Exh. JLB-1T
Dockets UE-190334, UG-190335, and UE-190222
Witness: Jason L. Ball

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **AVISTA CORPORATION, d/b/a AVISTA UTILITIES,** **Respondent.**	**DOCKETS UE-190334, UG-190335, and UE-190222 (*Consolidated*)**

TESTIMONY OF

Jason L. Ball

STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Cost of Service, Electric and Natural Gas
Rate Spread, Electric and Natural Gas
Rate Design, Electric and Natural Gas

October 3, 2019

TABLE OF CONTENTS

FIGURES AND TABLES

LIST OF EXHIBITS

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Jason L. Ball, and my business address is 621 Woodland Square Loop SE, Lacey, Washington, 98503. My business mailing address is P.O. Box 47250, Olympia, Washington, 98504-7250. My business email address is jason.ball@utc.wa.gov.

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

A. I am employed by the Washington Utilities and Transportation Commission (Commission) as the Deputy Assistant Director in the Energy Section of the Regulatory Services Division.

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

A. I have been employed by the Commission since June 2013.

Q. Please state your qualifications to provide testimony in this proceeding.

A. I earned a degree from New Mexico State University in 2010 with a dual major in Economics and Government. In 2013, I graduated with honors from New Mexico State University with a Master of Economics degree specializing in Public Utility Policy and Regulation. Since that time I have worked on multiple major projects at the Commission including: leading the inquiry into reliability reporting, under Docket UE-190027; developing cost of service rules through the ongoing

rulemakings in Dockets UE-170002 and UG-170003; and leading the Washington negotiation team for the Pacific Power & Light Company's (Pacific Power) multi-state process.

Q. Have you testified previously before the Commission?

A. Yes. I testified on cost of service, rate spread, and rate design for both electric and natural gas in Puget Sound Energy's (PSE's) 2017 general rate case (UE-170033 and UG-170034) and the general rate case filed by Avista Corporation d/b/a Avista Utilities ("Avista" or "Company") in Docket UE-160228. I sponsored testimony in Pacific Power's general rate case in Docket UE-152253 on overall policy, revenue requirement, decoupling mechanism, and proposed rate plan. I presented power supply and load forecasting testimony in Avista's general rate case in Docket UE-140188. I presented an economic feasibility study relating to line extensions for PSE in Docket UE-141335.

II. SCOPE AND SUMMARY OF TESTIMONY

Q. What is the scope and purpose of your testimony?

A. I address Avista's proposed electric and natural gas cost of service studies, rate spread, and rate design.

Q. Please summarize your recommendations.

A. *Electric and Natural Gas Cost of Service*

- The Company's cost of service models are adequate for this case, considering the progress being made in the cost of service rulemaking, Dockets UE-170002 and UG-170003.

Electric and Natural Gas Rate Spread

- I recommend that rate spread be used to correct the alarming disparity in cost assignment between residential ratepayers and almost all other Avista ratepayers. However, my proposal is limited to addressing unfair cost allocations among classes that are more than 10 points above or below parity.
- My proposed rate spread is based on Staff's recommended revenue requirement. If the Commission authorizes a revenue requirement at or near the Company's requested amount, I recommend the Commission use the Company's proposed rate spread for both electric and natural gas.

Electric Rate Design

- I recommend the Commission accept the company's proposed electric rate design changes.
- I recommend that Avista collaborate with interested customers to develop a banded rate schedule. If the Company does not agree to a collaborative development of a banded rate schedule, I propose to change the rate design of schedule 25 and create a new schedule.

Natural Gas Rate Design

- I recommend the Commission accept the company's proposed natural gas rate design changes.

- I recommend Avista perform updated economic bypass alternatives for all special contract customers on schedule 148 by May 1, 2021.

III. ELECTRIC AND NATURAL GAS COST OF SERVICE STUDIES

A. Background for Understanding Cost of Service Studies

Q. What is a cost of service study?

A. A cost of service study (COSS) identifies the costs to serve the customers of each schedule and compares the costs to the total revenue provided by each schedule. The rate base, revenue, and expenses are divided proportionally based on the service provided to each group of customers. This allows rates to be set properly for individual customer groups, called customer classes.

A COSS principally relies on cost causation for assigning costs. However, multiple methodologies exist for assigning costs to individual customer classes. Each of these methodologies has a variety of strengths and weaknesses. Due to this and other ongoing issues with COSS, the Commission is currently engaged in a rulemaking to address cost of service.

Q. Please provide the status of the cost of service rulemaking in Dockets UE-170002 and UG-170003.

A. The cost of service rulemaking is progressing well due to collaborative effort with participating stakeholders, including Avista. The Commission held a workshop on

September 25th, 2019 to discuss informal draft rules and other concepts with the parties.

Q. How does a COSS affect rates?

A. A COSS is a useful guide for determining a rate spread that allows the Company to recover the appropriate level of revenue from each customer class. In rate design, the breakdown among fixed basic, demand, and volumetric charges is informed by the division of costs into each functional category. The principle outputs of a COSS, the revenue-to-cost ratio and parity ratio, are important inputs into developing cost-based rates. The Commission considers the COSS results along with other factors to determine rate spread and rate design.

Q. Please describe the revenue-to-cost ratio and parity ratio.

A. Cost of service (COS) studies identify the costs incurred to service particular classes of customers, and provide a roadmap for how to spread the change in revenue requirement amongst customers. Two important results from a cost of service study inform equitable cost allocation for each customer class: the revenue-to-cost ratio and the parity ratio.

1) Revenue-to-cost ratio shows how much of a class' costs, as identified in the COSS, are recovered with test-year revenues. When the revenue-to-cost ratio does not equal one, a subsidy is occurring between customer classes. The revenue-to-cost ratio describes the relationship between costs and revenues *as they exist today*.

