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Via Electronic and United States Mail

March 27, 2015

Steven V. King, Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Dr. S.W.
P.O. Box 47250
Olympia, Washington 98504-7250

RE: *Investigation of possible ratemaking mechanisms to address utility earnings attrition,*
Docket U-150040

Dear Mr. King:

Enclosed for filing in the above-referenced docket are the original and two copies of Commission Staff Comments.

Sincerely,

PATRICK J. OSHIE
Assistant Attorney General

PJO:klg
Enclosure

COMMISSION STAFF COMMENTS REGARDING

Investigation of possible ratemaking mechanisms to address utility earnings attrition

DOCKET U-150040

March 27, 2015

The Washington Utilities and Transportation Commission Staff (Staff) submits the following comments in accordance with the Commission's Notice of Opportunity to Submit Written Comments issued in Docket U-150040 – *Investigation of possible ratemaking mechanisms to address utility earnings attrition.*

The Commission seeks written comments from interested persons on a number of issues identified below to better inform its work in this docket. Staff appreciates the opportunity to offer responses to the issues identified by the Commission.

The Commission's statutory duty is to balance the needs of the public to have safe and reliable electric service at reasonable rates with the financial ability of the utility to provide such service prospectively. In fulfilling its statutory duty, the Commission must establish rates that are "fair, just, reasonable and sufficient."[1] The rates must be fair to both customers and the utility; just, in that the rates are based solely on the record in this case following the principles of due process of law; reasonable, in light of the range of potential outcomes presented in the record; and sufficient, to meet the financial needs of the utility to cover its expenses and attract capital on reasonable terms.[2] Earnings attrition occurs when this latter obligation remains unfulfilled; that is, earnings attrition is the situation a utility faces when rates based on historical measures are insufficient to cover expenses in the rate year thus depriving a utility of a reasonable opportunity to earn a fair rate of return. As discussed in further detail below, the three primary causes of attrition that are largely out of the control of the utility are 1) high inflation, 2) rapid growth in necessary capital investments and 3) low or no load growth.

Staff offers its responses to the specific Commission questions below.

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[1] RCW 80.28.010(1); RCW 80.28.020.

[2] *Federal Power Commission v. Hope Natural Gas,* 320 U.S. 591 (1944); *Bluefield Water Works & Improvement Company v. Public Service Commission of West Virginia,* 262 U.S. 679 (1923). *See People's Organization for Washington Energy Resources v. Washington Utilities & Transportation Comm'n,* 104 Wn.2d 798, 807-13, 711 P.2d 319 (1985) (describing rate setting process in Washington).

1. ***Your organization's perspective on the cause(s) of utility earnings attrition, e.g., high inflation, aggressive capital investment in infrastructure, low/no load growth.***

Utility earnings attrition is caused by factors both outside of and within the control of the utility. For the purposes of these comments, Staff will focus solely on those factors outside of the control of the utility as those are the factors appropriate for consideration in setting rates. For example, if a utility fails to adequately control growth in O&M expense, the resulting earnings attrition should not have a regulatory remedy outside of simply allowing earnings attrition to provide incentive for the utility to better manage its costs.

Even though the economy is not currently experiencing high inflation and so inflation is not currently a contributor to earnings attrition, Staff believes it is important that inflation still be discussed in these comments as it will help to provide the Commission with insight into the distinct regulatory mechanisms used in the past in response to attrition. As discussed in response to Question 5 (below), Staff's review of Commission orders shows the Commission has historically addressed inflation-based attrition differently than infrastructure growth-based attrition.

Currently, utility earnings attrition is due primarily to growth in plant with no offsetting growth in revenue. Utilities simply are not experiencing the load growth to generate the revenues necessary to cover the cost of new capital expenditures that are associated with growing infrastructure investment necessary to ensure safe and reliable service.

