

**Exh. JH-1T  
Dockets UE-230172 and UE-210852  
Witness: Joanna Huang**

**BEFORE THE WASHINGTON  
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PACIFICORP d/b/a PACIFIC POWER  
AND LIGHT COMPANY,**

**Respondent.**

**DOCKETS UE-230172 and  
UE-210852 (consolidated)**

**In the Matter of**

**ALLIANCE OF WESTERN ENERGY  
CONSUMERS'**

**Petition for Order Approving Deferral of  
Increased Fly Ash Revenues**

**TESTIMONY OF**

**JOANNA HUANG**

**STAFF OF  
WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION**

***Results of Operations and Revenue Requirement Analysis,  
Interest True Up - Year 1, Interest True-Up - Year 2  
Production Factor - Year 1,***

**September 14, 2023**

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## LIST OF EXHIBITS

- Exh. JH-2 Results of Operations and Revenue Requirement Analysis for Rate Year 1
- Exh. JH-3 Results of Operations and Revenue Requirement Analysis for Rate Year 2
- Exh. JH-4 Interest True Up - Year 1, Interest True-Up - Year 2, Adjustments 7.1 and 15.1
- Exh. JH-5 Production Factor, Adjustments 9.1

1 **I. INTRODUCTION**

2

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

4 A. My name is Joanna Huang, and my business address is 621 Woodland Square Loop  
5 SE, Lacey, Washington, 98503. My business mailing address is P.O. Box 47250,  
6 Olympia, Washington, 98504-7250. My business email address is  
7 joanna.huang@utc.wa.gov.

8

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

10 A. I have been employed by the Washington Utilities and Transportation Commission  
11 since June 1996, and am a regulatory analyst in the Energy Section of the Regulatory  
12 Services Division.

13

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

15 A. I received a Master of Accounting degree from Washington State University in 1991,  
16 and a Bachelor of Business Administration degree with a major in Accounting from  
17 National Chung-Hsing University, Taiwan, in 1987.

18 I began my employment with the Commission in June 1996. My work with  
19 the Commission generally includes financial, accounting, and other analyses for  
20 general rate case proceedings and other tariff filings by the electric and natural gas  
21 utilities regulated by the Commission. I attended the National Association of  
22 Regulated Utility Commissioners Annual Utility School in 1996 and 2001. In

1 addition, I have attended numerous training seminars and conferences regarding  
2 utility regulations and operations.

3  
4 **Q. Have you previously testified before the Commission?**

5 A. Yes. I testified in Avista Corporation d/b/a Avista Utilities general rate cases in  
6 Dockets UE-200900 and UG-200901, UE-190334 and UG-190335, UE-170485 and  
7 UG-170486, Dockets UE-160228 and UG-160229, Dockets UE-140188 and UG-  
8 140189, Dockets UE-120436 and UG-120437, Dockets UE-090134 and UG-090135,  
9 and Dockets UE-991606 and UG-991607; Puget Sound Energy general rate cases in  
10 Dockets UE-090704 and UG-090705, and in Dockets UE-072300 and UG-072301; a  
11 PSE Power Cost Only Rate Case in Docket UE-130617; Pacific Power general rate  
12 cases in Dockets UE-152253, UE-130043 and UE-032065; a Cascade Natural Gas  
13 Company general rate cases in Docket UG-210755 and Docket UG-200568; and a  
14 Northwest Natural Gas Company tariff filing in Docket UG-111233.

15 I have also participated in Staff's investigation in the following general rate  
16 cases and other matters: Docket UE-011595, Dockets UE-050482 and UG-050483,  
17 Dockets UE-070804 and UG-070805, Dockets UE-100467 and UG-100468, and  
18 Dockets UE-110876 and UG-110877, Dockets UE-220053 and UG-220054 (all  
19 Avista); Docket UG-152286 and Docket UG-060256 (Cascade Natural Gas  
20 Corporation); Docket UG-080546 and Docket UG-031885 (NW Natural); and  
21 Dockets UE-070725 and UG-130137, UE-170033/UG-170034 (PSE).