2) Parity ratio adjusts the revenue-to-cost ratio to reflect the new proposed revenue requirement. Parity serves as a starting point for assigning class responsibility for the proposed revenue requirement increase. The parity ratio describes the relationships between costs and revenue *as they may exist in the upcoming rate year*.

B. Avista's Use of Return Ratios

Q. Did the company provide parity ratios in its direct testimony?

A. No. The Company presented the relative rate of return ratio for electric and natural gas customers. The rate of return ratio shows the relationship between a class' profitability and the profitability of the entire system.

Q. Please explain why this is misleading.

A. Avista is presenting how *profitable* a class is, not the percentage of the *cost of service* that class is paying. The resulting ratios are significantly different than the parity ratios for each class. Presenting these results in place of parity ratios could lead to the wrong cost assignment based on a balance of the factors the Commission considers in rate spread (outlined below). The tables below compare the rate of return ratio as presented by Avista to their respective parity ratio.

Table 1 – Electric Parity Ratios vs. Relative Return Ratio

Rate Schedule	**Relative Return Ratio** *(As presented by Avista)*	**Parity Ratio**
Residential Service, 1-2	0.43	0.87
General Service, 11-12	2.24	1.29
Large General Service, 21-22	1.55	1.13
Extra Large General Service, 25	1.08	1.02

Pumping Service, 31-32	0.85	0.96
Street and Area Lights, 41-48	1.14	1.05

Table 2 – Natural Gas Parity Ratios vs. Relative Return Ratio

Rate Schedule	**Relative Return Ratio** *(As presented by Avista)*	**Parity Ratio**
General Service, 101	0.68	0.92
Large General Service, 111-112	2.68	1.56
Interruptible Service, 131-132	2.19	1.40
Transportation Service. 146	1.14	1.05

As these tables illustrate, there is a stark difference between relative return ratio and parity ratio which could lead to disparate outcomes when allocating costs.

Q. What are the principles the Commission uses in setting rate spread?

A. The Commission has laid out several important factors that the Commission routinely considers in establishing rate spread:

> [D]etermining an appropriate rate spread requires consideration of a number of factors and is not the result of pure arithmetic calculations. Of course we consider the results of a valid COSS with the goal of ensuring that each customer class bears the burden of the costs it imposes on the utility. However we also consider principles of rate stability, gradualism, and the avoidance of rate shock.[1]

I have compiled the following list of factors the Commission considers in setting rate spread: [2]

- Fairness
- Perceptions of equity
- Economic conditions in the service territory
- Gradualism
- Avoidance of rate shock
- Rate stability

[1] *Wash. Utils. & Transp. Comm'n v. PacifiCorp d/b/a Pacific Power & Light Company,* Docket UE-100749, Order 06, 109, ¶ 315 (March 25, 2011) (2010 Pacific Power GRC Order).
[2] *Id*., *see also*, *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy, Inc.*, Dockets UE-111048 & UG-111049, Order 08, 124-25, ¶ 350 (May 7, 2012) (2011 PSE GRC Order).

Q. How have you applied these principles to your recommendations?

A. In general, I focus on the first two factors. I believe that the COSS results show that a significant number of the Company's customers are suffering from cross-class subsidization. Therefore, I strongly recommend making meaningful movement for these classes towards more appropriate rate levels.

However, I cannot and do not ignore the other factors. Regarding economic conditions, gradualism, and rate shock, I tie my rate spread to Staff's proposed revenue requirement. In contrast, the Company's proposed revenue requirement represents too large of rate change to make meaningful corrections to rate parity without creating rate shock.

Finally, I agree with the Company's proposed rate design changes, which are minimal. These changes preserve the existing rate structures for customers; I believe this adds a necessary amount of stability to the overall rate spread and rate design.

C. Avista's Cost of Service Study is Directionally Accurate

Q. Do you recommend the Commission rely on the cost of service studies presented by Avista?

A. For the purposes of this case, yes. However, there are certain elements of Avista's COSS that I do not believe appropriately allocate costs amongst classes. For example, the Company electric cost of service relies on the system load factor to classify demand and energy related costs. However, the peak credit methodology for Avista is based on the use of both thermal Combined Cycle Combustion Turbine

(CCCT) and hydro plants. Both state policy and industry trends are pushing generation towards renewable power. Relying on a CCCT to classify costs is out of step with these policies and trends because CCCT rely on natural gas and do not reflect the operating characteristics of renewable generation. This and other Staff concerns are being addressed in the Commission's rulemaking regarding cost of service.

Q. If your concerns are being address through the cost of service rulemaking, how should the Commission use the cost of service study results presented by Avista?

A. Although Staff is concerned with the precision of the results from the Company's proposed COSS, this does not render the current methodology or its presentation irrelevant. The COSS should be considered *directionally* accurate for the purpose of setting rates. Further, as discussed in the rate spread section of my testimony, a COSS is not the sole factor used by the Commission in setting rates.

