Exh. EMA-1T

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-17________

DOCKET NO. UG-17________

DIRECT TESTIMONY OF

ELIZABETH M. ANDREWS

REPRESENTING AVISTA CORPORATION

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I. INTRODUCTION

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

A. My name is Elizabeth M. Andrews. I am employed by Avista Corporation as Senior Manager of Revenue Requirements in the State and Federal Regulation Department. My business address is 1411 East Mission, Spokane, Washington.

Q. Would you please describe your education and business experience?

A. I am a 1990 graduate of Eastern Washington University with a Bachelor of Arts Degree in Business Administration, majoring in Accounting. That same year, I passed the November Certified Public Accountant exam, earning my CPA License in August 1991[1]. I worked for Lemaster & Daniels, CPAs from 1990 to 1993, before joining the Company in August 1993. I served in various positions within the sections of the Finance Department, including General Ledger Accountant and Systems Support Analyst until 2000. In 2000, I was hired into the State and Federal Regulation Department as a Regulatory Analyst until my promotion to Manager of Revenue Requirements in early 2007, and later promoted to Senior Manager of Revenue Requirements. I have also attended several utility accounting, ratemaking and leadership courses.

Q. As Senior Manager of Revenue Requirements, what are your responsibilities?

A. Aside from special projects, I am responsible for the preparation of normalized revenue requirement and ratemaking studies for the various jurisdictions in

[1] Currently I keep a CPA-Inactive status with regards to my CPA license.

which the Company provides utility services. Since 2000, I have led, or assisted in, the Company's electric and/or natural gas general rate filings in Washington, Idaho and Oregon.

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

A. My testimony will summarize the need for rate relief requested in the Company's filing. I will first summarize the Company's revenue increase requests for the proposed Three-Year Rate Plan for the period May 1, 2018 through April 30, 2021[2]. Avista has proposed electric and natural gas revenue increases to become effective May 1, 2018, May 1, 2019, and May 1, 2020. The filing of one rate case for a three-year period will reduce the burden to all stakeholders of processing a general rate case every year.

As part of Avista's demonstration of our need for electric and natural gas revenue increases, the Company has presented four ratemaking studies as follows:

1) **Traditional Pro Forma Study –** The Traditional Historical Modified Test Year Pro Forma Study.

2) **EOP Rate Base Study –** An End of Period (EOP) Rate Base Study, which also employs the use of an adjusted capital structure. The proposed capital structure in the EOP Rate Base Study has been adjusted to exclude short-term debt from the calculation. All other aspects of the cost of capital calculation are the same as that presented in prior cases. This ratemaking "tool" of excluding short-term debt from the capital structure calculation is currently used in Idaho and Oregon. A K-Factor is used to determine the revenue increases for rate years two and three of the Three-Year Rate Plan. Proposed rates were derived based on this Study.

[2] 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. In addition, the deferral period for the "Fee-Free Payment Program" is scheduled to go through February 19, 2020, 36 months from the date the program was available to customers. The Three-Year Rate Plan, if approved, would extend through April 2021. The Company may seek to extend the deferral period in a future proceeding. Following a filing by the Company, all interested parties would have an opportunity to respond to the Company's filing and make recommendations to the Commission; with the Commission ultimately deciding the outcome of the filing.

3) **K-Factor Study –** A study which employs the use of an annual revenue escalator (K-Factor) for a multi-year period to determine the revenue adjustments.

4) **Rate Year Study –** A study which incorporates all of the planned capital investments, operating expenses, and revenues for each year of the Three-Year Rate Plan. This study is comparable to a forward-looking test year used in other states.

I will demonstrate that the results from the Traditional Pro Forma Study will not yield the electric and natural gas revenue increases necessary for the prospective rate year, which would allow Avista a reasonable opportunity to earn the allowed return on investment approved by this Commission. The other studies, the EOP Rate Base Study and the K-Factor Study in particular, incorporate some of the ratemaking "tools" previously employed by this Commission in order to arrive at an end result that is fair to both customers and the Company for the rate periods. I will explain the development of each of the four studies and the results from the studies.

The Company's electric and natural gas revenue increases in this case for the Three-Year Rate Plan are based on the EOP Rate Base Study. As explained later in my testimony, this EOP Rate Base Study begins with the Traditional Pro Forma Study. The other three studies are foundational evidence that demonstrate, among other things, the following:

- results from the Traditional Pro Forma Study will not yield the electric and natural gas revenue increases necessary for the prospective rate year;
- revenue increases proposed by Avista based on the EOP Rate Base Study are fair, just, reasonable and sufficient for each year of the Three-Year Rate Plan; and
- the studies are based on ratemaking "tools" previously employed by this Commission or other state commissions.

Lastly, I will briefly discuss the Power Cost Rate Adjustment (PCRA) filing, filed coincident with this general case, to update base power supply costs effective September 1, 2017. As discussed in more detail by Company witness Mr. Ehrbar, resetting base power supply costs September 1, 2017 would increase Company revenues approximately $15 million, or 2.9% on a billed basis through Schedule 93. Schedule 93 would expire, however, effective with new base electric rates approved upon completion of this general rate case proceeding. If the power supply cost update is approved effective September 1, 2017, the pro forma power supply costs of $16.6 million included in this general rate case would be offset May 1, 2018, by the $15.0 million power supply cost increase already approved, for a net increase in power supply costs to customers through this general rate proceeding of approximately $1.6 million.

Q. Are you sponsoring any exhibits to be introduced in this proceeding?

A. Yes. I am sponsoring Exh. EMA-2 through EMA-9, which were prepared by me.

- **Exh. EMA-2 (Electric) and EMA-6 (Natural Gas)** present the results of the Company's electric and natural gas Traditional Pro Forma Studies; including an explanation of all restating and pro forma adjustments;

- **Exh. EMA-3 (Electric) and EMA-7 (Natural Gas)** present the results of the Company's EOP Rate Base Studies, which include 2017 end-of-period rate base and an adjusted capital structure. These studies are the basis of the Company's requested revenue requirement over the Three-Year Rate Plan, May 1, 2018 – April 30, 2021. These exhibits also show, among other things, the proposed rate of return, the derivation of the net-operating-income-to-gross-revenue-conversion factor, and the proposed revenue requirement based on each EOP Rate Base Study analysis, as well as an explanation of the 2017 EOP Adjustment and the impact of the adjusted capital structure;

- **Exh. EMA-4 (Electric) and EMA-8 (Natural Gas)** present the results of the Company's K-Factor Studies; and lastly

- **Exh. EMA-5 (Electric) and EMA-9 (Natural Gas)** present the results of the Company's Rate Year Studies over the Three-Year Rate plan; including explanations of rate period adjustments through the Three-Year Rate Plan ending April 30, 2021.

II. SUMMARY OF PROPOSED ELECTRIC AND NATURAL GAS REVENUE INCREASES OVER THE THREE-YEAR RATE PLAN

Q. Please summarize the Company's electric and natural gas Three-Year Rate Plan proposed for May 1, 2018 through April 30, 2021.

A. The Company is proposing a Three-Year Rate Plan including the period May 1, 2018 through April 30, 2021, with proposed revenue increases effective May 1, 2018, May 1, 2019 and May 1, 2020. [3]

In recent years the Company has filed general rate cases in the first quarter of the year, and the rate adjustments resulting from the cases have generally been implemented in January, which is the middle of the winter heating season. The filing of this Three-Year Rate Plan in late May 2017, will have the effect of changing the "cycle" of base rate adjustments from the middle of winter to approximately May 1st of each year, following the

[3] Relevant to the Company's Three-Year Rate Plan, on May 1, 2017 the Company filed with the WUTC its deferred accounting petition for Advanced Metering Infrastructure (AMI Petition). In the AMI Petition, the Company requested deferred accounting treatment of the revenue requirement of the AMI Project, including depreciation, taxes, and debt and equity financing costs, until such time as the actual costs of the AMI project investment can be reviewed for prudence in a future regulatory proceeding and included in base retail rates. The Company has excluded all costs associated with the AMI investment over the Three-Year Rate Plan from this case (through May 1, 2021). If the Commission ultimately decides to not allow deferred accounting treatment of the costs associated with the AMI investment over the Three-Year Rate Plan, due to the size of this investment, the fact that AMI investment will be transferred to plant in-service on a regular basis, and the investment involves short-lived assets (with a significant portion depreciated each year), the Company would plan to file a separate petition to propose some other method to address the timely recovery of the costs associated with AMI. The cumulative annual costs associated with the AMI investment through May 1, 2021 that would be addressed through deferred accounting may be as much as $65.0 million. Without the opportunity to timely recover the costs associated with AMI between now and May 1, 2021, it would have a significant adverse financial impact on the Company.

end of the winter heating season. The timing of this filing, together with the Three-Year Rate Plan, will avoid base rate adjustments for customers in the middle of winter for the next three years.

Furthermore, this Three-Year Rate Plan will provide a degree of rate predictability for customers, and a respite from the burdens and costs of the current pattern of continuous annual rate case filings for the Company, Staff, and other participants. The Three-Year Rate Plan will also provide an incentive for Avista to manage its costs in order to earn the authorized rate of return proposed in this filing over the rate plan period.

Q. Please provide a brief overview of each of the four electric and natural gas studies presented by Avista to demonstrate the need for relief in this case.

