the 2016 historical test year
 14 normalized operating results. The results of the Rate Year Study reflect the revenue increase
 15 needed for Rate Year 1 of \$46.7 million.

16 We understand that this information is based on estimates for the future, and
 17 essentially reflects a “forward-looking test year,” which some states employ in whole, or in
 18 part, in setting retail rates. Knowing this Commission historically has not used a forward-
 19 looking test year to establish retail rates, Avista is not proposing revenue increases in this case
 20 based on these electric and natural gas Rate Year Studies. These Studies do, however,
 21 represent additional evidence demonstrating Avista’s need for revenue increases for the future
 22 rate periods.

1 The provision of the results of the Rate Year Study is consistent with this
2 Commission's stated interest to "set rates based on expected costs the utility will experience
3 during the rate year following the effective date of the new rates."²⁰
4

5 **EOP Rate Base Study**

6 **Q. Please briefly describe the EOP Rate Base Study and the results from the**
7 **study.**

8 A. The EOP Rate Base Study is the basis of the Company's requested rate relief
9 in this case for Rate Year 1 beginning May 1, 2018. The EOP Rate Base Study starts with the
10 results of the Traditional Pro Forma Study discussed earlier, which is then adjusted to reflect
11 end of period (EOP) rate base at December 31, 2017, plus the employment of an adjusted
12 capital structure.

13 Avista's capital structure in this Study was calculated excluding short-term debt. The
14 resulting adjusted capital structure includes 50% common equity and 50% debt, as compared
15 to the current authorized capital structure of 48.5% common equity and 51.5% debt.²¹

16 **Q. Is this type of EOP Rate Base Study used in other jurisdictions?**

17 A. Yes. In both Avista's Idaho and Oregon jurisdictions the Commissions for
18 many years have approved an adjusted capital structure calculated excluding short-term debt.
19 Avista's current approved capital structure in Idaho and Oregon is 50% equity and 50% debt.
20 These two Commissions also use end of period rate base, measured just before new retail rates
21 are implemented, to determine the revenue increase for the prospective rate year.

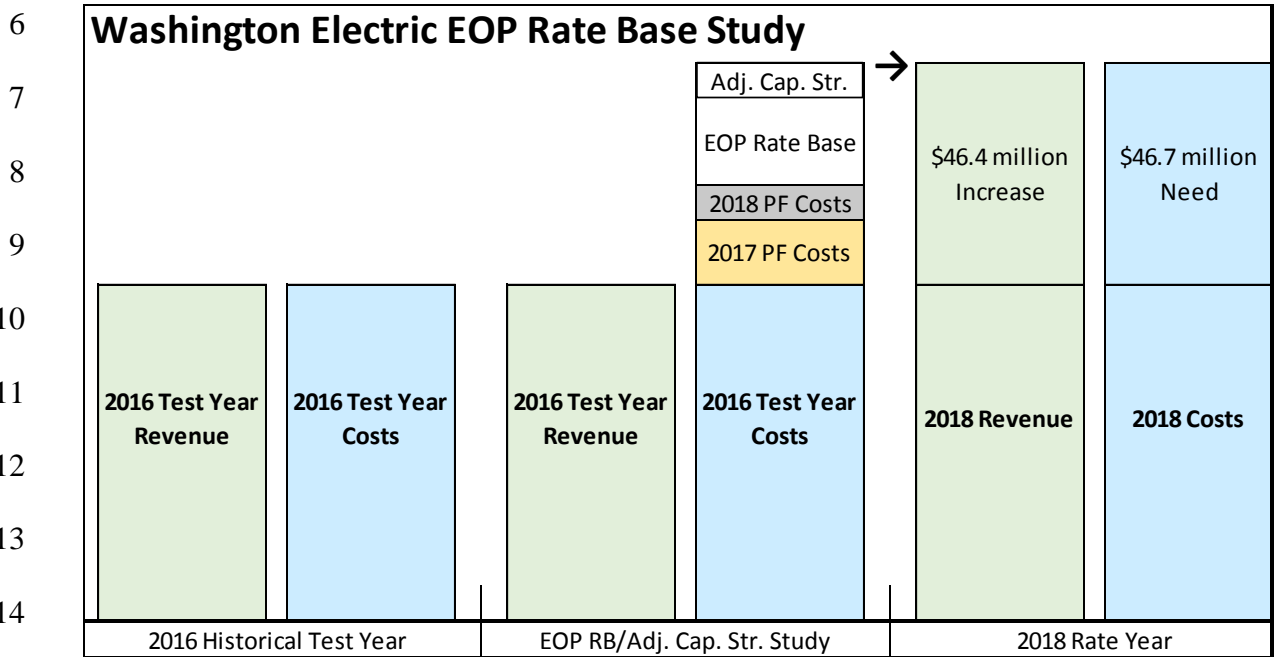
²⁰ Order 06, page 49, paragraph 82, Docket UE-160228/UG-160229.