2. ***Your organization's preferred ratemaking mechanism(s) for addressing each of the forms of earnings attrition identified in (1) above, e.g., an attrition allowance, pro forma plant in rate base, construction work in progress (CWIP) in rate base, or future test year. Please include a discussion of the benefits and shortcomings of your preferred mechanism and of alternative mechanisms. Also discuss whether the different causes of attrition require different ratemaking solutions, in your respective view.***

The attrition being experienced by utilities today is caused by differential rates of growth in revenues and expenses brought on by low load growth or rapid infrastructure development, or a combination of both. To address this form of attrition Staff's preferred option is an appropriately developed attrition allowance, though we believe there are circumstances where the use of pro forma adjustments may be particularly warranted.

Inclusion of CWIP in rate base should be reserved for extraordinary circumstances. While Staff does not argue in favor of a future test year in these comments, it is open to discussing the merits of such an option in this forum, particularly if the Commission indicates within its inclination toward consideration of a future test year.

Staff discusses in further detail here its thoughts regarding these four potential ratemaking mechanisms.

Pro Forma Plant Balances

With regards to the adjustment of plant balances to reflect post test-year additions, such adjustments have been used by the Commission for at least the past 20 years. There has been considerable debate as to how far into the future plant should be recognized, but there should be no doubt that this Commission finds adjusting pro forma plant balances for known and measurable changes outside of the test period to be an acceptable practice. As a matter of general policy, Staff believes it is acceptable to set rates in conformity with the numerous Commission decisions reaffirming this stance. However, Staff sees merit in the use of identified criteria for a plant-in-service cutoff date. Three options that may be used in different circumstances in determining a cutoff date are described in further detail in Section 4 below.

Aside from bringing test year plant balances in closer alignment with rate year plant balances, the primary benefit of adjusting plant balances to reflect post test-year rate base is that adjustments are made for known and measureable changes. That is, each project placed in service after the test year will be known to have occurred and, thus, the corresponding adjustment to rate base can be accurately quantified. Adjustments such as these do not rely upon projections, forecasts or capital budgets.

A commonly cited shortcoming of adjusting plant balances to reflect post test-year rate base is that such adjustments typically are in violation of the matching principle. That is, the change in costs associated with pro forma plant balances creates a mismatch between the period over which expenses are accrued and the period over which revenues are accrued.

A related shortcoming of adjusting plant balances to reflect post test-year rate base is that it is often difficult to capture all offsetting factors. For example, new plant placed in service might be accompanied by gains in efficiency or a reduction in O&M expense. If all offsetting factors are not incorporated into the revenue requirement calculation, it may overstate the utility's revenue deficiency.

Attrition Allowance

With regards to providing a utility with an attrition allowance, such an allowance historically has been accepted by the Commission, though the Commission orders accepting attrition allowances seem to be confined to the period 1981-1986. The circumstances necessitating "attrition allowances" during this period are discussed in response to Question 5, below.

Although attrition allowances have not been formally authorized by the Commission since 1986, Staff interprets three recent Commission statements to mean this Commission is open to accepting such allowances. In its recent policy statement on decoupling, the Commission stated that it would consider an attrition adjustment in the ratemaking process to address earnings attrition:

> "The guidance provided in this policy statement does not imply that the Commission would not consider other mechanisms in the context of a general rate case, including an appropriate attrition adjustment designed to protect the company from lost margin to any reason." [3]

In Puget Sound Energy's 2011 general rate case, the Commission stated it was open to considering:

> "Comprehensive expense adjustments based on an overall measurement of the projected shortfall of earnings in the rate year (e.g., attrition allowance based on an attrition study)." [4]

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[3] *Report and Policy Statement on Regulatory Mechanisms, Including Decoupling, to Encourage Utilities to Meet or Exceed Their Conservation Targets*, Docket U-100522 at 22 (November 4, 2010).
[4] *Utilities and Transp. Comm'n v. Puget Sound Energy,* Dockets UE-111048/UG-111049, Order 08 at ¶491 (May 7, 2012).