A. A brief description of each of the four separate electric and natural gas ratemaking studies is provided below:

1. **Traditional Pro Forma Study** – includes traditional restating and pro forma adjustments beyond the historical test year (2016), traditionally accepted and approved by the Washington Utilities and Transportation Commission (WUTC or Commission). This study alone, does not provide the necessary rate relief needed to allow the Company the opportunity to earn the proposed ROR requested in this case, and therefore, on its own is not the basis of the Company's request. The results of the electric Traditional Pro Forma Study for Rate Year 1 is $37.5 million for electric,[4] and $4.5 million for natural gas.

2. **EOP Rate Base Study** – starts with the electric and natural gas Traditional Pro Forma Study results, noted in (1) above, which is then adjusted to include EOP 2017 rate base, and an adjusted capital structure. The EOP Rate Base Study (electric and natural gas) is the basis of the Company's Year-1 requested rate relief in this case. For Rate Years 2 and 3, an annual "K-Factor" revenue escalator is applied to non-ERM and non-gas cost revenues to determine the Year 2 and Year 3 proposed rate changes. The results of this Study for Rate Year 1 is

[4] The electric revenue requirement dollar amount for each of the four studies include $16.6 million of increased power supply costs. If the proposed $15.0 million Power Supply Rate Adjustment is approved effective September 1, 2017, the total revenue requirement dollar amounts of each of the four electric studies would be offset by the $15.0 million on a billed basis.

$61.4 million for electric, and $8.3 million for natural gas. Rate Years 2 and 3 for electric are $14.0 million and $14.4 million, respectively. Rate Years 2 and 3 for natural gas are $4.2 million and $4.4 million, respectively.

3. **<u>K-Factor Study</u>** – A K-Factor, or escalation rate, is developed based on the historical trend of changes in rate base components, operating expenses and revenues, using normalized data from prior Commission Basis Reports. For Rate Year 1, normalized 2016 non-ERM and non-gas cost revenues are multiplied by the proposed K-Factor for each year from 2016 to Rate Year 1 (from 2016 through the first rate year beginning May 1, 2018). For Rate Years 2 & 3, the annual K-Factor is applied to the non-ERM and non-gas cost authorized revenues at the time Year 2 and 3 rate changes go into effect. The results of this Study for Rate Year 1 is $58.1 million for electric, and $9.8 million for natural gas. Rate Years 2 and 3 for electric are $13.9 million and $14.3 million, respectively. Rate Years 2 and 3 for natural gas are $4.3 million and $4.5 million, respectively.

4. **<u>Rate Year Study</u>** – includes the Company's <u>planned</u> rate period costs offset by revenues from increased sales to customers through each rate year of the Three-Year Rate Plan, May 1, 2018 through April 30, 2021. This Study is not the basis of the Company's requested Three-Year Rate Plan relief, but rather is provided as additional evidence demonstrating the need for revenue increases for the three-year rate period. This study is similar to the use of a forward-looking test year employed by other state jurisdictions. The dollar amounts in the study reflect the actual planned investments and operating costs for each of the three rate years, along with expected revenue growth from sales to customers. These dollar amounts are the amounts presented to our Board of Directors and the Rating Agencies, and represent our actual planned operations for the three-year period.[5] The results of this Study for Rate Year 1 is $61.7 million for electric, and $8.9 million for natural gas. Rate Years 2 and 3 for electric are $10.5 million, and $16.6 million, respectively. Rate Years 2 and 3 for natural gas are $3.5 million and $3.9 million, respectively.

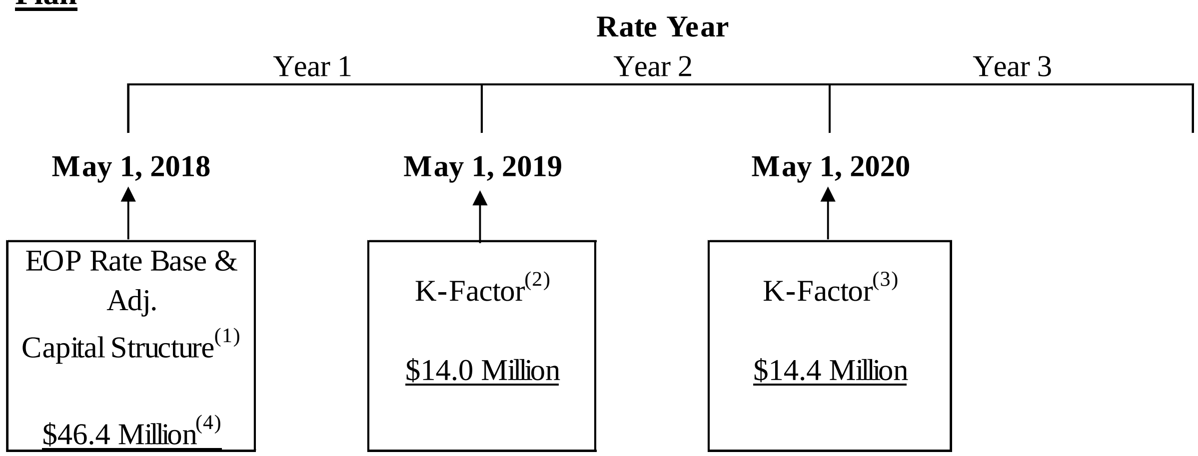
Q. By way of summary, would you please illustrate how the proposed revenue increases for each of the rate years were developed?

A. Yes. Illustration Nos. 1 (electric) and 2 (natural gas) below show how the

[5] The Rate Year Study represents the rate relief "need" based on actual planned operations, and the results are compared with the other studies to determine the reasonableness of the Company's requested rate relief for Rate Years 1, 2 and 3.

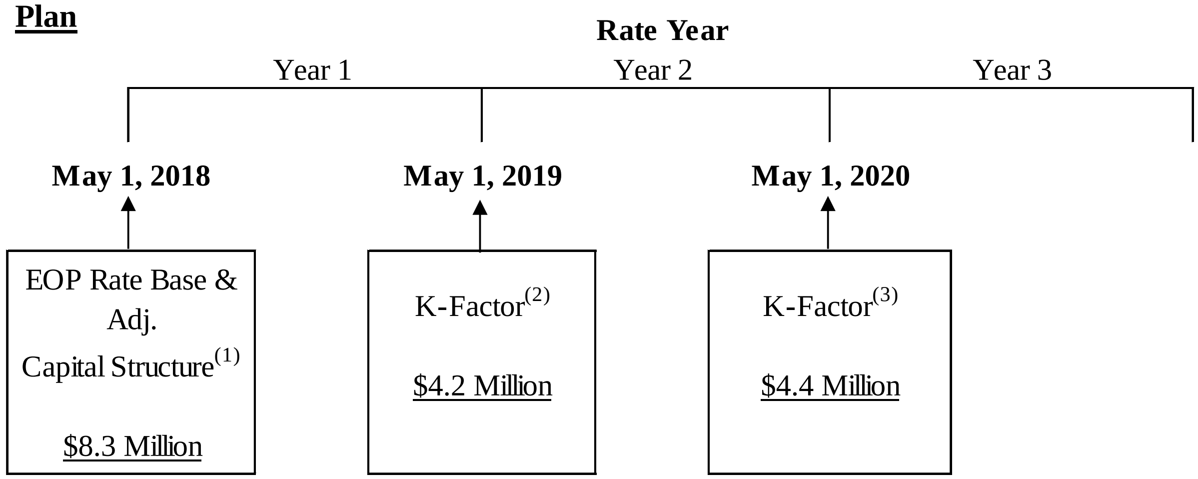
Company has made use of the studies discussed above, demonstrating that the revenue increases effective May 1, 2018 were based on the EOP Rate Base Study, while Years 2 and 3 of the Rate Plan were determined from the K-Factor analysis.

<u>Illustration No. 1 Derivation of Electric Revenue Requirement in Three-Year Rate Plan</u>



(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.

<u>Illustration No. 2 Derivation of Natural Gas Revenue Requirement in Three-Year Rate Plan</u>



(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.)

Q. What guidance is available for determining the appropriate ratemaking adjustments to achieve the objective of providing a utility the opportunity to recover its costs and earn a fair return?

A. One source of guidance in processing a general rate case filed by a utility is the Rate Case and Audit Manual (NARUC Manual) principles, prepared by the NARUC Staff Subcommittee on Accounting and Finance (Summer 2003). As noted by the NARUC Manual:

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

> A utility's rate filing commonly begins with test year booked numbers, which are then adjusted to represent anticipated, normalized operations for the period that the rates will take effect. … In general, the pro forma adjustments can be viewed as a ratemaking attempt to transform the relationship that exists between the elements of cost of service (revenues, expenses, taxes, and investment) during the test year to one that would take place during the period that the rates resulting from the rate proceeding take effect. One is trying to identify circumstances during the test year, or beyond the end of the test year, that impact the on-going expenditures or revenues of the utility. … (Page 15) (emphasis added)

> In reviewing the prudence and reasonableness of the adjustments proposed by the utility, the auditor should ultimately keep in mind that the ultimate purpose of the review is to determine a revenue requirement and customer rates that are just, fair, reasonable, and sufficient. (Page 15) (emphasis added)

In addition to the NARUC Manual, this Commission also provided guidance in Avista's last general rate case, Dockets UE-160228/UG-160229, Order 06, at paragraph 79, where it noted that it is tasked with determining an appropriate balance between the needs of the public to have safe and reliable electric and natural gas services at reasonable rates, and the financial ability of the utility to provide such services on an ongoing basis.