²¹ Company witness Mr. Thies provides these calculations.

1 **Q. How do the results of the EOP Rate Base Study compare with the rate**
 2 **relief needed during Rate Year 1?**

3 A. Illustration No. 19 below shows that the revenue increase supported by the
 4 electric EOP Rate Base Study is very close to the revenue increase needed for Rate Year 1.

5 **Illustration No. 19**



16 **Q. What are the benefits of using the EOP Rate Base Study?**

17 A. First, the foundation for the EOP Rate Base Study begins with the results of
 18 the Traditional Pro Forma Study. Second, the ratemaking “tools” used in this study (EOP rate
 19 base and adjusted capital structure) are familiar tools, either previously used by this
 20 Commission, or other regulatory commissions across the Country.

21 Third, the use of EOP rate base at December 31, 2017 provides the opportunity,
 22 between December 31, 2017 and the time that new retail rates go into effect (May 1, 2018),
 23 for parties to this case and the Commission to review the capital projects that are completed

1 and placed into service on or before December 31, 2017. This should alleviate concerns
2 related to whether the plant is in service prior to the rate year.

3 The proposed revenue increases for Years 2 and 3 of the Rate Plan, effective May 1,
4 2019 and May 1, 2020, are determined by applying a K-Factor to the results of the EOP Rate
5 Base Study for Year 1. As explained by Ms. Schuh, the Company is proposing to file with
6 this Commission an Annual Washington Electric and Natural Gas Capital Report by February
7 15, 2019 and February 15, 2020. The annual report would provide actual year-end (end of
8 period) rate base balances as of December 31st of the recently completed year, and will provide
9 an opportunity for review of the rate base additions prior to new rates going into effect. Again,
10 this would provide assurance to the Commission that the rate increases approved effective
11 May 1, 2019 and May 1, 2020, would include utility plant that is in-service serving customers
12 prior to new rates going into effect.

13

14 **K-Factor Study**

15 **Q. Please briefly describe the K-Factor Study and the results from the study.**

16 A. The Company's electric and natural gas K-Factor Study was produced to
17 provide additional evidence demonstrating its need for rate relief during the Three-Year Rate
18 Plan. The K-Factor itself, in simple terms, is a revenue escalation percentage, which is applied
19 to revenues for the historical base year, to determine revenue increases each year for a multi-
20 year rate period.

21 The development of the K-Factor for the first rate year beginning May 1, 2018 was
22 based on Avista's normalized Commission Basis results for the period 2013 to 2016 for both
23 the electric and natural gas K-Factor Studies. In general terms, the K-Factor percentage

1 represents a weighted average revenue escalation factor based on the historical growth in rate
2 base-related costs and operating costs, offset by the growth in sales revenue. The K-Factor
3 annual percentage was then applied to 2016 normalized retail revenue to determine the
4 revenue increase necessary for the first rate year beginning May 1, 2018.

5 This K-Factor analysis is similar to that used in determining the K-Factor for the multi-
6 year rate plan for Puget Sound Energy in *consolidated* Dockets UE-121697/UG-12705 & UE-
7 130137/UG-130138. Ms. Andrews provides details of the K-Factor calculations for each year
8 of the Three-Year Rate Plan.