1                                    **II.     SCOPE AND SUMMARY OF TESTIMONY**

2

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

4 A.     The purpose of my testimony is to present Staff’s revenue requirement analysis for  
5 the rate year beginning October 1, 2024 (Rate Year 1), and March 1, 2025 (Rate  
6 Year 2). Staff conducted an independent, stand-alone analysis to determine the  
7 revenue required for the Company to have the opportunity to achieve Staff’s  
8 recommended rate of return. Staff used a modified historical test year study with  
9 known and measurable pro forma adjustments. My testimony responds to the  
10 Company’s Washington Results of Operations for Rate Year 1 and Rate Year 2  
11 sponsored by Company witness Cheung in Exh. SLC-4 and Exh. SLC-5.

12

13 **Q.     In addition to the revenue requirement analysis, did you also analyze any**  
14 **specific adjustments in this proceeding?**

15 A.     Yes. I present Staff’s recommendations on adjustment 7.1 and 15.1 for Interest True  
16 Up - Year 1, Interest True-Up - Year 2, and adjustment 9.1 Production Factor - Year  
17 1.

18

19 **Q.     Please summarize Staff’s revenue requirement analysis for PacifiCorp.**

20 A.     Staff’s revenue requirement analysis shows that PacifiCorp, on a pro forma basis, is  
21 earning a 5.95 percent overall rate of return on rate base for Rate Year 1 and 5.64  
22 percent overall rate of return on rate base for Rate Year 2. Based on Staff witness  
23 David Parcell’s recommended 7.09 percent overall rate of return, Staff’s analysis

1 supports an increase in annual revenues of \$16.62 million for Rate Year 1 and  
2 \$26.06 million for Rate Year 2.

3

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

5 A. Yes. I prepared Exhibits JH-2 through JH-5.

6 • Exh. JH-2 shows Staff's Washington Results of Operations for Rate Year 1  
7 using a modified historical test year.

8 • Exh. JH-3 provides Staff's pro forma study for Washington Results of  
9 Operations for Rate Year 2.

10 • Exh. JH-4 shows the calculation of Interest True Up - Year 1, and Interest  
11 True-Up - Year 2.

12 • Exh. JH-5 shows the calculation of Adjustments 9.1, Production Factor.

13

14 **III. RESULTS OF OPERATIONS AND REVENUE REQUIREMENTS**

15

16 **Q. Please explain page 1 of your Exhibit JH-2, Results of Operations and Revenue**  
17 **Requirement for Rate Year 1.**

18 A. Page 1 of Exhibit JH-2 presents a summary of Staff's analysis of the Company's  
19 Washington-allocated results of operations for the historical 12 months ended June  
20 30, 2022. Page 1 presents the Results of Operations, Rate Base, and Return on  
21 Investment. The Company's Unadjusted Per-Book Results of Operations are shown  
22 in column (1), Restating Adjustments are shown in column (2), Total Restated  
23 Actual Results are shown in column (3), Pro Forma Adjustments are shown in

1 column (4), and Total Normalized Results are shown in column (5). Staff's  
2 proposed recommended revenue increase of about \$16.62 million is shown in  
3 column (6). Column (7) shows the Company's overall Results of Operations with  
4 the additional revenues Staff recommends to reach a 7.09 percent overall rate of  
5 return.

6

7 **Q. Please explain pages 2-31 of your Exhibit JH-2.**

8 A. Pages 2-11 shows "Summary of Total Adjustments- Rate Year 1". "Summary of  
9 Total Adjustments- Rate Year 1" is the total combination of Staff's restating  
10 adjustments and pro forma adjustments. Pages 12-21 itemize Staff's restating  
11 adjustments, as summarized in the second column of page 12 of the exhibit. Pages  
12 22-31 itemize Staff's pro forma adjustments, as summarized in the second column of  
13 page 22.