More specifically, the governing statutes require it to determine results that establish "fair, just, reasonable and sufficient" rates (RCW.80.28.010), which mean: "rates that are *fair* to customers and to the Company's owners; *just* in the sense of being based solely on the record developed in a rate proceeding; *reasonable* in light of the range of possible outcomes supported by the evidence; and *sufficient* to meet the needs of the Company to cover its expenses and attract necessary capital on reasonable terms." (emphasis added) (Order 06, paragraph 79)

To accomplish this, the Commission noted (see paragraph 82) certain "tools" they may consider:

> While the Commission traditionally has described its ratemaking practice as being based on the historical test year, a key operative part of this description is "based on." In point of fact, our practice is quite forward looking and in actuality a process sometimes referred to as a "hybrid test year." The Commission, for example:
>
> - Approves pro-forma adjustments to test-year costs when the adjustments are adequately supported. The Commission retains significant discretion to apply flexibly the requirements that *pro forma* adjustments be known and measurable, used and useful, and matched to offsetting factors. The Commission has not established bright-line standards governing the timing or the number of adjustments that can be accepted in a given case, and has not established a minimum size for *pro forma* adjustments to be recognized.
>
> - May allow new generation plant or other infrastructure in rate base even when the new facilities are placed in service subsequent to the end of the test period. The more certain the timing of infrastructure being in service, that is used and useful, and the more certain the costs, the more likely the post-test period rate base will be approved.
>
> - May approve end-of-period rate base when this is shown to be appropriate.
>
> - May approve hypothetical capital structures to improve a utility's financial condition.

The WUTC also acknowledged at page 181 of its Order 08 in Dockets UE-111048 and UG-111049 of Puget Sound Energy's proceeding the consideration of adjustments to rate base beyond the historical test period, by stating they were open to considering "Use of plant accounts (rate base) measured at the end, or subsequent to the end of the test-year rather than the test-year average," and their openness to consider an "upward adjustment to the equity share in the capital structure." (emphasis added)

Through the guidance of the governing statutes, the Commission has the flexibility to employ the appropriate "tool" from its "toolbox" in assuring that rates are ultimately "fair, just, reasonable and sufficient." Both EOP rate base and adjusted capital structures are within this flexibility, and allowing the Commission to decide what is "used and useful" when it comes to approving a level of rate base in-service during the rate period, is also within this flexibility.[6]

It is squarely within the Commission's purview, therefore, to interpret the "used and useful" language of the statute in a way that best reflects a recognition of plant that will be actually in-service during the period the new rates are in effect, or to employ other "tools" which allow a utility the opportunity to earn its authorized rate of return. The Company's request to include EOP 2017 rate base, and an adjusted capital structure, meets the requirements of these governing statutes.[7]

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[6] Indeed, the very provisions of RCW 80.04.250 provide that "[t]he Commission has the power … to ascertain and determine" the fair value of property that is "used and useful for service." (emphasis added) With the use of EOP December 2017 for net plant (or rate base) balances, the Company is asking for a level of plant that is in-service four months prior to rates going into effect May 1, 2018.

[7] Both Idaho and Oregon, for the past several rate cases, have approved planned end-of-period net plant balances, just prior to rates going into effect. For example, in Avista's last Idaho electric general rate case (Case AVU-E-16-03), consistent with prior electric and natural gas cases in Idaho since 2008, the Idaho Commission approved net plant after ADFIT balances as of December 31, 2016, for rates effective January 1, 2017.

Q. Has this Commission recently discussed this flexibility?

A. Yes. The Commission stated as follows in Order 06, page 49, paragraph 82:[8]

> In prior orders, the Commission has made clear that while its ratemaking practice starts with known data that are "historical" by definition, these data are adjusted using various approaches to <u>set rates based on expected costs the utility will experience during the rate year following the effective date of the new rates</u>. Whatever tools are proposed for use in a given case, however, must be chosen with specific reference to the needs of the case and the appropriateness of using each tool selected must be demonstrated by applicable evidence. (emphasis added)

<u>III. PROPOSED REVENUE INCREASES FOR THREE-YEAR RATE PLAN</u>

Q. Please summarize the proposed electric and natural gas revenue increases proposed by the Company in this case.

A. Table No. 1 below provides a summary of the proposed Three-Year Rate Plan revenue increases and percentage increases.

[8] Docket UE-160228/UG-160229.

Table No. 1

Washington Electric and Natural Gas Three Year Rate Plan Summary of Revenue Requirement (000s) and % Increases May 1 , 2018 - April 30, 2021				
Service		Rate Year 1 (May 1, 2018 - April 30, 2019)	Rate Year 2 (May 1, 2019 - April 30, 2020)	Rate Year 3 (May 1, 2020 - April 30, 2021)
WA Electric	Revenue Requirement	$ 61,356	$ 13,983	$ 14,432
	% Base	12.47%	2.53% (2)	2.54% (2)
	% Billed	8.80% (1)	2.44% (3)	2.46% (3)
WA Natural Gas	Revenue Requirement	$ 8,269	$ 4,220	$ 4,417
	% Base	9.31%	4.35% (2)	4.36% (2)
	% Billed	5.44%	2.63%	2.68%

(1) Bill impact is 8.81% after taking into effect the expiration of Schedule 93 (Power Cost Rate Adjustment).

(2) Revenue increases for Rate Years 2 and 3 are proposed to be implemented through Schedule 96 and 196, and not through a change to base tariffs.

(3) Does not take into account changes in power supply costs. Annually, prior to the May 1 effective date of Rate Year 2 and Rate Year 3, the Company will file a Power Supply Update to update power supply costs as described by Mr. Ehrbar.

The proposed base electric increase, effective May 1, 2018, is $61.4 million or 12.47%. (As indicated earlier, if the $15.0 million Power Cost Rate Adjustment is approved effective September 1, 2017, the incremental bill increase to customers May 1, 2018 will be $46.4 million or 8.80%.) The base natural gas increase, effective May 1, 2018, is $8.3 million or 9.31% (5.44% on a billed basis).

For Rate Year 2 (May 1, 2019) the proposed revenue increase is $14.0 million or 2.44% on a billed basis for electric operations, and $4.2 million or 2.63% on a billed basis for natural gas operations.

For Rate Year 3 (May 1, 2020) the proposed revenue increase is $14.4 million or 2.46% on a billed basis for electric operations, and $4.4 million or 2.68% on a billed basis for natural gas operations.

Q. What are the primary factors driving the Company's requested electric and natural gas revenue increases over the Three-Year Rate plan?

A. The increase in overall costs to serve customers is driven primarily by three major factors: 1) the continuing need to replace and upgrade the facilities and technology we use every day to serve our customers, 2) low revenue growth and 3) increased net power supply costs.

More specifically, as discussed further by Company witness Mr. Thies, from 2017 through 2021, Avista will spend approximately $2.0 billion of capital on utility generation, transmission and distribution facilities and other requirements. Other Company witnesses, (i.e. Mr. Kinney, Ms. Rosentrater, and Mr. Kensok) provide more specific information on capital projects during the periods 2017 through 2021, describing the need for and timing of these capital projects.

As discussed by Company witness Mr. Morris (and shown in Illustration No. 6 of his testimony), net plant investment has been growing at a much faster pace than retail kilowatt-hour (kWh) sales and retail therm sales. This mismatch in the growth of net plant investment and sales is expected to continue to the future, requiring the Company to request increases in its retail rates to cover this increase in net plant investment; since revenue growth is not sufficient to cover it.

For Rate Year 1 (effective May 1, 2018), the increase in net power supply expenses increases the requested revenue requirement by $16.6 million, compared to that currently authorized (approximately 27% of the total electric Rate Year 1 request). Company witness Mr. Johnson discusses the changes in power supply costs in Rate Year 1, explaining that over $8 million is due to the expiration of the Portland General Electric (PGE) capacity sales contract in December 2016.

As discussed by Mr. Ehrbar, the Company has filed, coincident with this general rate case, its Power Cost Rate Adjustment (PCRA) filing requesting an increase in revenues of $15.0 million (or 2.9%) effective September 1, 2017, through Tariff Schedule 93. The PCRA reflects changes in net power supply costs, including the expiration of the PGE capacity sales contract. Schedule 93 would expire effective with the change in base rates from this general rate case. If the September 1, 2017 proposed rate change reflecting increased power supply costs is approved, the incremental power supply cost increase to customers from this general rate case effective May 1, 2018 is $1.6 million (or 0.32%).

Q. What are the Company's rates of return currently authorized by this Commission for its electric and natural gas operations in Washington?

A. The last authorized rate of return by this Commission for both the Company's electric and natural gas operations in its Washington jurisdiction was 7.29%, approved in Dockets UE-150204 and UG-150205 (*Consolidated*), effective January 11, 2016.