D. Parity Ranges and Cross-Class Subsidization

Q. How should the Commission use the parity ratios from the COSS in this case to allocate revenues?

A. Since parity ratios are important for allocating any revenue requirement increase or decrease, I propose specific ranges for judging parity ratios. A parity ratio that falls outside of a target range may be considered unreasonable or unfair. For example, a

rate schedule with a parity ratio well below 1.00 means that schedule is being subsidized by other rate schedule(s); this is referred to as cross-class subsidization. Historically, the Commission considers plus or minus five percent of parity to be an acceptable error range.[3] However, the Commission has also emphasized balancing rate spread with other principles like gradualism and rate stability.[4] Further, the COSS in this case can only be considered to be directionally accurate. Taking all of this into consideration, for the purposes of this case, I propose the following ranges for judging parity ratios:

Table 3 - Parity Ranges

Parity Ratio Range	Category
+/- 5 (i.e. 0.95 to 1.05)	Error range
+/- 10 (i.e. 0.90 to 1.10)	Range of reasonableness
+/- 20 (i.e. 0.80 to .90 or 1.10 to 1.20)	Unreasonable cross-class subsidization
+/-30 (i.e. 0.70 to .90 or 1.20 to 1.30)	Excessive cross-class subsidization
+-40 (i.e. <0.70 or >1.30)	Grossly excessive cross-class subsidization

Q. Is it important to achieve a parity ratio of 1.00 for all rate schedules?

A. No. The results of any given COSS, and its associated parity ratios, should inform the Commission's judgment when it assigns proportions of an average rate increase.[5]

[3] *Wash. Utils. & Transp. Comm'n v. PacifiCorp d/b/a Pacific Power & Light Company,* Docket UE-152253, Order 12, 74-75, n. 350 (September 1, 2016) (2015 Pacific Power GRC Order).
[4] *See, Wash. Utils. & Transp. Comm'n v. Puget Sound Energy, Inc.*, Dockets UE-170033 & UG-170034, Order 08, 4, n. 10 (December 5, 2017) (2017 PSE GRC Order).
[5] The Commission has repeatedly emphasized this point. *See, e.g.*, 2017 PSE GRC Order at 4 n. 10; 2010 Pacific Power GRC Order at 314-17; *Wash. Utils. & Transp. Comm'n v. PacifiCorp d/b/a Pacific Power & Light Company,* UE-140762 (consolidated), Order 08, 84, ¶ 197 (March 25, 2015) (2014 Pacific Power GRC Order).

However, the Commission should pay particular attention to schedules that do not fall within the reasonable range of 90 to 110 percentage points of parity. As I discuss later in my testimony, 98.9 percent of Avista electric customers and 98.7 percent of non-residential natural gas customers are outside the range of reasonableness; more importantly, all of the 98.7 percent of non-residential natural gas customers are in the grossly excessive category. Therefore, I recommend the Commission set a rate spread to start alleviating the cross-class subsidization already in effect.

Q. Why is it important to address the issue of cross-class subsidization?

A. First, cross-class subsidization violates the regulatory principles of cost-causation and benefit follows burden. The principles of cost causation and benefit follows burden state that individuals causing costs should pay for those costs. Additionally, the benefits related to certain costs should flow to those who pay those costs and have the best opportunity of realizing the benefits.[6] Addressing cross-class subsidization is especially important when customer class parity ratios are in the excessive or grossly excessive categories.

Second, cross-class subsidization should be considered when weighing fairness and perceptions of equity, two factors the Commission considers when establishing rate spread. [7]

[6] For a more detailed explanation, see my previous testimony in Dockets UE-170033 & UG-170034, Ball, Exh. JLB-1T at 2-3 (June 30, 2017).
[7] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy, Inc.*, Dockets UE-111048 & UG-111049, Order 08, 124-25, ¶ 350 (May 7, 2012) (2010 PSE GRC Order).

IV. ELECTRIC RATE SPREAD

Q. What is your recommendation regarding electric rate spread?

A. My recommended rate spread is summarized in the table below using Staff's proposed revenue requirement:

Table 4 - Staff Recommended Electric Rate Spread

Electric Rate Schedule	**Rate Spread** *(As presented by Avista)*	**Staff Proposed**
Residential Service, 1-2	110%	170%
General Service, 11-12	80%	25%
Large General Service, 21-22	100%	25%
Extra Large General Service, 25	100%	100%
Pumping Service, 31-32	100%	100%
Street and Area Lights, 41-48	0.0%	100%

Q. Please explain the rationale for your proposed rate spread.

A. I focus on classes that fall outside the range of reasonableness, especially those schedules experiencing excessive or grossly excessive cross-class subsidization, such as General Service and Large General Service customer classes. I recommend that these classes receive, at most, 25 percent of the proposed rate increase. For classes that are within the range of reasonableness, I set rate spread to preserve the parity ratio at or near its current level.

Q. Do you have any alternative recommendations regarding electric rate spread?

A. Yes. Staff is recommending a significantly lower revenue requirement than Avista. If the Commission approves an electric revenue requirement at or near the Company's amount, I recommend the Commission use the Company's proposed electric rate

spread. My proposed rates spread would result in a large rate shock to the residential class, if the revenue increase is near the Company's initial filing.

A. Residential Rate Spread

Q. Why are you proposing the residential schedules receive such large relative increases?

A. The residential schedule is below parity and outside the range of reasonableness while General Service (Schedule 11/12), Large General Service (Schedule 21/22), Extra Large General Service (Schedule 25) and Street and Area Lights (Schedules 41-48) are above parity. This is patently unfair. My recommendation results in a parity ratio of 0.89 for the residential class, almost within the range of reasonableness. Further, as the Company has acknowledged in their direct testimony, the residential class has been below parity for quite some time.[8]