14 My exhibit uses the same adjustment titles as the Company uses in Company  
15 witness Cheung's Exh. SLC-4.

16

17 **Q. Please continue with your explanation of Exhibit JH-2.**

18 A. Page 31 shows the calculation of Staff's overall proposed rate of return and "Net to  
19 Gross Bump-up Factor".

20

21 **Q. What are the components of Staff's overall proposed rate of return?**

22 A. The overall cost of capital recommended by Staff witness Parcell is 7.09 percent,  
23 based upon the following capital structure and cost rates:



**PACIFICORP**  
**TOTAL COST OF CAPITAL**

Item	Percent	Cost	Weight Cost
<b>December 31, 2024</b>			
Short-Term Debt	0.76%	3.90%	0.03%
Long-Term Debt	50.13%	4.77%	2.39%
Preferred Stock	0.01%	6.75%	0.00%
Common Equity	49.10%	9.50%	4.66%
Total	100.00%		7.09%

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12

**Q. Please explain page 1 of your Exhibit JH-3, Results of Operations and Revenue Requirement for Rate Year 2.**

A. Page 1 of Exhibit JH-3 presents a summary of Staff’s analysis of the Company’s Revenue Requirement for Rate Year 2. Page 1 presents the Results of Operations, Rate Base, and Return on Investment from Staff’s proposed Revenue Requirement for Rate Year 2. Staff’s recommended revenue for PacifiCorp’s operations in Washington for Rate Year 2 is based on Staff’s recommended revenue requirement for PacifiCorp’s operations in Washington for Rate Year 1. Column 1-3 of Exhibit JH-3 of page 1 is the same as Column 5-7 of Exhibit JH-2 of page 1. Rate Year 2 Pro Forma Adjustments is shown in Column (4) and Total Year 2 Adjusted Results are shown in column (5). Staff’s proposed recommended revenue increase of about

1 \$26.06 million is shown in column (6). Column (7) shows the Company's overall  
2 Results of Operations with the additional revenues Staff recommends to reach a 7.09  
3 percent overall rate of return.

4

5 **Q. Please explain pages 2-7 of your Exhibit JH-3, Results of Operations and**  
6 **Revenue Requirement for Rate Year 2.**

7 A. Pages 2-6 shows Staff's pro forma adjustments, as summarized in the second column  
8 of page 2. My exhibit uses the same adjustment titles as the Company uses in  
9 Company witness Cheung's Exh. SLC-5. Page 7 shows the calculation of Staff's  
10 overall proposed rate of return and "Net to Gross Bump-up Factor".

11

12 **A. PacifiCorp's Presentation of Revenue Requirements**

13

14 **Q. What did PacifiCorp propose in the general rate case?**

15 A. PacifiCorp has prepared a Two-Year Rate Plan in this case with requested rate  
16 effective dates of March 1, 2024 (Rate Year 1), and March 1, 2025 (Rate Year 2),  
17 respectively. Under RCW 80.28.425, PacifiCorp is required to include a proposal for  
18 a multi-year rate plan for every general rate case filing submitted after January 1,  
19 2022.

20

21 **Q. What is PacifiCorp's proposed revenue requirement for its electric operations**  
22 **in Washington for Rate Year 1 in this case?**

23

1 A. PacifiCorp’s proposed revenue requirement for its electric operations in Washington  
2 for Rate Year 1 was developed using historical expense levels for the Test Period,  
3 normalized with restating adjustments, and known and measurable pro forma  
4 adjustments. PacifiCorp proposes an annual revenue increase of \$26.8 million to its  
5 electric revenues for the rate year, beginning March 1, 2024. PacifiCorp’s revenue  
6 requirement calculation is based on a recommended 7.60 percent overall rate of  
7 return.<sup>1</sup>

8

9 **Q. What revenue requirement does PacifiCorp present for its electric operations in**  
10 **Washington for Rate Year 2?**

11 A. PacifiCorp proposes an annual revenue increase of \$27.9 million to its electric  
12 revenues for Rate Year 2, beginning March 1, 2025. PacifiCorp’s revenue  
13 requirement calculation is based on recommended 7.60 percent overall rate of  
14 return.<sup>2</sup>

15

16 **B. Staff’s Presentation of Revenue Requirements**

17

18 **Q. What is Staff’s recommended revenue requirement for PacifiCorp’s electric**  
19 **operations in Washington for Rate Year 1?**

20 A. Staff’s analysis, based on a modified historical test period with pro forma  
21 adjustments, results in a recommended increase in annual revenues of approximately

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<sup>1</sup> Cheung, Exh. SLC-1T at 2:28.