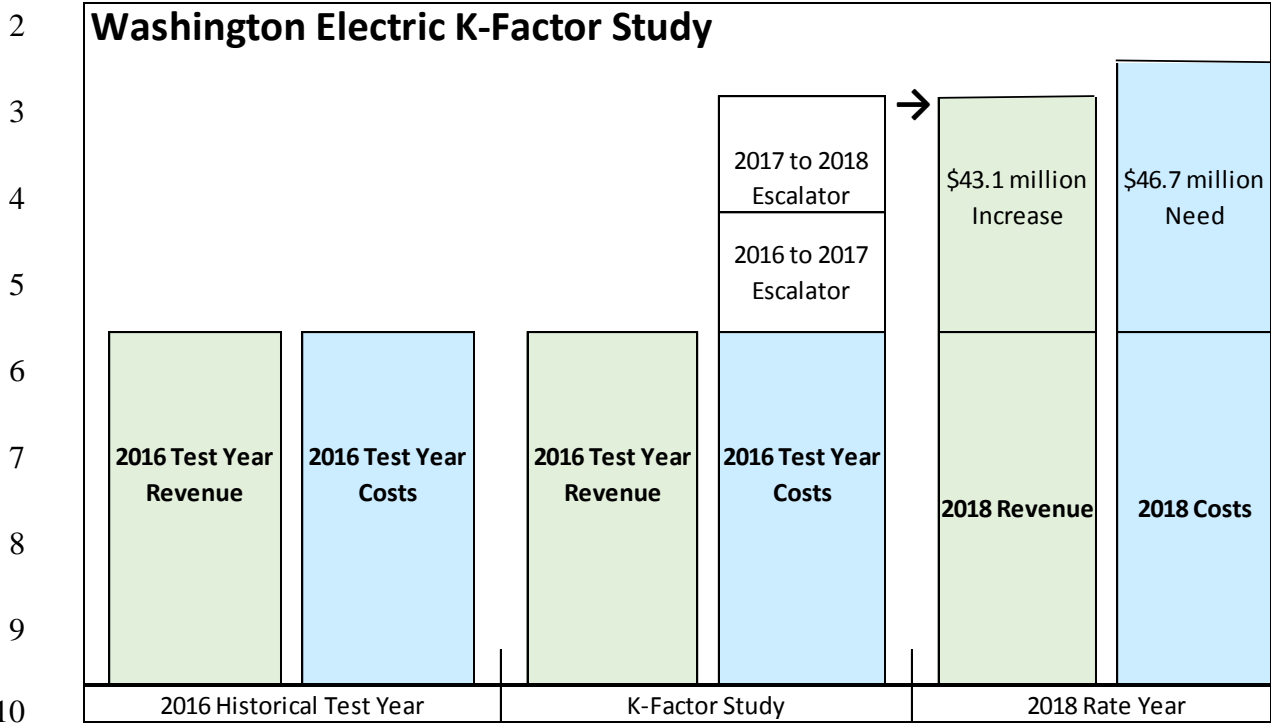
9 **Q. Has Avista included an efficiency adjustment in the determination of the**
10 **K-Factor percentage?**

11 A. Yes. For Rate Years 2 and 3, Avista included an “efficiency adjustment,”
12 reducing the electric and natural gas O&M growth percentage by 10%. Avista did not include
13 an “efficiency adjustment” in the Rate Year 1 K-Factor, because Avista is using the more
14 recent Commission Basis results for the period 2013-2016, which include the effects of O&M
15 cost reductions in recent years.

16 **Q. How do the results of the K-factor Study compare with the rate relief**
17 **needed for Rate Year 1 beginning May 1, 2018?**

18 A. Illustration No. 20 below shows the results of the electric K-Factor Study as
19 compared to that needed for Rate Year 1 of the Three-Year Rate Plan.