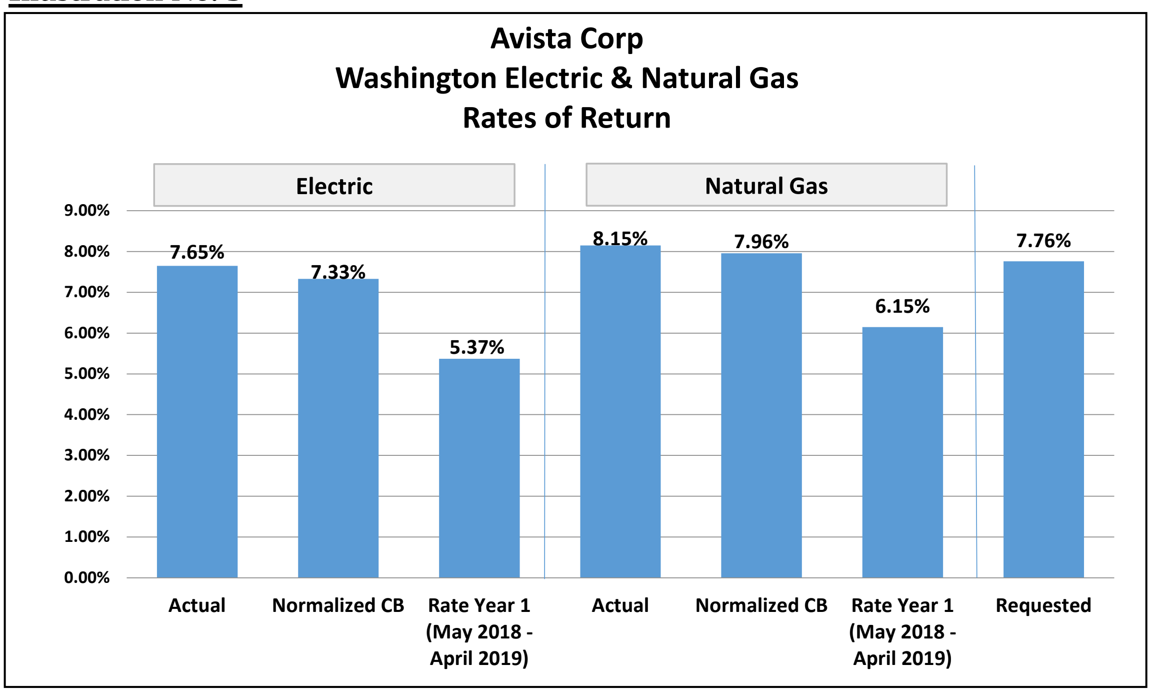
Q. On what test period is the Company basing its need for additional electric and natural gas revenue?

A. The test period being used by the Company is the twelve-month period ending December 31, 2016. Current authorized rates were based upon the 2014 test year utilized in Dockets UE-150204 and UG-150205 (*Consolidated)*, adjusted per Order No. 05 and approved by the Commission.

Q. By way of summary, please explain the different rates of return presented in your testimony for electric and natural gas operations.

A. There are four different rates of return that are provided. The actual ROR earned by the Company during the 2016 test period, the normalized or Commission Basis (CB) ROR results for the 2016 test period (as filed with the Commission on April 28, 2017), the adjusted ROR for Rate Year 1 (May 1, 2018 – April 30, 2019) determined in my Exh. EMA-3 and Exh. EMA-7, and the requested ROR. These returns are shown in Illustration No. 3 below:

Illustration No. 3



IV. ELECTRIC & NATURAL GAS REVENUE REQUIREMENT STUDIES

Q. Please briefly summarize the four ratemaking studies presented by the Company, and the results from each of the studies.

A. As part of Avista's demonstration of our need for electric and natural gas revenue increases, the Company has presented the following four ratemaking studies:

1) **Traditional Pro Forma Study –** The Traditional Historical Modified Test Year Pro Forma Study.

2) **Rate Year Study –** A study which incorporates all of the planned capital investments, operating expenses, and revenues for each year of the Three-Year Rate Plan. This study is comparable to a forward-looking test year used in other states.

3) **EOP Rate Base Study –** An End of Period (EOP) Rate Base Study, which also employs the use of an adjusted capital structure. The proposed capital structure in the EOP Rate Base Study has been adjusted to exclude short-term debt from the calculation. All other aspects of the cost of capital calculation are the same as that presented in prior cases. This ratemaking "tool" of excluding short-term debt from the capital structure calculation is currently used in Idaho and Oregon. A K-Factor is used to determine the revenue increases for rate years two and three of the Three-Year Rate Plan. Proposed rates were derived based on this Study.

4) **K-Factor Study –** A study which employs the use of an annual revenue escalator (K-Factor) for a multi-year period to determine the revenue adjustments.

Included below in Table Nos. 2 – 5 are the results of the four electric and four natural gas studies presented by the Company to demonstrate its need for rate relief. An explanation of each of the studies follows the tables.

Table No. 2

Electric Rate Year 1 Beginning May 1, 2018 (000s)							
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Study	Restated Amount	Pro Forma Amount	Pro Forma Power Supply	Study Adjustments	Study Results 5/1/2018 (Base Rate Change)	Power Cost Rate Adjustment (Schedule 93) Expiration	Incremental Proposed Increase (Bill Change)
1) Traditional Pro Forma Study	$ 4,330	$ 20,892	$ 16,609	Includes traditional Modified Historical Test Year Pro Forma Study Adjustments	$ 37,501	$ (14,976)	$ 22,525
2) EOP Rate Base Study (1) (Filing Request)	$ 6,614	$ 23,222	$ 16,609	Adds 2017 EOP Rate Base Adjustment to Pro Forma Study results & adjusted Capital Structure	$ 61,356	$ (14,976)	$ 46,380
3) K-Factor Study	$ 4,330	N/A	$ 16,609	Applies "K-Factor" percentage to non-ERM revenues, covering investment-related costs and operating expenses.	$ 58,051	$ (14,976)	$ 43,075
4) Rate Year Study	$ 4,330	$ 20,892	$ 16,609	Includes planned rate year costs & increased sales revenue through the Rate Year	$ 61,649	$ (14,976)	$ 46,673
(1) EOP Rate Base Study amounts of $6.614 million and $23.222 million in columns (b) and (c), respectively, vary from the other studies due to the use of a 50% equity capital structure and its impact on restated debt interest.							

Table No. 3

Electric Rate Years 2 and 3 (May 1, 2019 & May 1, 2020) (000s)				
(a)	(b)	(c)	(d)	RY1 + (c) + (d)
Study	Rate Year 2 and 3 Study Adjustments	RY2 Incremental Base Rate Change (5/1/2019)	RY3 Incremental Base Rate Change (5/1/2020)	Three-Year Total
1) Traditional Pro Forma Study	N/A	N/A	N/A	N/A
2) EOP Rate Base Study (Filing Request)	Applies "K-Factor" percentage to non-ERM revenues, covering investment-related costs and operating expenses.	$ 13,983	$ 14,432	$ 89,771
3) K-Factor Study	Applies "K-Factor" percentage to non-ERM revenues, covering investment-related costs and operating expenses.	$ 13,863	$ 14,308	$ 86,222
4) Rate Year Study	Includes planned rate year costs & increased sales revenue through the Rate Year	$ 10,539	$ 16,556	$ 88,744

Table No. 4

Natural Gas Rate Year 1 Beginning May 1, 2018 (000s)				
(a)	(b)	(c)	(d)	(e)
Study	Restated Amount	Pro Forma Amount	Study Adjustments	Study Results 5/1/2018 (Base Rate Change)
1) Traditional Pro Forma Study	$ (1,562)	$ 4,531	Includes traditional Modified Historical Test Year Pro Forma Study Adjustments	$ 4,531
2) EOP Rate Base Study (1) (Filing Request)	$ (1,110)	$ 5,013	Adds 2017 EOP Rate Base Adjustment to Pro Forma Study results & adjusted Capital Structure	$ 8,269
3) K-Factor Study	$ (1,562)	N/A	Applies "K-Factor" percentage to non-gas costs revenues, covering investment-related costs and operating expenses.	$ 9,812
4) Rate Year Study	$ (1,562)	$ 4,531	Includes planned rate year costs & increased sales revenue through the Rate Year	$ 8,886

(1) EOP Rate Base Study amounts of ($1.110) million and $8.269 million in columns (b) and (c), respectively, vary from the other studies due to the use of a 50% equity capital structure and its impact on restated debt interest.

Table No. 5

Natural Gas Rate Years 2 and 3 (May 1, 2019 & May 1, 2020) (000s)				
(a)	(b)	(c)	(d)	RY1 + (c) + (d)
Study (1)	RY2 and RY3 Study Adjustments	RY2 Incremental Base Rate Change (5/1/2019)	RY3 Incremental Base Rate Change (5/1/2020)	Three-Year Total
1) Traditional Pro Forma Study	N/A	N/A	N/A	N/A
2) EOP Rate Base Study (Filing Request)	Applies "K-Factor" percentage to non-gas costs revenues, covering investment-related costs	$ 4,220	$ 4,417	$ 16,906
3) K-Factor Study	Applies "K-Factor" percentage to non-gas costs revenues, covering investment-related costs and operating expenses.	$ 4,295	$ 4,494	$ 18,601
4) Rate Year Study	Includes planned rate year costs & increased sales revenue through the Rate Year	$ 3,461	$ 3,936	$ 16,283