<sup>2</sup> *Id.* at 2:31.

1 \$16.62 million for the company’s Washington electric operations.<sup>3</sup> Staff’s revenue  
2 requirement calculation is based on Staff witness Parcell’s recommended 7.09  
3 percent overall rate of return.

4

5 **Q. What is Staff’s recommended revenue requirement for PacifiCorp’s electric**  
6 **operations in Washington for Rate Year 2?**

7 A. Staff’s analysis, based on Staff’s recommended revenue requirement for  
8 PacifiCorp’s operations in Washington for Rate Year 1, with additional pro forma  
9 adjustments, results in a recommended increase in annual revenues of approximately  
10 \$26.06 million for the company’s Washington electric operations.<sup>4</sup> Staff’s revenue  
11 requirement calculation is based on Staff witness David Parcell’s recommended 7.09  
12 percent overall rate of return.

13

14 **Q. How does Staff’s recommended revenue requirement compare to PacifiCorp’s**  
15 **proposed revenue requirement for PacifiCorp’s operations in Washington for**  
16 **Rate Year 2?**

17 A. Staff’s recommended revenue for PacifiCorp’s operations in Washington for Rate  
18 Year 2 is based on Staff’s recommended revenue requirement for PacifiCorp’s  
19 operations in Washington for Rate Year 1, which is \$16.62 million. PacifiCorp’s  
20 recommended revenue in Washington for Rate Year 2 is based on PacifiCorp’s  
21 requested revenue requirement for PacifiCorp’s operations in Washington for Rate  
22 Year 1, which is \$27.9 million. The basis for the calculation of Staff’s recommended

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<sup>3</sup> Huang, Exh. JH-2 at 1, column 6.

<sup>4</sup> Huang, Exh. JH-3 at 1, column 6.

1 revenue for PacifiCorp’s operations in Washington for Rate Year 2 is much lower  
2 (by \$10.14 million) than PacifiCorp’s calculation of revenue requirement for Rate  
3 Year 2. Though Staff’s recommended revenue for PacifiCorp’s operations in  
4 Washington for Rate Year 2 is close to PacifiCorp’s requested revenue requirement,  
5 the starting point for the calculation is drastically further apart.

6

7 **Q. How does Staff’s recommended revenue requirement compare to PacifiCorp’s**  
8 **proposed revenue requirement for PacifiCorp’s operations in Washington for**  
9 **Rate Year 1 and 2 in comparison?**

10 A. The following table is the comparison of Staff’s recommended revenue requirement  
11 compared to PacifiCorp’s proposed revenue requirement for Rate Year 1 and Rate  
12 Year 2.

	Rate Year 1	Rate Year 2	Total of two years
PacifiCorp	\$26,763,219	\$27,944,573	\$54,707,792
Staff	\$16,621,098	\$26,063,309	\$42,684,407

13

14

15 **IV. CONTESTED ADJUSTMENTS**

16

17 **A. Interest True Up - Year 1, and Interest True-Up - Year 2 Adjustment 7.1**  
18 **and 15.1**

19

20 **Q. Please describe Staff’s proposed Adjustment 7.1 and 15.1, Interest True Up -**  
21 **Year 1, and Interest True-Up - Year 2.**

1 A. Staff's proposed adjustment restating debt interest calculates the tax effect on interest  
2 using Staff witness Parcell's recommended weighted average cost of debt, 2.42  
3 percent, applied to Staff's recommended level of rate base. The difference between  
4 the Company's adjustments and Staff's adjustments results from differences in the  
5 weighted average cost of debt and the level of rate base used in the calculation.