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

> "The Commission finds, on the basis of the evidence presented, that consideration of attrition in setting rates for 2013 is appropriate." [5]

The primary benefit of providing a utility with an attrition allowance, particularly as compared to allowing pro forma plant, is with an attrition allowance the underlying analysis is an effort to assess prospective maintenance of the matching principle, and the allowance itself is calculated in an attempt to maintain the matching principle for the rate year. The analysis of historical trends in revenue, expense and rate base growth enables the Commission to assess the likelihood that the relationship of these general categories in the rate year will be materially different from that of the test year. If a material difference is expected, the Commission may choose to address the resulting attrition through the ratemaking mechanisms at its disposal. One such mechanism is an attrition allowance. The analysis of historical rates of growth in revenues, expenses and rate base can be used to derive an approximate net operating income shortfall for the rate year which, in turn, can be used to calculate a reasonable attrition allowance.

An attrition analysis is also a much simpler analysis to perform. Whereas pro forma plant adjustments may require evaluation of hundreds of individual adjustments as well as offsets to those adjustments, an attrition analysis requires evaluation of only historical rates of growth in revenues, expenses and rate base. The historical data is readily available at the time a company files a rate case. Importantly, an attrition analysis does not need to be dependent on estimates of utility operations beyond the test year.

The primary argument against the use of an attrition allowance is that the associated changes to the test period relationships between revenue, expense and rate base are not known and measurable. That is, the revenue requirement for the rate year is based on an extrapolation of historical data. Therefore, growth in revenues, expense and rate base cannot

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

be identified to specific utility investments or other observed changes. However, Staff believes the underlying attrition study is an acceptable basis upon which to base rates since historical data provide evidence of how these fundamental ratemaking relationships are likely to behave over limited future time periods enabling the Commission to exercise its judgment with respect to determining rates consistent with statutory requirements.

CWIP in Rate Base

As shown in Section 5 below, prior to 1981 the Commission allowed construction work in progress (CWIP) into rate base. In 1981, the legality of including CWIP in rate base began to be formally challenged and in 1984 consideration of CWIP balances in rate base was found unlawful by the Supreme Court of Washington State.[6] In 1991, the State Legislature amended state law to enable inclusion of CWIP in rate base insofar as it is in the public interest. [7] However, Staff could not find an example of Commission approval, or even consideration, of CWIP in rate base subsequent to 1991.

Staff believes that allowing CWIP in rate base may be appropriate in very limited circumstances. For example, if a company were to invest in large capital projects with a very long lead times, it may be practical to consider allowing recovery of that investment prior to the project being placed in service. As the Commission has observed, in that type of situation if some CWIP were not included in rate base a company could experience a deteriorating financial condition and may have difficulty raising capital for construction requirements. [8]

However, Staff believes that allowing CWIP in rate base is typically unnecessary given the Commission's commonly accepted practice of allowing pro forma plant in rate base. Assuming that plant will be placed in service between the test year and the start of the rate year, at the end of a test year a company's total CWIP balance must necessarily include some amount for plant that will be placed in service prior to the rate year. Therefore, by allowing pro forma plant in rate base, the Commission is setting rates in a manner that is similar to

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[6] *Power v. Utilities & Transp. Comm'n,* Cause Number 49591-2, 101 Wn.2d 425, 679 P.2d 922 (April 5, 1984).
[7] RCW 80.04.250 now allows the Commission to include reasonable costs of CWIP in rate base. Laws of 1991, Chapter 122, § 2.
[8] *Utilities and Transp. Comm'n v. Puget Sound Power & Light Company,* Cause No. U-80-10, 5th Suppl. Order.

allowing a portion of test-year CWIP in rate base. It should be noted that historically when CWIP was allowed in rate base, only a portion of the total test-year CWIP balance was considered for inclusion. [9]

As an alternative to allowing pro forma plant in rate base, Staff believes that allowing CWIP in rate base is generally inferior because there are likely projects in the CWIP account that will not be used and useful until after the rate year. Therefore, inclusion of CWIP in rate base may lead to issues of intergenerational inequity, whereby current ratepayers fund projects from which they do not receive benefit. However, the Commission has noted that in certain circumstances a relaxation of the used and useful standard may be necessary. [10] Staff accepts this rationale and is open to considering CWIP balances for inclusion in rate base in extraordinary circumstances.