<u>Traditional Pro Forma Study</u>

Q. Starting with the Traditional Pro Forma Study, please explain how this Study was produced.

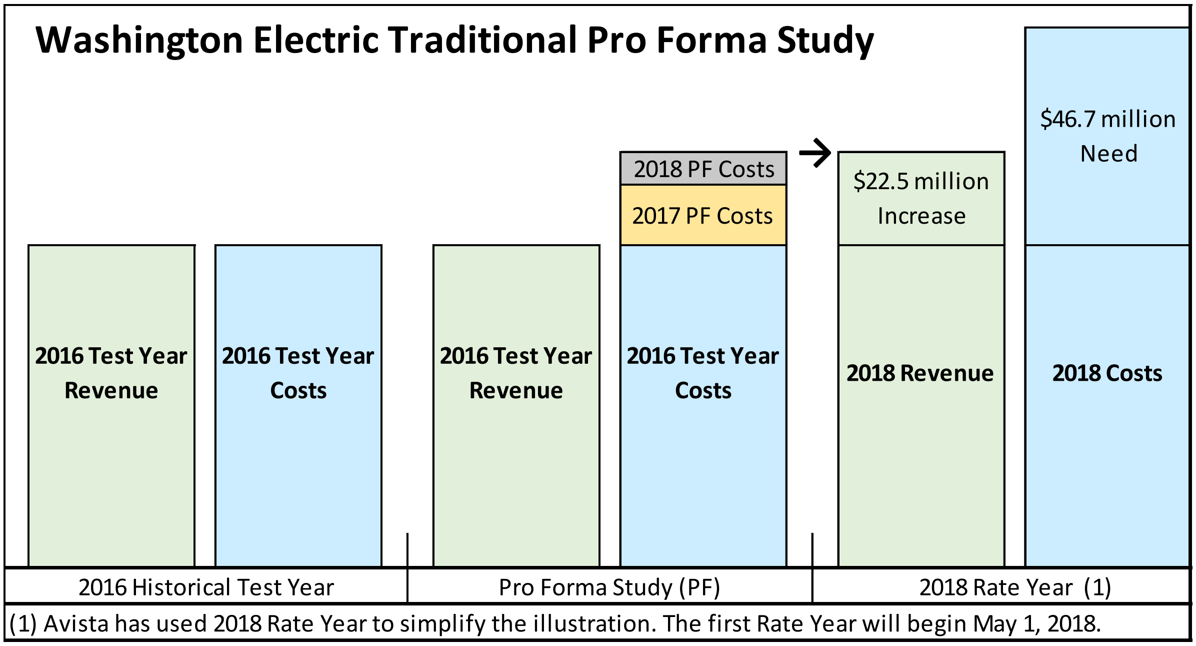
A. In determining the Company's need for rate relief, the Company first completed its Traditional Pro Forma Study, adjusting 2016 historical test year balances for restating and pro forma adjustments. Provided as Exh. EMA-2 (electric) and EMA-6 (natural gas), the revenue requirement based on the Traditional Pro Forma Studies is $37.5 million for electric ($22.5 million net of the proposed $15.0 million September 1, 2017 Power Cost Rate Adjustment) and $4.5 million natural gas.

The electric and natural gas Traditional Pro Forma Studies were prepared by the Company to include the restating and pro forma adjustments beyond the historical test year (2016) traditionally accepted and approved by this Commission. <u>Within Exh. EMA-2 (electric) and EMA-6 (natural gas) is an explanation of each restating and pro forma adjustment.</u>

Q. How do the Traditional Pro Forma Study results compare with the needed relief during Rate Year 1 of the Three-Year Rate Plan?

A. Illustration No. 4 below shows the results of the <u>electric</u> Traditional Pro Forma Study versus the Company's need for an electric revenue increase beginning May 1, 2018.

<u>Illustration No. 4</u>



As shown in Illustration No. 4, following the 2016 Historical Test Year results, traditional restating and pro forma adjustments will include some increases in costs related to 2017 and 2018, but does not include all. The electric Traditional Pro Forma Study would result in a revenue increase of $22.5 million. This $22.5 million result falls $24.2 million short of the electric revenue increase needed by Avista for the rate year beginning May 1, 2018.

Q. How do we know that the $22.5 million is less than the revenue increase needed for the Rate Year beginning May 1, 2018?

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

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

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

The provision of the results of the Rate Year Study is consistent with this Commission's stated interest to "set rates based on expected costs the utility will experience during the rate year following the effective date of the new rates."[9]

Rate Year Study

Q. Please now explain the Rate Year Study.

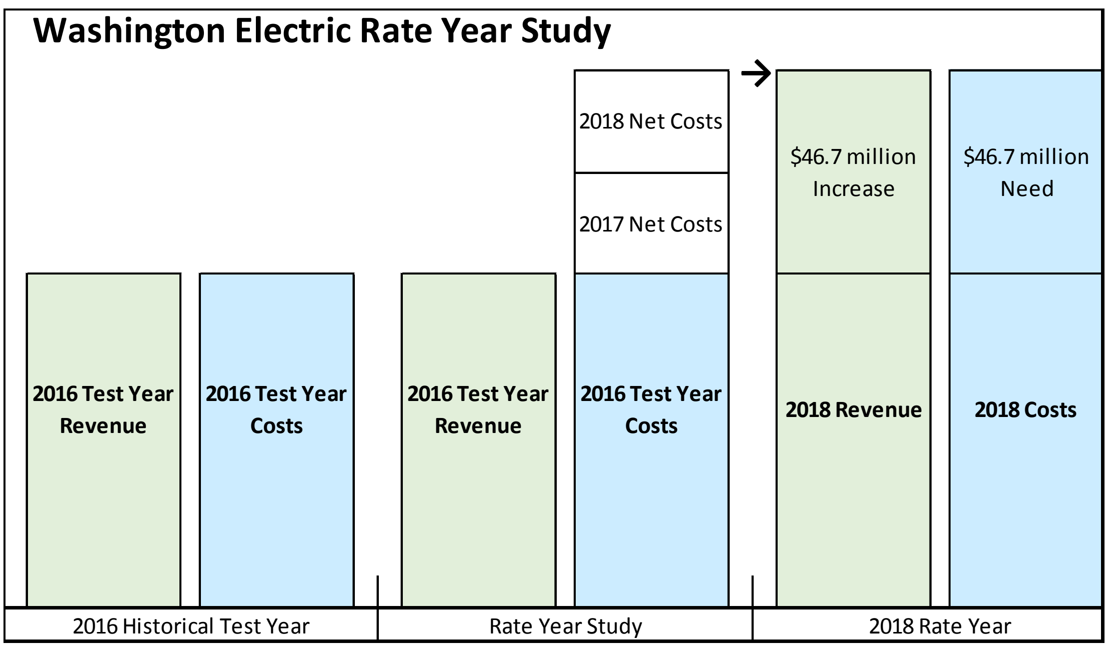
A. The Rate Year Study includes the Company's planned rate period costs,

[9] Order 06, page 49, paragraph 82, Docket UE-160228/UG-160229.

offset by growth in sales of revenue,[10] through each year of the Three-Year Rate Plan, May 1, 2018 through April 30, 2021. The results of this Study for Rate Year 1 is $61.7 million for electric ($46.7 million net of the proposed $15.0 million September 1, 2017 Power Cost Rate Adjustment), and $8.9 million for natural gas. Rate Years 2 and 3 for electric are approximately $10.5 million and $16.6 million, respectively. Rate Years 2 and 3 for natural gas are approximately $3.5 million and $3.9 million, respectively.

Illustration No. 5 below shows the "need" during the rate year beginning May 1, 2018, as determined by the electric_Rate Year Study, of $46.7 million (net of the proposed $15.0 million September 1, 2017 Power Cost Rate Adjustment).

Illustration No. 5



[10] The electric Rate Year Study includes the offset of growth in sales revenue (net of revenue related expenses), between 2016 and May 1, 2018 of $9.4 million for Rate Year 1, $4.2 million for Rate Year 2, and $4.3 million for Rear Year 3. The natural gas Rate Year Study includes the offset of growth in sales revenue (net of revenue related expenses), between 2016 and May 1, 2018 of $1.6 million for Rate Year 1, $1.1 million for Rate Year 2, and $1.1 million for Rear Year 3.

Illustration No. 5 shows that by adding 2017 and 2018 planned costs (both expenses and capital additions for the rate year), net of increased revenue from sales growth, the result of the Rate Year Study reflects the revenue increase needed for Rate Year 1.

The Rate Year Studies, as well as descriptions of rate year adjustments, are provided as Exh. EMA-5 for electric and Exh. EMA-9 for natural gas.

EOP Rate Base Study

Q. Please discuss the Company's request for rate relief based on its electric and natural gas EOP Rate Base Studies.

A. The Company's electric and natural gas EOP Rate Base Studies are the basis of the Company's requested rate relief in this case for Rate Year 1 beginning May 1, 2018. The EOP Rate Base Studies start with the results of the Traditional Pro Forma Studies discussed earlier, adjusted to EOP 2017 rate base, and utilizing an adjusted capital structure.

The results of the EOP Rate Base Study for Rate Year 1 is $61.4 million for electric, and $8.3 million for natural gas. Rate Years 2 and 3 for electric are $14.0 million and $14.4 million, respectively. Rate Years 2 and 3 for natural gas are $4.2 million and $4.4 million, respectively.[11] The electric and natural gas EOP Rate Base Studies and descriptions are provided as Exh. EMA-3 and Exh. EMA-7. [12]

Q. Please explain the adjustments made to the Traditional Pro Forma Studies, producing the electric and natural gas EOP Rate Base Studies.

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[11] Rate Years 2 and 3 use a K-Factor revenue escalator of 3.21% for electric and 4.65% for natural gas applied to non-ERM and non-gas cost authorized revenues at the time the Year 2 and Year 3 rate changes go into effect. The calculation of the K-Factor used in Years 2 and 3 are discussed below in "Section IV. 4.) K-Factor Study."