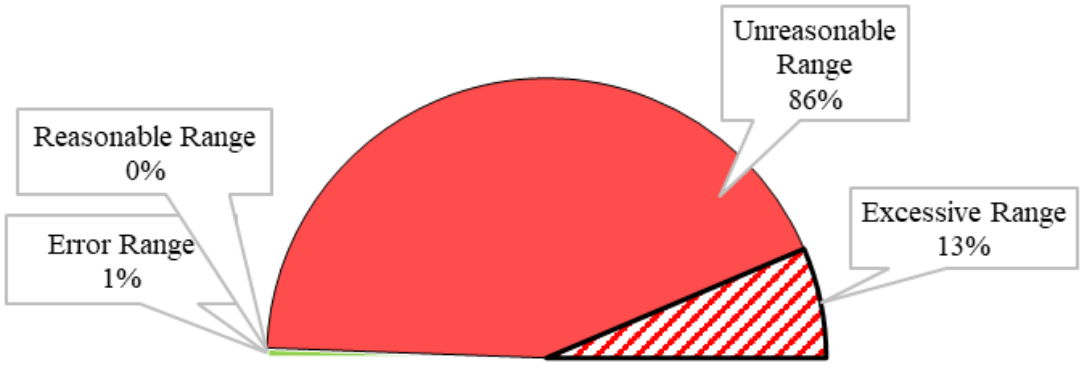
B. General Service and Large General Service Schedules Rate Spread

Q. What is your recommended rate spread regarding general service and large general service classes?

[8] Miller, Exh. JDM-1T at 6:10-13.

A. The charts below illustrates where all electric customer classes fall within the parity ranges I have set.

Figure 1 – Electric Customer Classes Grouped by Parity Range



General Service customers are currently at the very top of the excessive cross-class subsidization category and Large General Service customers are experiencing unreasonable cross-class subsidization. These customers are receiving electricity at prices well beyond their cost to serve. To address this, I recommend these customer classes receive, at most, 25 percent of the proposed rate increase.

Q. Why do you recommend 25 percent of the proposed rate increase be applied to the General Service and Large General Service Customer classes?

A. These classes are paying well above parity and steps should be taken to reduce the cross-class subsidization. However, rate spread is a balance of multiple competing objectives, such as gradualism and perceptions of equity. Therefore, a limited amount of the proposed rate increase should be applied to those schedules significantly above parity; this makes it so that all customers are participating in the rate increase.

A. Extra Large General Service Rate Spread

Q. Why do you propose Extra Large General Service receive 100 percent of the rate increase?

A. Extra Large General Service is currently within the range of reasonableness with a parity ratio of 1.02. Under my proposal, their parity ratio remains at 1.02. This is within the error range, very close to parity. Also, Staff believes the COSS is only directionally accurate in this case – in essence, a directionally accurate COSS should not be the basis for adjusting minor variances in parity. I believe assigning 100 percent of the proposed rate increase to this class is more aligned with the Commission's policy goals of fairness and perceptions of equity.

B. Street and Area Lighting Rate Spread

Q. What are you proposing for the Street and Area Lights Schedules?

A. I propose the Street and Area Lights Schedules receive 100 percent of the proposed rate increase. Their parity ratio is currently 1.05, well within the range of reasonableness. With the proposed increase, their parity ratio moves to 1.03, further inside the range. The Company, however, has proposed that this class receive none of the proposed rate increase for this case.

Q. Do you agree with the Company's proposal to assign none of the proposed rate increase to Street and Area Lighting?

A. No. The Company represents that smaller communities may eliminate lighting to reduce operating expenses. In turn, this would reduce revenue to Avista and increases costs for all ratepayers.[9] While I understand the Company's rationale, ratepayers should not be responsible for shoring up local community's budgets. Further, the Company is not responsible for ensuring universal access to public safety services.[10] Those decisions should be left to local governments and their constituents. Assigning none of the proposed increase to these schedules would result in significant subsidization of local budgets across multiple legal jurisdictions in the Company's service territory (such as towns, cities, or counties).

C. The Company's Proposed Electric Rate Spread is Inadequate

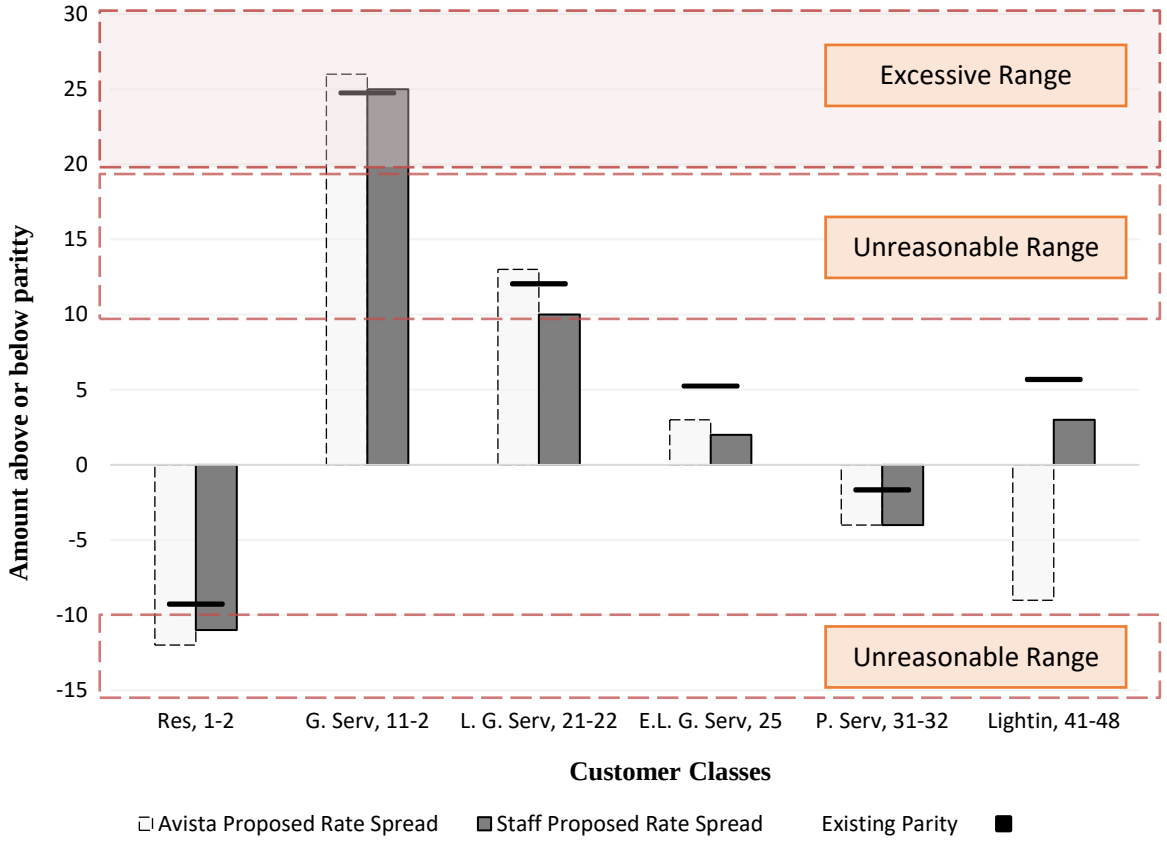
Q. Does the Company proposes to address the cross-subsidization problem?