Future Test Year

Future test year ratemaking relies on budgets and estimates. As such, these mechanisms do not meet the known and measurable standard. The Commission has stated that:

> "Costs that are documented by actual expenditure, invoice, contract, or other specific obligation usually meet this test. Amounts that will not meet this test are estimates or amounts that are the product of a projection, budget forecast, or some similar exercise of judgment concerning future revenue, expense or rate base."[11]

Further, in response to PSE's use of an apparent future test year approach in its 2011 general rate case, the Commission stated that such a future test year approach to ratemaking burdens ratepayers with unnecessary costs determined on the basis of speculation.[12]

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[9] *Utilities and Transp. Comm'n v. Pacific Power and Light Co.,* Cause No. U-75-24, 2nd Suppl. Order; *Utilities and Transp. Comm'n v. Puget Power & Light Company,* Cause No. U-78-21, 2nd Suppl. Order; and *Utilities and Transp. Comm'n v. Puget Sound Power & Light Company,* Cause No. U-80-10, 5th Suppl. Order.
[10] *Utilities and Transp. Comm'n v. Pacific Power and Light Co.,* Cause No. U-75-24, 2nd Suppl. Order.
[11] *Utilities and Transp. Comm'n v. Puget Sound Energy,* Dockets UE-090704 and UG-090705, Order 11 at ¶26 (April 2, 2010).
[12] *Utilities and Transp. Comm'n v. Puget Sound Energy,* Dockets UE-111048/UG-111049, Order 08 at ¶ 94 (May 7, 2012).

Further still, projections of future levels of expense and rate base may become a self-fulfilling prophesy. In other words, a utility may "prove" its projections of the future to be true by modifying its business decisions to create the projected future. In that way, a utility may prove any future level of expense or any future level of plant investment to be an accurate projection simply by making it so, irrespective of whether those future levels are the most economically efficient or the most beneficial to the utility's ratepayers. If the Commission were to accept a future test year approach to ratemaking, a utility's budgeting process would need to be heavily scrutinized. Such scrutiny of a company's budget is not necessary under a historical test year ratemaking approach.

Lastly, and perhaps most importantly, a future test year approach may be implicitly prohibited by Commission rule. WAC 480-07-510(1) states:

> The utility must provide an exhibit that includes a results-of-operations statement showing test year actual results and the restating and pro forma adjustments in columnar format supporting its general rate request. The utility must also show each restating and pro forma adjustment and its effect on the results of operations.

Also, WAC 480-07-510(3)(e) states:

> Parties must provide work papers that contain a detailed portrayal of restating actual and pro forma adjustments that the company uses to support its filing.

The rule suggests that the basis for general rate change then is a fully restated, historical test year results-of-operations with certain pro forma adjustments.[13] As the Commission itself has stated,

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[13] WAC 480-07-510(3)(e)(iii) states that "pro forma adjustments" give effect for the test period to all known and measurable changes that are not offset by other factors.

> "Because use of an historic test year is embodied in Commission rule, any proposal for a future test year would have to involve a petition to revise that rule or have to be a filing using both a future and an historic test year." [14]

Staff requests that, within this exploratory docket, the Commission discuss its inclination toward acceptance of a future test year and its appetite for a rulemaking to codify its position.