[12] The Company provided the individual results and descriptions of all restating and pro forma adjustments included within Exhs. EMA-2 and EMA-6.

A. The Company made two changes to the electric and natural gas Traditional Pro Forma Study results. First, as discussed by Company witness Ms. Schuh, the Company adjusted the level of net plant after ADFIT produced in the Traditional Pro Forma Studies results, including the incremental 2017 capital additions not included in the Traditional Pro Forma Study, to a 2017 EOP basis.

The result of electric EOP 2017 Adjustment 3.15 added $119.9 million in additional net plant (after ADFIT) and reduced net income by $4.0 million, for a net increase in revenue requirement of $21.5 million.

The result of natural gas EOP 2017 Adjustment 3.14 added $13.6 million in additional net plant (after ADFIT) and reduced net income by $963,000, for a net increase in revenue requirement of $3.3 million. EOP 2017 adjustments (3.15 electric and 3.14 natural gas), including descriptions, are included with Exhs. EMA-3 and EMA-7.

Q. What is the second change included in the electric and natural gas EOP Rate Base Studies?

A. Secondly, the Company is proposing an adjusted capital structure of 50% common equity / 50% debt. This is revised from the current authorized common equity level of 48.5% / 51.5% debt. The 50% equity also impacts the pro forma weighted cost of debt, reducing the tax benefit of debt interest and reducing net operating income.

The overall result of using a 50% equity ratio increases the electric revenue requirement requested in this case for electric by $2.5 million, and natural gas by $502,000 for Rate Year 1.

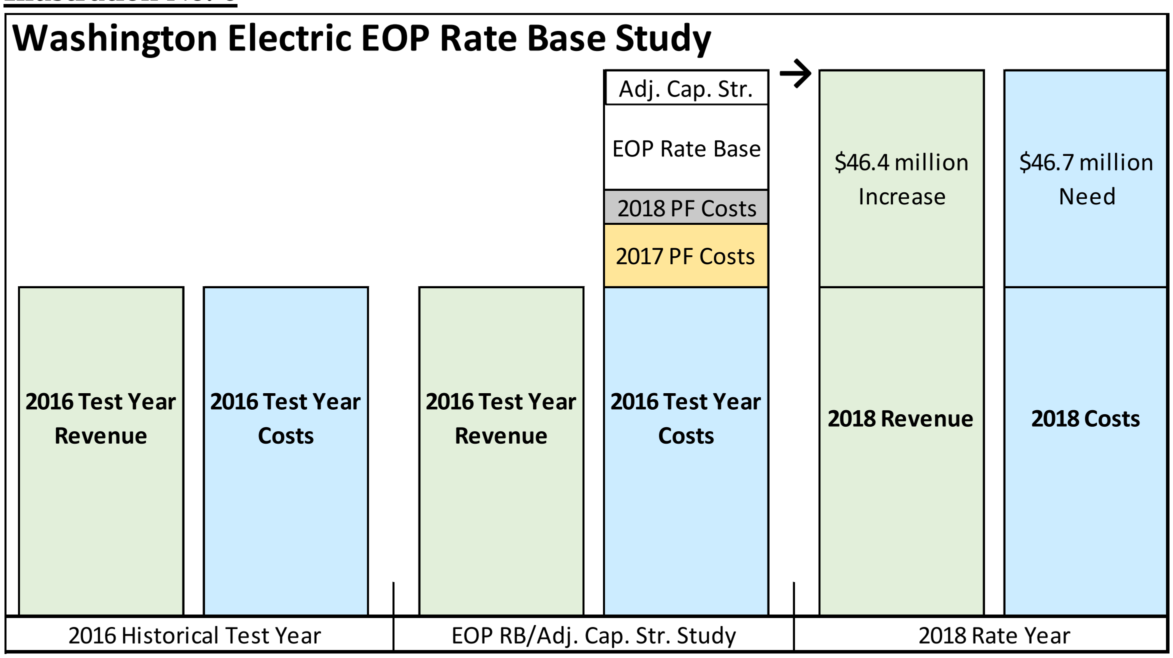
Q. Is this approach used in other jurisdictions?

A. Yes. In both Avista's Idaho and Oregon jurisdictions the Commissions for many years have approved a capital structure calculated excluding short-term debt. This approach improves Avista's opportunity to earn its allowed ROR in those jurisdictions. Company witness Mr. Thies provides this calculation in his testimony.

Q. How do the results of the EOP Rate Base Studies compare with the rate relief needed during Rate Year 1 of the Three- Year plan?

A. Illustration No. 6 below compares the results of the electric EOP Rate Base Study with the revenue increase needed for Rate Year 1. The EOP Rate Base Study starts with the Traditional Pro Forma Study, and then employs the use of the two ratemaking "tools": 1) EOP 2017 rate base; and 2) an adjusted capital structure.

<u>Illustration No. 6</u>



The results for the electric EOP Rate Base Study (and requested rate relief for Rate Year 1 in this case), as shown in Illustration No. 6 above, and per Exh. EMA-3, page 10, is

$46,380,000.[13] The results for the natural gas EOP Rate Base Study (and requested rate relief for Rate Year 1 in this case) per Exh. EMA-7, page 8, is $8,269,000.

By comparison, Avista's need for an electric revenue increase during Rate Year 1 (effective May 1, 2018) is $46.7 million[14], and Avista's need for natural gas rate relief (per the Rate Year Study) is $8.9 million.[15]

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

A. First, the ratemaking "tools" used in this study (EOP rate base and adjusted capital structure) are familiar tools either used by this Commission, or other regulatory commissions across the Country.

Second, the use of EOP rate base at December 31, 2017 provides the opportunity between December 31, 2017 and the time that new retail rates would go into effect (May 1, 2018) for parties to this case, and the Commission, to review the capital projects that are completed and placed into service on or before December 31, 2017. This should alleviate concerns related to whether the plant is in service prior to the rate year.

For Rate Years 2 and 3 effective May 1, 2019 and May 1, 2020, as discussed by Ms. Schuh, the Company is proposing to file with this Commission an Annual Washington Electric and Natural Gas Capital Report by February 15, 2019 and February 15, 2020 (approximately 75 days) prior to new rates going into effect. The annual report would provide actual year-end balances for the calendar year as of December 31st (EOP net plant balances including impact of A/D and ADFIT). This would provide assurance to the

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[13] See Table No. 2 (Electric Rate Year 1), EOP Rate Base Study results May 1, 2018 of $61.356 million, net of the proposed $14.98 million September 1, 2017 Power Cost Rate Adjustment.
[14] Net of the proposed $14.98 million September 1, 2017 Power Cost Rate Adjustment.
[15] See Table No. 4 (Natural Gas Rate Year 1), Rate Year Study results May 1, 2018, earlier in my testimony.

Commission that the rate increases approved effective May 1, 2019 and May 1, 2020, would include net plant which is in-service serving customers prior to new rates going into effect.

Q. What additional protection is offered customers during the Three-Year Rate Plan regarding the increases in revenues based on the EOP Rate Base Studies, and the K-Factor revenue escalation rate for Years 2 and 3?

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

<u>K-Factor Study</u>

Q. Please now discuss the Company's electric and natural gas K-Factor Studies.

A. The Company's electric and natural gas K-Factor Studies were produced to provide additional evidence demonstrating Avista's need for rate relief during the Three-Year Rate Plan. These K-Factor Studies include the electric and natural gas results of determining Avista's revenue requirement need over the Three-Year Rate Plan, based on 2016 restated Commission Basis results, and applying revenue increases through the Rate Plan based on a "K-Factor" revenue escalation percentage.

The calculation of the K-Factor is discussed below and provided in Exhs. EMA-4 (electric) and EMA-8 (natural gas). Pages 4-6 (electric) and 4-5 (natural gas) of those exhibits show the restating adjustments (consistent with the Traditional Pro Forma Studies). The "Restated Total," appearing on page 6 for electric, shows a revenue requirement need of $4.33 million. The "Restated Total," appearing on page 5 for natural gas, shows a revenue surplus (or reduction needed) of $1.56 million.

After determining the restated Commission Basis levels, the annual K-Factor revenue escalation percentage was determined. The annual revenue increases needed for each year of the Three-Year Rate Plan, was determined by multiplying the "K-Factor" revenue escalation percentage to the restated non-ERM and non-gas cost revenues annually.

For example, for Rate Year 1, actual restated 2016 non-ERM and non-gas cost revenues are multiplied by the proposed K-Factor for each year from 2016 to Rate Year 1 (2016 versus May 1, 2018 – April 30, 2019 = 2 1/3 years apart) – or multiplied by 2.333. For Rate Years 2 & 3, the K-Factor is applied to the non-ERM and non-gas cost authorized revenues at the time the Year 2 and Year 3 rate changes go into effect.

The results of this Study for Rate Year 1 is $58.1 million for electric,[16] and $9.8 million for natural gas. Rate Years 2 and 3 for electric are $13.9 million and $14.3 million, respectively. Rate Years 2 and 3 for natural gas are $4.3 million and $4.5 million, respectively.

Q. What are the K-Factor revenue escalation percentages used during the Three-Year Rate Plan?

A. There are two sets of K-Factor percentages used over the Three-Year Rate

[16] Pro Forma Power supply costs are excluded from the determination of K-Factor deduced revenues, and therefore, the revenue requirement associated with increased power supply costs during the rate year must be additive to the K-Factor deduced revenue requirement.