A. Yes. Even though the Company acknowledges the problem, I do not believe the Company's proposal adequately addresses it.

[9] Miller, Exh. JDM-1T at 8:11-20

[10] *In re Petition For an Order Requiring Puget Sound Energy to Fund Replacement of Electric Facilities*, Docket UE-141335, Order 04, 9, ¶ 23 (*quoting* initial order, Docket UE-141335, Order 03, 12, ¶ 34: "The importance of electric service to a customer (or to the customer's customers) is not a basis on which the Commission will determine who pays for that service or the facilities used to deliver it.") (October 13, 2015).

Figure 2 – Comparison of Staff and Avista Electric Parity Ratios



As this chart illustrates, the Company's proposal makes little progress in addressing the cross-class subsidization that exists. Staff's proposal, however, reduces parity ratios in a more meaningful manner.

Q. Why do you recommend adopting the Company's proposed rate spread if the Commission approves the revenue requirement the Company presented?

A. Rate spread is a balance of multiple competing objectives. While I strongly recommend the Commission adopt a rate spread that starts to alleviate cross-class subsidization, the Company's proposed revenue requirement results in a significant overall rate increase. At or near that overall increase, the Commission's principles of

gradualism, economic conditions in the service territory, and avoidance of rate shock temper the amount that can be done to alleviate cross-class subsidization.

D. Results of Staff Proposed Rate Spread

Q. Please provide a summary of Staff's proposed electric rate spread.

A. The table below summarizes Staff's proposed electric rate spread using Staff's proposed electric revenue requirement increase.

Table 5 – Results of Staff's Proposed Electric Rate Spread

Electric Rate Schedule	**Percent of Uniform Increase**	**Allocated Revenue Increase** *(000)'s*	**Resulting Parity Ratio**
Residential Service, 1-2	170%	$12,866	0.89
General Service, 11-12	25%	$659	1.25
Large General Service, 21-22	25%	$1,103	1.10
Extra Large General Service, 25	50%	$2,342	1.02
Pumping Service, 31-32	100%	$422	0.96
Street and Area Lights, 41-48	100%	$225	1.03

V. NATURAL GAS RATE SPREAD

Q. What is your recommendation regarding natural gas rate spread?

A. My recommended rate spread is summarized in the table below:

Table 6 - Staff Recommended Natural Gas Service Rate Spread

Natural Rate Schedule	**Rate Spread** *(As presented by Avista)*	**Staff Proposed**
General Service, 101	100%	119%
Large General Service, 111-112	100%	25%
Interruptible Service, 131-132	100%	25%
Transportation Service. 146	100%	100%

Q. Please explain the rationale for your proposed rate spread.

A. I focus on classes that fall outside the range of reasonableness, especially those schedules experiencing excessive or grossly excessive cross-class subsidization. Unlike electric service, nearly all natural gas non-residential customers are experiencing grossly-excessive cross class subsidization. I recommend that these classes receive 25 percent of the proposed rate increase. Although the natural gas residential class is within the range of reasonableness, they are the only class below parity. Therefore, I assign the majority of the natural gas rate increase to the residential class.

Q. Do you have any alternative recommendations regarding natural gas rate spread?

A. Yes. Staff is recommending a significantly lower revenue requirement than Avista presented. If the Commission approves natural gas revenue requirement at or near the Company's amount, I recommend the Commission use the Company's proposed natural gas rate spread.

A. Residential Rate Spread

Q. Why are you proposing the Residential Schedules receive such large relative increases?

A. The Residential Schedule is the only natural gas customer class below parity. Large General Service (Schedule 111/112), Interruptible Service (Schedule 131/132), and

Transportation Services (Schedule 146) are grossly above parity. This is far from fair. My recommendation results in a parity ratio of 0.93 for the Residential Class, still below parity but within the range of reasonableness.

B. Large General Service and Interruptible Schedules Rate Spread

Q. Why do you recommend 25 percent of the rate increase be applied the Large General Service and Interruptible Classes?

A. Both Large General Service and Interruptible Classes are within the grossly excessive cross-subsidization category. Even with my recommendation to assign 25 percent of the proposed rate increase to these classes, Large General Service remains in the grossly excessive cross-subsidization category with a parity ratio of 1.46. The Interruptible Schedules moves from grossly-excessive to excessive with a new parity ratio of 1.30.