3. ***If your organization prefers the Commission adhere to a historical test year ratemaking approach, please discuss why it would or would not be appropriate to consider potential earnings attrition in that historical year context.***

Staff assumes the Commission refers here to a strict adherence to a historical test year ratemaking approach whereby rates are based on historical test year restated results-of-operations with pro forma adjustments allowed only for known and measurable changes in expense *rates* applied to test year units. A pro forma rate base adjustment would not be an acceptable pro forma adjustment under this strict definition.

The use of a historical test year assumes that the relationships between revenues, expenses and rate base hold true in the immediate future. Assuming an attrition study reveals that the relationships between test-year revenues, expenses and rate base is not likely to hold in the rate year, strict adherence to a historical ratemaking approach would run counter to the Commission's obligation to provide rates sufficient to meet the financial needs of the utility to cover its costs. Therefore, Staff rejects such a strict approach in periods where earnings erosion is out of the control of the utility.

4. ***If your organization has a preferred mechanism(s), please discuss the requirements and parameters necessary for calculating the adjustment(s). Please include in your comments responses to the following questions:***

   a. Should an attrition analysis include historical data only?

Yes. Indeed, the Commission itself has stated

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[14] *Utilities and Transp. Comm'n v. Puget Sound Energy,* Dockets UE-111048/UG-111049, Order 08, page 183, footnote 677 (May 7, 2012).

> "Such historical analysis is what distinguishes an attrition adjustment from the use of a future test year." [15]

An attrition analysis is therefore an exercise in inferential statistics, whereby inferences are made through empirical analysis of recorded observations. Such an analysis should be scientifically objective and free from bias. Speculative future expenses or plant balances do not qualify as observations and so are entirely inappropriate to include as data points in an objective statistical analysis.

b. Should rate-year capital budgets be considered?

No. Rate year capital budgets are not known and measurable and do not reflect the level of plant that will used and useful in the rate year.

c. Should there be a "bright-line" cutoff date for including pro forma plant in rate base?

Staff has argued previously that the establishment of a "bright-line" cutoff date for including pro forma plant in rate base is appropriate. Although Staff sees value in maintaining flexibility so that the Commission may exercise its informed judgment when determining rates, Staff encourages the Commission to engage in additional discussion with a goal of clearer guidance on when plant may be included in determining rates.

At the barest of minima, Staff believes that the plant included in rates must be used and useful in the rate year. Further, if a plant in question is not in service on day 1 of the rate year, there is no guarantee that the plant being supported through rates will be used and useful in the rate year. Staff does not see much room for the relaxation of the used and useful standard. Therefore, Staff argues here that in the most generous view, only plant that is in service prior to the start of the rate year should be considered for inclusion in rates. This

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[15] *Utilities and Transp. Comm'n v. Puget Sound Energy,* Dockets UE-111048/UG-111049, Order 08, page 181, footnote 673 (May 7, 2012).

position is in response to prior occasions when new generation plant was intended to be in service shortly after the rate effective date, but failed in the test phase of operations.[16]

In the most restrictive view, pro forma plant would be rejected entirely. Staff does not argue in favor of this position, as described above. However, given these two views, a carefully identified, objective cutoff date (if one is to be established) should lay between these two extremes; in order to be recognized for inclusion in rates, a plant should be placed in service after the test year but before the rate year. In PacifiCorp's 2013 general rate case, Staff argued for a cutoff date of the company's filing of the general rate case. [17] That is, only plant placed in service prior to the filing of a case should be considered for inclusion in rates. The Commission rejected this position on the grounds that the Commission requires flexibility to exercise its informed judgement. [18] However, for the purpose of promoting a comprehensive discussion in this docket, Staff seeks to restate its preference for a bright line cutoff date and notes that various bright line cutoff dates can be seen as reflective of underlying policy preferences. Staff offers its opinion here about the implied policy preferences associated with three possible bright line cutoff dates. If the Commission were to assert specific policy preferences it could do so through the choice of one of these three bright lines.

Bright Line 1 – Day 1 of the rate year.