Plan. First, for Rate Year 1, the K-Factor applied to adjust restated 2016 results from 2016 to the first Rate Year beginning May 1, 2018, is 3.92% for electric and 5.78% for natural gas. This results in an increase in electric revenue above current 2016 base revenues of 3.6% annually over the 2 1/3 years. For natural gas, the increase in revenue above current 2016 revenues is 3.2% annually over the 2 1/3 years (on a billed basis). These K-Factor percentages are applied to non-ERM and non-gas cost revenues, covering investment-related costs and operating expenses.

For Rate Years 2 and 3, the Company discounts the K-Factor to reflect a 10% efficiency adjustment in O&M expenses, and includes a reduction in the net plant (after ADFIT) component, reflecting decreases in the growth in net plant expected in 2019 and 2020.[17] The revised K-Factor applied to non-ERM and non-gas cost revenues at the time Years 2 and 3 rate changes go into effect (May 1, 2019 and May 1, 2020) is 3.21% for electric and 4.65% for natural gas. This results in an increase in billed revenue in Rate Years 2 and 3 of approximately 2.5% for electric, and 2.7% for natural gas.

Q. Please explain how the K-Factor revenue escalation percentage was calculated for Rate Year 1 (May 1, 2018 to April 30 2019).

A. The Rate Year 1 K-Factor was based on Avista's actual normalized Commission Basis results for the period 2013 to 2016 for both electric and natural gas K-Factor Studies. The resulting percentage represents a weighted average revenue escalation factor based on the percentage of non-ERM and non-gas cost revenue requirements for the

[17] The growth in net plant for 2017 and 2018 appear to be consistent with that for the period 2013-2016, however, based on the Rate Year Studies discussed in "Section IV. 2.) Rate Year Study" below, this growth rate declines in 2019 and 2020.

following: 1) net plant after ADFIT; 2) depreciation expense; 3) taxes other than income expense (mainly property taxes); and 4) all other operating expenses, including O&M, customer service, and administrative and general expenses. The result of the weighted average components where then offset by the growth in sales revenue to customers from the 2016 test year to Rate Year 1.

Q. Is this a similar approach to that approved by the Commission for Puget Sound Energy in *consolidated* Dockets UE-121697/UG-12705 & UE-130137/UG-130138?

A. Yes, with a few exceptions. First, Puget Sound Energy (PSE) used compound growth in costs from approved general rate case compliance filings for a period of years prior to their 2012 filed case. Avista used normalized Commission Basis data, as consistent data from approved general rate case compliance filings for a recent period are not available. The normalized CB data provides consistent normalized Commission Basis results for the historical period.

Second, Avista has included "taxes other than income," as a separate component, as these expenses are mainly changes in property tax expense related to changes in the growth in plant additions over time. It is our understanding, that PSE was granted a "Property Tax Tracker" or mechanism in the same Docket (as referenced above) their K-Factor and Multi-Year Plan were approved by the WUTC.

Lastly, PSE used O&M expenses based on the Consumer Price index (CPI) less a "productivity factor" or "efficiency adjustment." As explained further below, the Company believes CPI is not an appropriate measure for considering growth in O&M and other expenses for a utility, as CPI does not track costs typically implicit in the operations of a utility. And, although Avista does include an "efficiency adjustment" within the K-Factor O&M component applied in Years 2 and 3 (effective May 1, 2019 and May 1, 2020), there is not a specific separate "efficiency adjustment" included in the Rate-Year 1 K-Factor, as reductions in O&M are already implicit within the Rate-Year 1 K-Factor.[18]

Q. Why has Avista not included an efficiency adjustment in the K-Factor percentage used in determining Rate Year 1?

A. Avista did not include an additional reduction or "efficiency adjustment" in the Rate Year 1 K-Factor because Avista is using the more current CB results for the period 2013-2016, which has already included the effects of reductions in O&M after 2012.[19] The O&M growth rate for the period 2013 to 2016 included in the Rate Year 1 K-Factor weighted average is 2.84% for electric and 3.62% for natural gas.[20]

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[18] The Commission indicated its support for the use of trended data within the escalation factors (K-Factors) used by PSE, in Order 07, Dockets UE-121697/UG-12705 & UE-130137/UG-130138 *consolidated*, paragraphs 149, 157 and 158, as follows: "As in the Avista case, we determine that the trending analysis on which PSE bases the rate plan escalation factors supports their approval as an appropriate measure to address earnings attrition going forward. That is, PSE's analysis of actual historical trends in the growth rates of revenues, expenses, and rate base to estimate the erosion in rate of return caused by disparate growth in these categories that PSE will experience absent application of these escalation factors supports the adjustments. …PSE fairly represents what the data show. While various results can be read into these data, PSE's analyses are straightforward and easy to follow. … We determine that the escalation factors reasonably represent the levels of growth in non-production costs that PSE may expect over the term of the rate plan." Avista agrees with these points, and has also determined its K-Factor on appropriate data which supports the rate plan escalation factors in order to recognize earnings erosion during the Three-Year Rate Plan; it uses a methodology which is straightforward, easy to follow and reasonably represents the level of growth in costs expected over the term of the rate plan.

[19] As shown in Illustration No. 6 included by Mr. Morris within in his testimony, at the end of 2012 the Company made significant reductions to its O&M expenses, which are included in the restated Commission Basis level of expenses, and within the 2013 to 2016 trend included in the K-Factor.

[20] As noted in the Company's prior 2016 case (Docket UE-160226, Exhibit No. (EMA-1T), page 35, line 2, the previous growth trend in O&M per the Company's forecast from 2015 to 2017 was 4.24% annually for electric operations, which was consistent with the 2007-2015 average growth rate of 4.0%. The use of the growth trend from 2013-2016 of 2.84% electric and 3.62% for natural gas is a significant reduction in the growth in O&M expenditures.

Q. How has Avista included an efficiency adjustment in the K-Factor percentage used in determining Rate Years 2 and 3?

A. For Rate Years 2 and 3, Avista has included an additional 10% "efficiency adjustment," reducing the electric O&M percentage from 2.84% included in the Rate Year 1 K-Factor to 2.55% for the K-Factor used in Rate Years 2 and 3. The average of the O&M percentage included in the K-Factor over the period 2017-2020 (2.84% in years 2017-2018 and 2.55% in years 2019-2020), results in an average O&M growth rate over the four years of 2.695% for electric.

For Natural gas the O&M growth rate is reduced from 3.62% (annual growth rate for the period 2013-2016) for rate Year 1, to 3.26% for Rate Years 2 and 3. The average O&M percentage included in the natural gas K-factor over the four-year period is 3.44%.[21]

Q. For the Three-Year Rate Plan, what is Avista's planned average percentage increase in O&M between 2017 and 2020, per the Company's financial forecast?

A. Per the Company's current financial forecast, the annual percentage increase in O&M has been reduced to reflect "efficiency reductions" in O&M, resulting in an O&M average increase of 2.71% over the four-year period 2017 to 2020 for the combined electric and natural gas systems. This is a significant reduction from the prior year average growth in O&M expenses, and reflects an effort by the Company to reduce the growth in its O&M expenses from previous years.

[21] Natural gas operations represent approximately 19% of total company operations. The growth in O&M expense for natural gas has typically been slightly higher as the natural gas operations provide a much smaller base to spread increased common costs and increased safety and compliance related expenses over.

Q. Why does the Company believe CPI is not a proper statistic to measure or compare with utility O&M expenses?

A. The Consumer Price Index (CPI), published by the Bureau of Labor Statistics (BLS), reflects price escalation experienced by urban households in the U.S., based on a survey of household spending patterns and prices in urban areas. Household spending, and the prices of products and services in urban areas, is irrelevant to the utility industry. CPI does not accurately reflect the Company's spending patterns or the goods and services purchased for non-labor O&M activities. In other words, the CPI is misaligned with the Company's <u>utility</u> non-labor O&M activities.

Specifically, according to the BLS, the CPI reflects the following types of households:

> The <u>CPI reflects spending patterns for</u> each of two population groups: <u>all urban consumers and urban wage earners and clerical workers</u>. The all urban consumer group represents about 89 percent of the total U.S. population. It is based on the expenditures of almost all residents of urban or metropolitan areas, including professionals, the self-employed, the poor, the unemployed, and retired people, as well as urban wage earners and clerical workers.[22] (emphasis added)

It is important to note that the <u>spending behavior of business entities are not reflected in the survey</u>. This is important because the survey results are used to weight the monthly retail price data. Specific to the collection of prices, the BLS notes:

> Each month, BLS data collectors called economic assistants visit or call thousands of retail stores, service establishments, rental units, and doctors' offices, all over the United States, to obtain information on the prices of the thousands of items used to track and measure price changes in the CPI. These economic assistants record the prices of about 80,000 items each month, representing a scientifically

[22] https://www.bls.gov/cpi/cpifaq.htm

> selected sample of the prices paid by consumers for goods and services purchased.[23]

Again, this description highlights that the CPI is capturing prices paid by urban household consumers, and not the prices paid by businesses when contracting for goods and services. Specifically, the following eight major groupings of goods and services reflected in the CPI include items such as[24]:

1) Food and beverages (e.g., cereal, milk, coffee, chicken, wine, full service meals),
2) Housing (e.g. rent of primary residence, owners' equivalent rent, furniture),
3) Apparel (e.g. men's shirts and sweaters, women's dresses, jewelry),
4) Transportation (e.g. new vehicles, airline fares, gasoline, motor vehicle insurance),
5) Medical care (e.g. prescription drugs, medical supplies, hospital services),
6) Recreation (e.g. televisions, toys, pet products, sports equipment, admissions),
7) Education and communication (e.g. college tuition, computer software) and
8) Other goods and services (e.g. tobacco, haircuts and other personal services).