1 **Illustration No. 20**

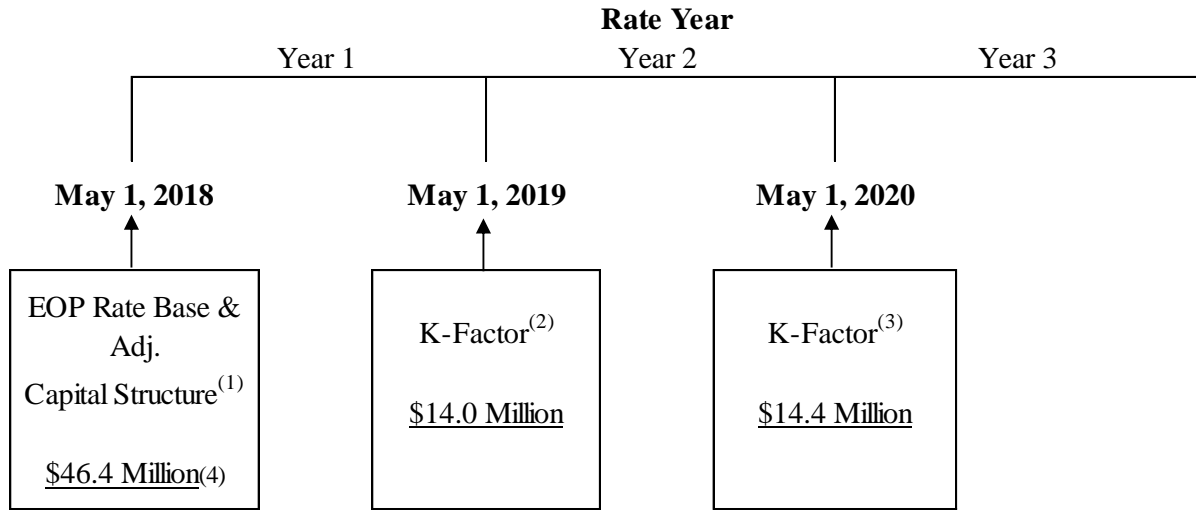


11 As shown in Illustration No. 20, use of the K-Factor from 2016 to Rate Year 1
 12 beginning May 1, 2018 produces an electric revenue increase of \$43.1 million, as compared
 13 with the Company’s need for electric rate relief of \$46.7 million.

14 **Q. Would you please summarize how the revenue increases proposed by**
 15 **Avista in this case for each year of the Three-Year Rate Plan were developed?**

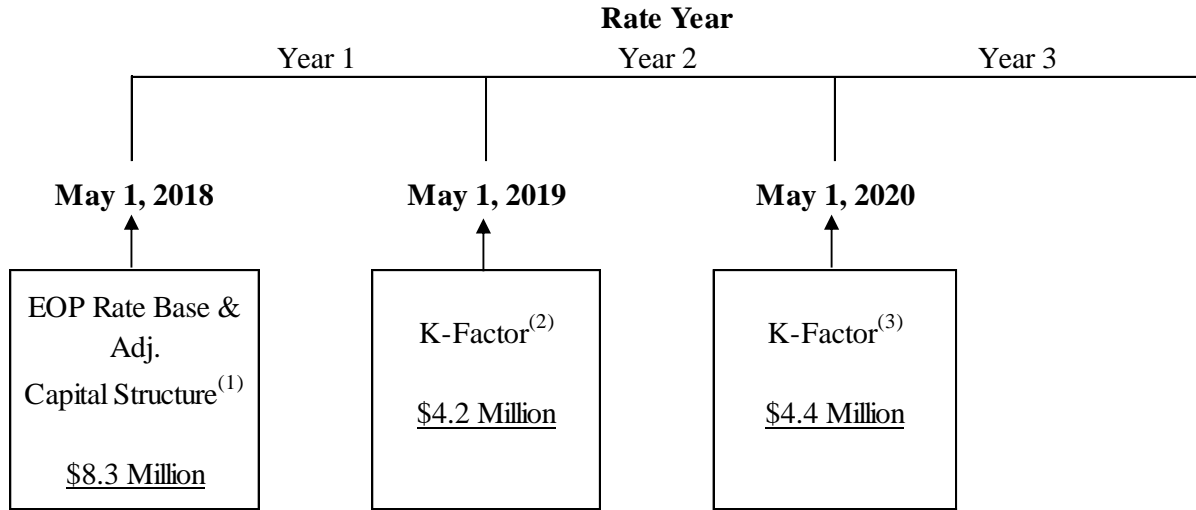
16 A. Yes. Illustration Nos. 21 (electric) and 22 (natural gas) below show how the
 17 Company has made use of the studies I have summarized above. The proposed electric and
 18 natural gas revenue increases for the first year of the rate plan beginning May 1, 2018 were
 19 based on the EOP Rate Base Study, while Years 2 and 3 of the Rate Plan were determined
 20 from the K-Factor analysis.