A cutoff date of day 1 of the rate year (that is, all plant supported though rates must be in service prior to the start of the rate year) enables adherence to the "used and useful" standard while providing the Company with rates based on plant balances that most closely align with rate year plant balances.

To the extent that earnings attrition is being caused by abnormally rapid (but prudent) plant investment compounded by regulatory lag, a bright line of day 1 of the rate year

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[16] See, for example, *Utilities and Transp. Comm'n v. Avista Corporation,* Docket UE-030751, Appendix A to Order 05 (January 30, 2004) at Section II, par. E. Avista's Coyote Springs II combustion turbine project, originally scheduled for commercial operation in mid-2002, did not begin commercial operation until July 1, 2003.
[17] McGuire, Exhibit No. CRM-1T in *WUTC v. Pacific Power and Light Company, Docket UE-130043.*
[18] *Utilities and Transp. Comm'n v. Pacific Power and Light Company, Docket UE-130043, Order 05 (December 4, 2013) at ¶¶199-200.*

implies that, as a policy preference, the Commission is intent on combating earnings attrition by minimizing regulatory lag.

However, this position also implies a relaxation of the "known and measurable" standard. For example, consider a utility that files a case on February 1, 2016, for rates effective January 1, 2017. At the filing of Staff and intervener response testimony (late July), five months of prospective plant transfers will remain unknown and costs will remain uncertain, while at the evidentiary hearing (early October), three months of prospective plant transfers will remain unknown and costs will remain uncertain. Therefore, if plant is to be recognized to the start of the rate year, Staff would be incorporating five months of unknown and unmeasurable plant balances into its recommended rates. The Commission, presuming it makes its decision using data available at the evidentiary hearing, would be allowing three months of unknown and unmeasurable plant balances into rates. With a bright line of day 1 of the rate year, the calculation of rates *must* necessarily include plant balances that do not meet the known and measurable standard.

Bright line 2 – Auditable In-Service Date

A cutoff date of the date at which staff and interveners may audit final in-service plant balances (that is, all plant supported though rates must be in service prior to the due date of Staff and intervener response testimony) allows Staff and interveners to perform their analyses in adherence to the known and measurable standard while providing the Company with rates based on plant balances recognized ten months or more beyond the test year.

The policy preference implied by an auditable cutoff date is one of a strict adherence to the known and measurable standard. That is, the decision would affirm that all parties should have an opportunity to audit the costs upon which their recommendations are based. In its final order for Avista's 2009 general rate case, the Commission endorsed this position by stating:

> "Staff is correct to focus on audited results to ensure that the costs it proposes to include in rates comply with both the known and measurable principle and the used and useful principle." [19]

While strictly adhering to the known and measurable principle, this policy position also implies a more subdued stance on the Commission's role in addressing earnings attrition by minimizing regulatory lag. It should be noted that by enforcing this cutoff date the Commission would not be ignoring regulatory lag altogether. Rather, as mentioned above, such a cutoff date would allow rates to be based on plant balances at least ten months beyond the test year. However, the corollary to this statement is that transfers to plant during the five months immediately prior to the rate year would not be considered for purposes of ratemaking. With this cutoff date, if a utility is likely to make substantial transfers to plant during the five months immediately prior to the rate year, lag-induced attrition is possible.

Bright line 3 – Evidentiary Hearing

A cutoff date of the conclusion of the evidentiary hearing (that is, all plant supported though rates must be in service by conclusion of the evidentiary hearing) enables the Commission to base its final decision in adherence to the known and measurable standard while providing the Company with rates based on plant balances recognized 12 months or more beyond the test year.

The implied policy position attempts to strike a balance between the known and measurable principle and the conflicting goal of minimizing regulatory lag. Although under this cutoff date Staff and interveners would not be able to audit transfers to plant for the period between response testimony and the evidentiary hearing (and so two-plus months of plant transfers necessarily would be estimates), the Commission could base its final decision on what is proved to be in service at the time of the hearing. In that way, from the perspective of the Commission, the known and measurable principle is maintained.