This misalignment with the Company operations is evident as the goods and services reflected in these categories have little in common with goods and services associated with the Company's O&M expenditures.

Even the BLS notes, when discussing CPI, that it is based on the experiences of average households, and that it may not precisely correspond with the experiences of any specific family or individual:

> It is important to understand that BLS bases the market baskets and pricing procedures for the [CPI] populations on the experience of the relevant average household, not of any specific family or individual. <u>It is unlikely that your experience will correspond precisely with either the national indexes or the indexes for specific cities or regions</u>.[25] (emphasis added)

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[23] https://www.bls.gov/cpi/cpifaq.htm
[24] https://www.bls.gov/cpi/cpifaq.htm
[25] https://www.bls.gov/cpi/cpifaq.htm

The above statement holds true for any price index based on a basket of a large number of goods and services consumed by a survey of household or business entities. Therefore, using a price index for evaluating the Company's expenditure growth presupposes the Company's experience is equivalent to the average of all entities captured by the index. Similarly, it is incorrect to assume that the price escalation measured by any price index is the same as the escalation for individual entities. The CPI index is not an appropriate measure for considering growth in O&M and other expenses for a utility, as CPI does not track costs typically implicit in the operations of a utility.

Q. Now turning to the growth rates used for net plant after ADFIT, please explain the growth rate used in Rate Year 1.

A. The K-Factor used in Rate Year 1 includes a net plant after ADFIT (Net Plant) growth rate of 4.81% for electric and 8.17% for natural gas. Consistent with the O&M component, the 2013-2016 time period was also used for the three plant related K-Factor components (net plant after ADFIT, depreciation, and taxes other than income, which is mainly related to property taxes on plant additions). The 2013-2016 time period is appropriate during Rate Year 1, because these years are reflective of the increasing trend in capital investment and related costs.

Q. What electric and natural gas growth rates are used for Net Plant in Rate Years 2 and 3?

A. For Rate Years 2 and 3, the Net Plant growth rate is reduced from 4.81% to 3.04% for electric, and from 8.17% to 5.02% for natural gas.

Q. Why has Avista included a reduction in the rate base growth rate in determining the K-Factor for Rate Years 2 and 3?

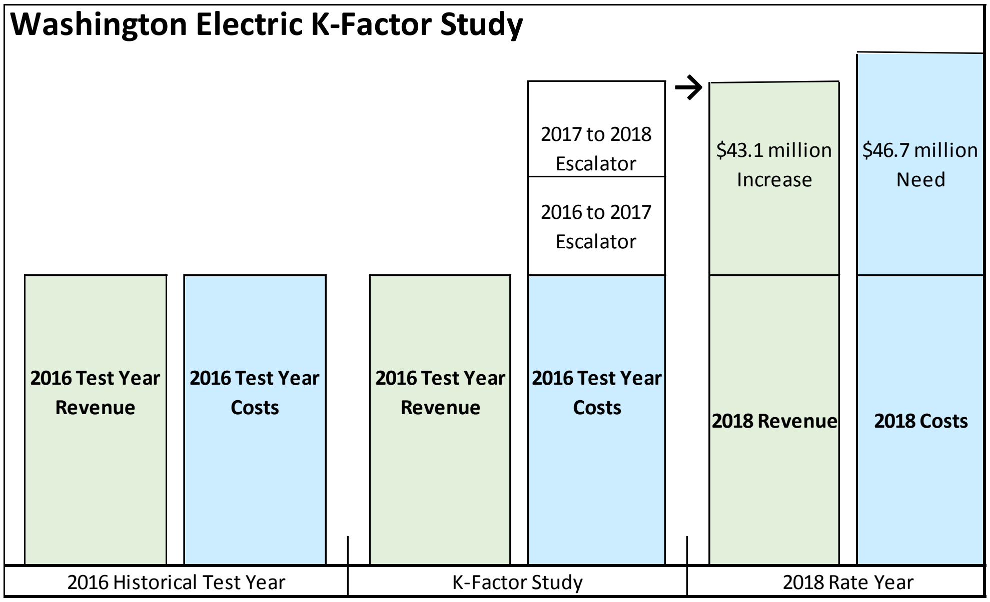
A. During the process of reviewing the Company's Net Plant included in its electric and natural gas Rate Year Studies, the data showed that a reduction in the growth rate of Net Plant is expected to occur in years 2019 and 2020. This reduction in Net Plant between 2018 and 2020 was determined based on planned transfers to plant and the impacts of A/D and ADFIT. As discussed by Ms. Schuh, the expected reductions in 2019 and 2020 in net plant result from: 1) timing of transfers to plant (less in 2019-2020); 2) the continuing impact of the repairs deduction and bonus depreciation on ADFIT through 2020; and 3) carrying forward A/D on all plant from December 31, 2016 on an AMA basis to each rate year, increases A/D and reduces the net plant adjustment amount in each year.

Therefore, although the 2013-2016 average growth in Net Plant used in Rate Year 1 is consistent with that expected through 2018; for Rate Years 2019 and 2020 the average growth rate for net plant is lower. This reduction in the Net Plant growth rate is based on known reductions as a result of larger retirements, for example in Years 2 and 3, than experienced in the prior year growth trends in Net Plant.

Q. Turning back now to the results of the K-Factor Studies, how do the K-Factor Study results compare with the needed rate relief during Rate Year 1 of the Three- Year Rate Plan?

A. Illustration No. 7 below shows the results of the electric K-Factor Study versus that needed during Rate Year 1 of the Three-Year Rate Plan.

Illustration No. 7



As shown in Illustration No. 7, use of the K-Factor escalation from 2016 to Rate Year 1 (May 1, 2018-April 30, 2019) produces a revenue increase (see also Exh. EMA-4, page 1), of $43.1 million[26]. The results for the natural gas K-Factor Study per Exh. EMA-8, page 1, is $9.8 million.

By comparison, the Company's need for electric rate relief is $46.7 million, for Rate Year 1, and $8.9 million for natural gas, as shown in Table Nos. 2 and 4 earlier in my testimony.

Q. Given that this Commission in its Order 06 in Dockets UE-160228 and UG-160229 stated a Company's requested rate relief should start with its Traditional Pro Forma Study results, why did the Company not use Pro Forma revenue results as the starting point to apply the K-Factor revenue escalation rate?

[26] Excludes the impact of increased net power supply expenses.

A. In reviewing the rate relief resulting from the K-Factor analysis, the Company did review the effect of applying the K-Factor to the Pro Forma level of adjusted revenues, rather than the restated Commission Basis level revenues. For informational purposes only, this analysis and the results are provided at page 10 of electric Exh, EMA-4, and page 9 of natural gas Exh. EMA-8. As shown on page 10, the electric revenue requirement amount for Rate Year 1 is $42.6 million[27], $13.9 million for Rate Year 2, and $14.4 million for Rate Year 3. As shown on page 9 for natural gas, the revenue requirement amount for Rate Year 1 is $11.3 million, $4.4 million for Rate Year 2, and $4.6 million for Rate Year 3. Although the overall results are similar under this method for electric, they are overstated for natural gas, as compared to either the K-Factor CB results or the actual expected "need" during the Three-Year Rate Plan.

Because the Traditional Pro Forma Study already pro forms some costs beyond the 2016 historical test period to 2017 and others to 2018, as shown in Illustration No. 4 earlier in my testimony, certain costs in Rate Year 1 would be understated, while other costs may be overstated. Using the Pro Forma results as the starting point to apply the K-Factor does not provide a "matching of revenues and costs," and is therefore, not the "proper" starting place in which to apply the K-Factor. Annual Commission Basis results, however, do provide a matching of revenues with costs as a starting point.

<u>Three-Year Rate Plan Summary</u>

Q. Please now summarize the Company's Three-Year Rate Plan and how the Company has supported its request for rate relief in this filing.

[27] Excludes the impact of increased net power supply expenses.

A. In this general rate case filing the Company has provided four Studies to demonstrate its need for rate relief over the proposed Three-Year Rate Plan from May 1, 2018 through April 30, 2021. Rate changes are proposed for (approximately) May 1, 2018, May 1, 2019 and May 1, 2020. These four Studies include the: 1) Traditional Pro Forma Study; 2) EOP Rate Base Study; 3) K-Factor Revenue Escalation Study; and 4) Rate Year Study.

The purpose of the four Studies is to provide this Commission with evidence in the record to support the rate relief requested for each year of the Three-Year Rate Plan. Avista's request for rate relief is based on the electric and natural gas EOP Rate Base Studies. Additionally, the purpose of the four Studies is to show that the rate relief requested for each of the three years, beyond that provided by the Traditional Pro Forma Study alone, is reasonable.

These Studies provide evidence that demonstrate the electric and natural gas Traditional Pro Forma Study results alone do not provide sufficient rate relief, thereby warranting the use or inclusion of other "tools" available to this Commission. Approval of other "tools," such as that proposed by Avista including EOP 2017 rate base and an adjusted capital structure, would allow the Company an opportunity to earn its authorized rate of return, and result in rates that are "fair, just, reasonable and sufficient."

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

A. Yes, it does.