Illustration No. 21 - Derivation of Electric Revenue Requirement in Three-Year Rate Plan



- (1) See Exh. EMA-3, p. 2, ln. 7
- (2) See Exh. EMA-4, p. 9, ln. 10 (for K-Factor); EMA-3, p. 2, ln. 14 (for Revenue Rqmt.)
- (3) See Exh. EMA-4, p. 9, ln. 10 (for K-Factor); EMA-3, p. 2, ln. 16 (for Revenue Rqmt.)
- (4) This is net of the \$15.0 million Power Cost Rate Adjustment

Illustration No. 22 - Derivation of Natural Gas Revenue Requirement in Three-Year Rate Plan



- (1) See Exh. EMA-7, p. 2, ln. 7
- (2) See Exh. EMA-8, p. 8, ln. 14 (for K-Factor); EMA-7, p. 2, ln. 14 (for Revenue Rqmt.)
- (3) See Exh. EMA-8, p. 8, ln. 14 (for K-Factor); EMA-7, p. 2, ln. 16 (for Revenue Rqmt.)

1 The results of the Traditional Pro Forma Study, on its own, does not provide sufficient
2 revenues for the rate year beginning May 1, 2018. Through the EOP Rate Base Study, Avista
3 employed familiar ratemaking tools, including end of period rate base at December 31, 2017,
4 and an adjusted capital structure, in order to arrive at an end result that is fair to customers
5 and fair to the Company for the rate year beginning May 1, 2018. This EOP Rate Base Study
6 starts with the results of the Traditional Pro Forma Study, and then adds 2017 EOP rate base
7 and the adjusted capital structure.

8 Avista’s proposed Three-Year Rate Plan beginning May 1, 2018, involves a stay-out
9 period, such that Avista would not file another general rate case prior to June 1, 2020. To
10 accomplish this multi-year rate plan, Avista used a K-Factor to determine the revenue
11 increases for years 2 and 3 of the Three-Year Rate Plan. The use of a K-Factor, a fixed annual
12 escalation factor, has previously been employed by this Commission to accomplish a multi-
13 year rate plan (and stay-out period) for Puget Sound Energy, as indicated below:

14 The use of fixed annual escalation factors to adjust PSE’s rates is a viable approach to
15 reduce the impacts of regulatory lag and attrition during a multi-year general rate case
16 stay-out period. The escalation factors provide PSE an improved opportunity to earn
17 its authorized return, but are set at levels that will require PSE to improve the
18 efficiency of its operations if it is to actually earn its authorized return. This is a
19 critically important consideration underlying our approval of the rate plan.²²
20

21 The Company has proposed some “checks and balances” to ensure that retail rates for
22 the duration of the multi-year rate plan are fair for customers. Through the existing one-way
23 earnings tests for each of its Washington electric and natural gas operations, if Avista were to
24 over-earn during the Three-Year Rate Plan, Avista would share half of the overearnings,

²² Dockets UE-121697 and UG-121705 (consolidated), Order 07, dated June 25, 2013, paragraph 171.

1 protecting customers. However, if Avista under-earns there is no protection for the Company
2 under these circumstances; Avista simply would not earn its authorized rate of return.

3 In addition, for Rate Years 2 and 3, beginning May 1, 2019 and May 1, 2020, the
4 Company is proposing to file with the Commission an Annual Washington Electric and
5 Natural Gas Capital Report by February 15, 2019 and February 15, 2020. The annual report
6 would provide actual year-end (end of period) rate base balances as of December 31st of the
7 recently completed year. This would provide assurance to the Commission that the rate
8 increases approved effective May 1, 2019 and May 1, 2020, would include utility plant that is
9 in-service serving customers prior to new rates going into effect.

10 11 **VII. UTILITY INTO THE FUTURE**

12 **Q. What steps is Avista taking to meet the needs and expectations of its**
13 **customers, both now and into the future?**

14 A. Avista continues to partner with its customers and other stakeholders to change
15 and adapt its operations, and its utility infrastructure, to meet the needs and expectations of
16 not only our customers, but all of our stakeholders.

17 We are continuing to build on the recent advancements in products, services and
18 changes in our operations. Many of the recent changes were developed and implemented in
19 partnership with the Commission Staff, Public Counsel, low income agencies, and
20 representatives of other customer groups.

21 Although in these and other regulatory proceedings we may find ourselves on
22 “opposite sides of the table,” so to speak, in litigating or negotiating outcomes, we all share
23 the same ultimate interests and goals; to provide Avista’s customers with safe, reliable service

1 at the lowest reasonable cost, while at the same time providing a fair rate of return on
2 investment for shareholders.