C. The Company's Proposed Natural Gas Rate Spread is Inadequate

Q. Does the Company propose to address the cross-subsidization problem?

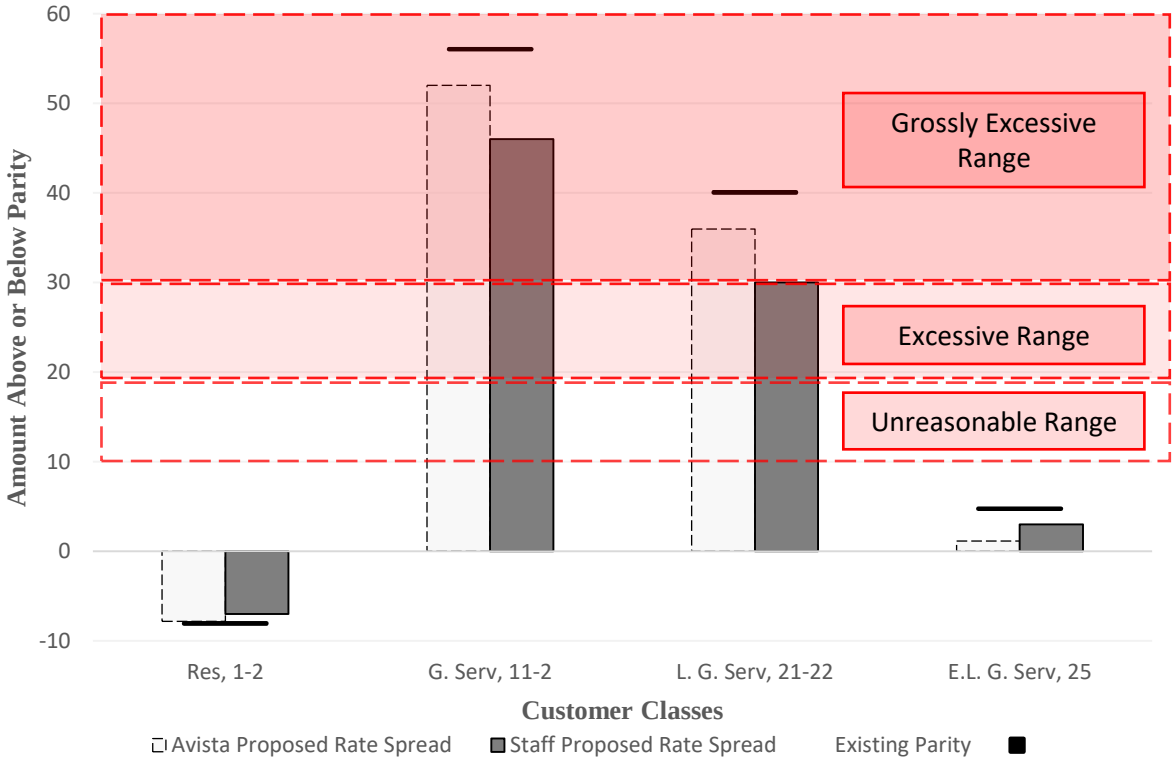
A. The Company's proposal only addresses cross-subsidization if the Commission sets the revenue requirement at less than the level proposed in Avista's initial filing. Avista proposes an equal percent of margin increase if the Commission approves the Company's proposed revenue requirement. However, Avista recommends applying the same increase as their proposed revenue requirement if the Commission approves

a smaller revenue requirement increase.[11] This may be intended to mitigate some of the rate impact form the Company's proposed 14.1 percent increase in margin rates.

Q. Do you agree with the Company's proposal to use equal percent of margin?

A. No. An equal percent of margin rate spread in this case perpetuates the grossly excessive cross-subsidization already in effect for non-residential classes. This does not meet the Commission's principles of fairness or perceptions of equity. As the chart below illustrates, the Company's proposal makes little progress in addressing the cross-class subsidization that exists.

Figure 3 - Comparison of Staff and Avista Natural Gas Parity Ratios



[11] Miller, Exh. JDM-1T at 21:7-14.

Q. Do you agree with the Company's proposal to apply the same increase to the residential class regardless of revenue requirement set by the Commission?

A. No. The Company's proposal appears to rely upon the premise that the Commission authorizes a revenue requirement increase of at least $10.3 million. This is the amount of cost allocation the Company recommends assigning to the residential class regardless of revenue requirement. If the Commission authorizes a level below this amount, then other schedules would have to receive a rate decrease to maintain the balance. I do not believe it is appropriate to assign a rate decrease to any class in this proceeding, based on the revenue requirement recommended by Staff.

D. Results of Staff Proposed Rate Spread

Q. Please provide a summary of Staff's proposed natural gas rate spread.

A. The table below summarizes Staff's proposed natural gas rate spread using Staff's proposed natural gas revenue requirement increase.

Table 7 - Results of Staff's Proposed Natural Gas Rate Spread

Natural Gas Rate Schedule	**Percent of Uniform Increase**	**Allocated Revenue Increase** ***(000's)***	**Resulting Parity Ratio**
General Service, 101	119%	$6,459	0.93
Large General Service, 111-112	25%	$333	1.46
Interruptible Service, 131-132	25%	$4	1.30
Transportation Service. 146	100%	$248	1.03

VI. ELECTRIC RATE DESIGN

Q. Please provide an overview of the Company's proposed electric rate design.

A. *Residential Schedules 1/2*

- No changes to rate design

General Services Schedules 11/12

- No changes to basic charge
- Increase demand charge by $.50 per kW

Large General Services Schedules 21/22

- Increase Minimum Demand Charge by $50
- Increase demand charge by $.50 per kW

Extra Large General Services Schedule 25

- Increase Minimum Demand Charge by $2,500
- Increase demand charge by $.50 per kW

Pumping Schedules 31/32

- No changes to rate design

Street and Area Lighting Schedules 41-48

- Add several banded LED rates

Q. Do you agree with the Company's proposed electric rate design?

A. Yes. However, I propose two options for the Commission to consider for Schedule 25.

Option A) – The Company should work collaboratively with interested customers to convert Schedule 25 to a banded rate tariff or develop special contracts as appropriate.