Further, by allowing consideration of transfers to plant between the test year and the evidentiary hearing, the Commission would be basing rates on plant balances only three

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[19] *Utilities and Transp. Comm'n v. Avista Corporation,* Dockets UE-090134, UG-090135 and UG-060518, Order 10 at ¶71 (December 22, 2009).

months prior to the rate year. Therefore, this position conforms to the known and measurable principle while nearly eliminating regulatory lag. Of course, transfers to plant during the three months immediately prior to the rate year would not be considered for purposes of ratemaking.

However, the drawback to this position is that Staff and interveners are not afforded an opportunity to audit all plant balances subject to inclusion in rates. From the perspective of Staff and interveners, strict adherence to the known and measurable principle is not possible.

d. What level of precision should be expected for projected capital budgets (budgeted to actual) for ratemaking?

Staff does not believe projected capital budgets are appropriate to consider for ratemaking purposes. The Commission has confirmed this position by stating:

> "Budgeted figures representing the Company's projected and planned costs for capital programs may prove to be inaccurate. While we do not question the rigor of the Company's management and planning processes, planned expenditures are not certain expenditures. For costs of new plant to be recovered in customer rates, the investment must have indeed occurred and the new facilities must be providing service to customers." [20]

5. Please provide any other information, discussion, analysis, or documentation you believe would help inform the Commission on this issue.

Staff wishes to submit to the record its review of historical Commission practice in response to specific causes of attrition, with particular focus on the historical period where CWIP in rate base and attrition allowances were common practice. The table below indicates that:

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[20] *Utilities and Transp. Comm'n v. Avista Corporation,* Dockets UE-090134, UG-090135 and UG-060518, Order 10 at ¶71 (December 22, 2009).

1. Attrition allowances were approved when differential rates of growth in revenues, expenses and rate base were evident. Although, technically, this definition suggests that an attrition allowance is an appropriate response to any factor causing differential rates of growth, attrition allowances granted by this Commission appear to be specifically related to abnormally rapid plant investment. An "attrition allowance" appears as a unique term in 1981 and appears to be generally associated with the application of growth factors derived from a historical trend analysis of revenues, expenses and rate base. The last attrition allowance granted by this Commission was in 1986.
2. CWIP in rate base appears to be the first regulatory mechanism approved by this Commission in response to periods of very large capital investment. Staff could not find an example of Commission approval, or even consideration, of CWIP in rate base subsequent to 1991 (the year CWIP was allowed in rate base by law through legislative action).
3. An inflation adjustment was authorized in a period of high inflation. Staff only uncovered one case where an adjustment was made to counteract expected inflation. The inflation adjustment was distinct from attrition allowances in that it was applied to O&M expenses subject to inflation. An "attrition allowance," as a distinct concept, has never been authorized by this Commission in direct response to high inflation.

Docket	Cause of Attrition	Approved Remedy
CWIP in Rate Base		
U-75-24	Unusual growth in plant; CWIP proportionally large as compared to net plant.	CWIP in Rate Base
U-78-21	Unusual growth in plant	CWIP in Rate Base
U-80-10	Unusual growth in plant; CWIP proportionally large as compared to net plant	CWIP in Rate Base
Inflation Adjustment		
U-80-111	Inflation	Price inflation adjustment
Attrition Allowance		
U-81-15/16	Unusual growth in plant	Attrition allowance
U-82-10/11	Differential growth in revenues, expenses and rate base	Attrition allowance
U-82-12/35	Differential rates of growth in revenues, expenses and rate base	Attrition allowance
U-82-38	Unusual growth in plant	Attrition allowance
U-83-26	Differential growth in revenues, expenses and rate base	Attrition allowance
U-83-27	Differential growth in revenues, expenses and rate base	Attrition allowance
U-84-65	Differential growth rates	Attrition allowance
U-86-02	Large construction projects	Attrition allowance