3 Some examples of the recent advancements and improvements for our customers are
4 summarized below and others are discussed in more detail in Company witness Mr. Christie's
5 direct testimony. These are just the beginning of what is to come as we partner with our
6 customers and our other stakeholders in developing an energy future where we use energy
7 efficiently and minimize the impact on our environment.

8 **Community Solar Project:** Avista's community solar project was built on land the
9 Company owns in Spokane Valley, Washington. Customers who elected to participate
10 in the project were asked to make an upfront contribution equal to their portion of the
11 overall project costs, including both initial costs and ongoing costs, such as operation,
12 maintenance, administrative, etc., that will be incurred throughout the life of the
13 program. This community solar program was open to both residential and non-
14 residential customers in Washington and participation was voluntary. The project
15 consists of six separate solar arrays, with 252 panels each, for a total of 1,512 panels.
16 Each panel is rated at approximately 280 Watts, resulting in a total generating
17 capability of the community solar array of 423 kilowatts, or a little less than one-half
18 megawatt. Customers are receiving a credit on their monthly bills based on the actual
19 generation from the panels. The project has provided the opportunity for Washington
20 customers to participate directly in solar generation, without having the solar
21 equipment at their premise.

22
23 **Battery Electricity Storage at Schweitzer Engineering Laboratories:** Avista's
24 Energy Storage project builds upon the technology upgrades in Pullman, Washington,
25 and is part of the Company's investment into research that will improve power system
26 reliability by addressing one of the biggest challenges facing the energy industry –
27 how to integrate power generated from intermittent renewable sources such as wind
28 and solar into the electrical grid. The 1 MW, 3.2 MWh large-scale battery storage
29 system uses batteries manufactured in Washington in a real-world setting at
30 Schweitzer Engineering Laboratories in Pullman. The system went online in 2015,
31 and is the result of a partnership between Avista and the State of Washington, with
32 both parties contributing funding for the project. Batteries such as this one provide
33 the capability to store power generated by renewable sources when it's abundant, for
34 example when the wind is blowing, and distribute energy when it's needed, regardless
35 of weather patterns.

36
37 **Electric Vehicle Charging Equipment Pilot:** In April 2016, the Commission
38 approved a two-year pilot program in Washington to install AC Level 2 Electric

1 Vehicle Supply Equipment (EVSE) as a means to better understand Electric Vehicle
2 (EV) charging at home, at work and in public areas, i.e., what is needed, what is
3 effective, and how it may affect the grid in the future. The pilot is helping Avista
4 better understand how to maximize the benefits of EVs for all our customers in the
5 years ahead, as well as supporting a cleaner environment through the increased use of
6 EVs in the Spokane area. By installing a limited number of EVSE in beneficial
7 workplace and public areas, we will also help support greater EV adoption in our
8 service territory and pave the way for effective long-term programs. In addition to the
9 Level 2 EVSE installations, Avista is installing DC Fast Charging EVSE at seven
10 locations as part of the pilot program.
11

12 VIII. COMMUNICATIONS WITH CUSTOMERS

13 **Q. How is Avista communicating with its customers to explain what is**
14 **driving increased costs for the Company?**

15 A. The Company proactively communicates with its customers in a number of
16 ways: customer forums, one-on-one customer interactions through field personnel and
17 account representatives, bill inserts, social media, media contacts, group presentations, and
18 through our employees' involvement in community, business and civic organizations, to name
19 a few. We believe our communications are helping our customers and the communities we
20 serve to better understand the issues faced by the Company, such as increased infrastructure
21 investment, environmental mitigation and security, all of which have led to higher costs for
22 our customers.

23 Our employees provide excellent customer service, and this focus on communicating
24 with our customers includes providing our employees messaging and new tools and training
25 to make it easier to communicate with friends, family and customers. We are finding that
26 once a customer talks with our employees, and voices their concerns and receives answers to
27 their questions, their satisfaction level increases.

1 We are also continuing our focus on informing customers of the many programs we
2 offer to provide assistance in managing their energy bills, and ensuring that our employees
3 are equipped to engage in these conversations.

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

5 A. Yes.