Option B) – If the Company does not agree to Option A, I recommend creating a new schedule and customer class: Schedule 26 - Ultra Large General Service.

Q. Why do you recommend these changes?

A. I am concerned that this schedule is not homogenous, especially in regards to one particular customer. My analysis of this class is attached as Exh. JLB-2. In summary:

1. A single customer has an average demand that is over ten times higher than the class average;
2. A single customer uses almost half (45 percent) of all kWh's; and,
3. A single customer is the responsible for over 80 percent of the primary voltage discount the schedule receives.

Q. Why is it important for a rate schedule to be homogeneous?

A. State law generally prohibits rate discrimination for "like or contemporaneous service."[12] As the Commission has explained:

> The purpose of these statutes is to protect utility customers from paying different rates for electrical or natural gas services than the rates other, similarly situated customers pay when they receive the same, or at least closely comparable, electrical or natural gas services.[13]

This interpretation was applied to the 2013 decoupling program for Puget Sound Energy. In that case, the Commission acknowledged that:

> Different non-residential customers have different needs for service and these are recognized by the availability of multiple rate schedules that have different rate designs. Where customers are, in fact, similarly situated, their rate designs and rates are the same.[14]

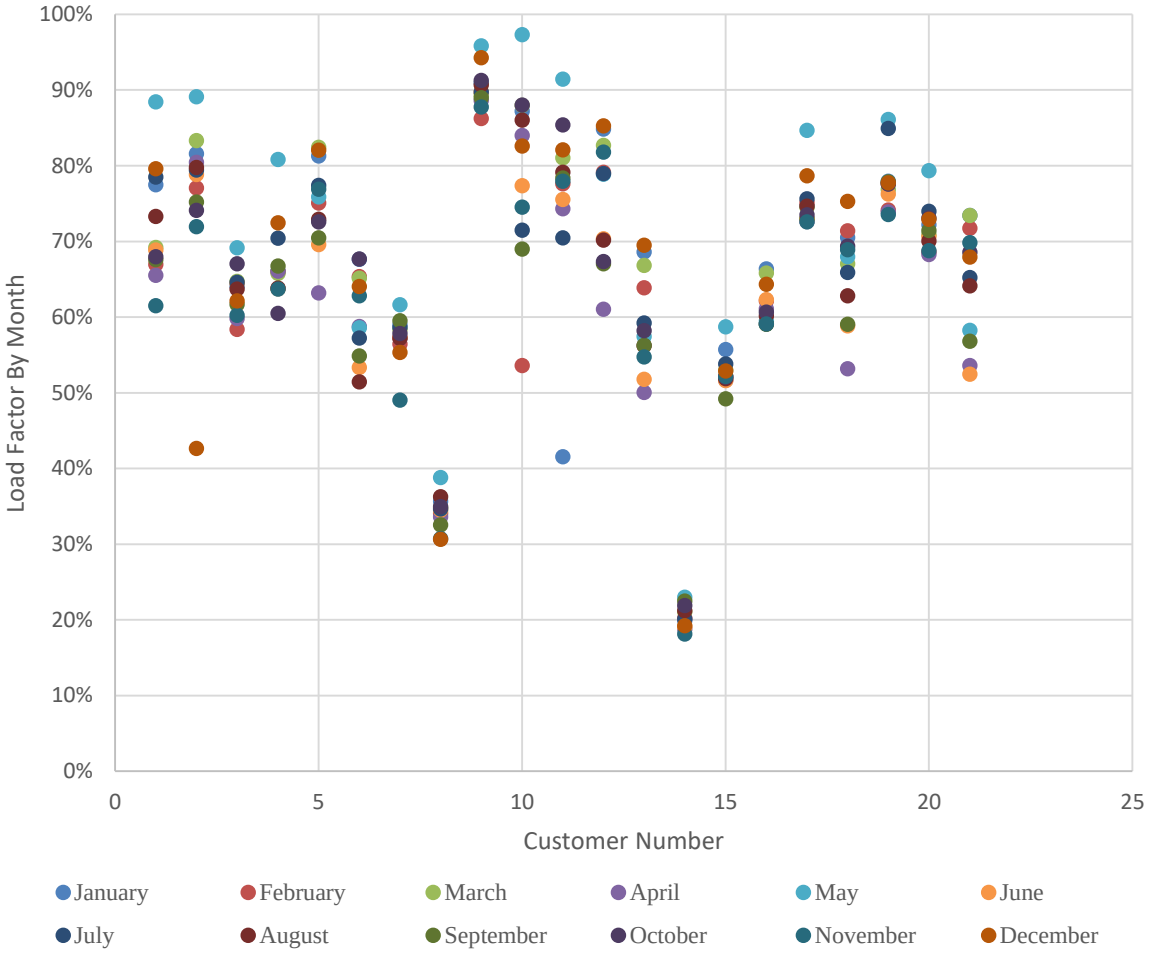
Based on my analysis of this schedule, this single customer is not receiving like or contemporaneous service as the other customers in the schedule.

[12] *See*, RCW 80.28.100.
[13] *In re Petition For an Order Authorizing PSE To Implement Electric and Natural Gas Decoupling Mechanisms and To Record Accounting Entries Associated With the Mechanisms*, UE-121697 & UG-121705 (consolidated), Order 09, 22, ¶ 54 (December 12, 2013).
[14] *Id*. at 30, ¶ 71.

Q. Are your concerns limited to just this one customer in Schedule 25?

A. No. As the scatter plot below shows, there is significant variation in load factor amongst the customers in Schedule 25.

Figure 4 - Schedule 25 Individual Load Factor by Month



It is important to recognize that non-residential customers, to some degree, will always have variances between them. The Commission observed this in 2012:

> There undoubtedly is significant heterogeneity in the non-residential customer class. Members of this customer class have different—in some instances vastly different—levels of demand. Some non-residential customers have the capability to react nimbly to changed economic conditions, ratcheting their demand for power or gas up or down as general market conditions improve or deteriorate. Others have less flexibility. Some customers are more weather sensitive than others. Many non-residential customers undertake their own conservation efforts and are not

even eligible to participate in Company conservation programs and initiatives.[15]

The heterogeneous nature of these schedules, as evidenced by the variation in load-factor, presents a unique opportunity for the Company to explore innovative rate designs. Specifically, customers with various capabilities to "react nimbly" could potentially benefit from rates that recognize the temporal value of power consumption.

Further, I believe that the continuing industry and policy trend towards renewable, but non-dispatchable generation impacts the costs of serving industrial customers.[16] Both industrial customers and the system has a whole will benefit from having rate designs which reflect the nature of newer generation; this can include synchronizing load factors, or other price signals, with the dispatch of renewable generation used to serve them.

Q. How can timing and load factor be included an industrial rate schedule?

A. The most obvious answer is through specific time of use rates or other charges tied to the specific load of a customer. By tying rates to the needs of the system as whole, as well as what an industrial customer is actually willing to respond to, diverse load profiles can drive average costs down.

[15] *In re Petition For an Order Authorizing PSE To Implement Electric and Natural Gas Decoupling Mechanisms and To Record Accounting Entries Associated With the Mechanisms*, UE-121697 & UG-121705, Order 07, 56, ¶ 127 (June 25, 2013).
[16] Carl Linvill et. al., "Smart Non-Residential Rate Design" at 20 (The Regulatory Assistance Project, December 2017).

Q. Are you proposing a specific rate design to capture the value of diverse load profiles?

A. No. I believe the best approach here is for the Company to work with willing customers to set rates appropriately. Therefore, I recommend the Company develop a banded rate schedule coupled with new rate design features; such as rates that vary based on load factor or profile. This allows Company to craft rates based on the specific needs of each customer, through an appropriate contract.

Q. What are the advantages of the banded rate schedule approach?

A. In general, a banded rate tariff can provide the utility with additional tools to manage costs. By enabling industrial customers to respond to stronger and more accurate price signals, the average cost of purchasing and generating power will be reduced. The primary savings from such a program would be shared with all customers as a part of the actual costs recovered through Avista's Energy Recovery Mechanism. Over-time, sustained savings will become a permanent part of rates through modifications to the power cost baseline.

Q. If the Company does not agree to develop a banded rate schedule, what do you propose as an alternative?

A. If the Company does not agree to explore a banded rate tariff, I recommend Schedule 25 be separated into two schedules. The specific rate design changes are included in Exh. JLB-3. In general, I propose:

- Schedule 25 – Large General Service
  - Accept the Company's proposed changes to the demand charges

- Eliminate the third block

- Schedule 26 – Ultra Large General Service
  - Reduce the demand charges from Schedule 25 levels
  - Develop a single per kWh rate.

Q. Can you summarize the potential impacts of your proposed options?

A. Yes. Please see Exh. JLB-3 for the analysis for each customer in Schedule 25.

Option A – Banded Rate Schedule *(Staff Preferred Option)*	**Schedule 25 Average Rate Impact** *(Staff Proposed Revenue)*
Accept Company's Proposed Rate Design Changes	3.70%

Option B – New Rate Schedule 26

Schedule 25	3.49%
Schedule 26	3.90%

VII. NATURAL GAS RATE DESIGN

Q. Please provide an overview of the Company's proposed natural gas rate design.

A. *General Service (Residential) Schedules 1/2*

- No changes to rate design

Large General Service Schedules 111/112

- Increase minimum charge by $16.66

Extra Large General Service Schedules 121/122

- Eliminate schedule and merge with Large General Service 111/112

Interruptible Service Schedule 131/132

- Limit rate increase to first three blocks

Transportation Schedule 146

- Increase basic charge by $75

Housekeeping

- Eliminate rate components portion of the Other Charges section

Q. Do you agree with the Company's proposed electric rate design?

A. Yes. However, I recommend the Company update the economic bypass alternatives for all of their natural gas special contracts by May 1, 2021.

Q. Why do you recommend updating the economic bypass alternatives?

A. The marginal cost studies that these contracts rely on have not been updated in some time, as indicated in JLB-4C. It is important to keep these economic bypass alternatives updated on a reasonable basis so that these customer rates remain in compliance with RCW 80.28.090 and RCW 80.28.100.

VIII. BILL IMPACTS

Q. Can you please quantify the bill impacts of Staff's proposed revenue requirement, rate spread, and rate design?

A. Yes. Exh. JLB-5 presents the bill impacts for electric customers and Exh. JLB-6 presents the bill impacts for natural gas customers.

IX. RATE SPREAD DURING THE RATE PLAN

Q. What is your recommendation for rate spread if the Commission approves a rate plan for Avista?

A. If the Commission approves a rate plan for the Company and uses Staff's proposed revenue requirement, I recommend applying the rate increase using the same rate spread and rate design outlined above. Given that Staff's recommended rate increase in the second year is significantly less than the first year, applying the same rate spread would continue to address issues of cross-subsidization without leading to rate shock.

Q. Does this conclude your testimony?

A. Yes.