6

7 **Q. What is the impact of Staff's proposed Adjustment 7.1, Interest True Up - Year**  
8 **1 to Net Operating Income (NOI) and revenue requirement?**

9 A. The effect on federal income tax of the restated and pro forma level of debt interest  
10 for the test period decreases Washington Net Operating Income (NOI) by \$298,830  
11 and increases revenue requirement by \$397,475 for Rate Year 1. These amounts are  
12 shown in my Exh. JH-2 at page 6 of 32 for Rate Year 1.

13

14 **Q. What is the impact of Staff's proposed Adjustment 15.1, Interest True-Up -**  
15 **Year 2 to NOI and revenue requirement.**

16 A. The effect on federal income tax of the pro forma level of debt interest for the test  
17 period increases Washington NOI by \$1,300,946 and decreases revenue  
18 requirement by \$1,730,396 for Year 2. These amounts are shown in my Exh. JH-3 at  
19 page 4 of 6 for Rate Year 2.

20

21 **B. Production Factor, Adjustment 9.1**

22

23 **Q. What is the Production Factor adjustment?**

1 A. The Production Factor adjustment was put into place as an offsetting factor to the pro  
2 forma power supply adjustment and other pro forma adjustments that allowed new  
3 resources added after the test year to be included in the rate base calculation. As new  
4 resources were pro formed in rate cases in order to meet increasing loads, pro forma  
5 power supply expenses were calculated at expected load levels in the rate year. So,  
6 in order for the Company to recover these power supply expenses and production/  
7 transmission investment and related expenses during the rate year, a per-unit rate was  
8 calculated and applied to test period loads. This treatment maintained the matching  
9 principal and yet provided recovery of costs associated with future loads.

10

11 **Q. Please describe the adjustments included in Tab 9.**

12 A. **Production Factor (page 9.1)**—The production factor is a means of adjusting pro  
13 forma generation-related components of the revenue requirement to Test Period  
14 expense and balance levels. The production factor has been calculated by dividing  
15 Washington’s normalized historical retail load by the Washington pro forma load for  
16 the 12 months ending December 31, 2024. This factor is then applied to the pro  
17 forma net power cost and pro forma major plant addition revenue requirement  
18 components.

19

20 **Q. What are the generation-related components that need to be adjusted back to**  
21 **test period expense and balance levels?**

22 A. The following are the generation-related components that need to be adjusted back to  
23 test period expense and balance levels.

- 1 • Net Power Costs, Adjustments 5.1 and 5.2
- 2 • Major Plant Additions, Adjustment 8.4
- 3 • Production Tax Credit - Year 1, Adjustment 7.3
- 4 • Wyoming Wind Generation Tax, Adjustment 7.10
- 5 • Pro Forma Major Plant Additions - Year 1, Adjustment 8.4
- 6 • Confidential Pro Forma Capital Additions - Year 1, Adjustment 8.11
- 7 • Jim Bridger SCRs Removal, Adjustment 10.2
- 8 • Existing Coal-Fired Generation Assets - Year 1, Adjustment 10.5
- 9 • Pro Forma JB Units 3, 4 and Colstrip 4 Additions - Year 1, Adjustment 10.6
- 10 • Pro Forma JB Units 1 & 2 Additions - Year 1, Adjustment 10.7
- 11 • Fly Ash Revenues - Year 1, Adjustment 10.8

12

13 **Q. Do you agree with the Company’s methodology for calculating the production**  
14 **factor?**

15 A. Yes. The Company’s methodology decreases test year net operating income and  
16 decreases test year rate base, due to the decreased load forecast for the year 12-  
17 months ending December 2024. This is consistent with prior Commission treatment  
18 that applied a production factor adjustment when loads were projected to decrease  
19 during the rate year.<sup>5</sup>

20  
21

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<sup>5</sup> *Wash. Utils. & Trans. Comm’n v. Puget Sound Energy, Inc.*, Dockets UE-090704 and UG-090705, Order 11, at 78-79, ¶¶ 225-226 (April 2, 2010).



1 **Q. How does Staff's adjustment differ from the Company's Adjustment 9.1?**

2 A. The difference between Staff and Company adjustments arises only from differences  
3 in the corresponding adjustments for Net Power Costs and Major Plant Additions as  
4 listed above. As I noted earlier, changes in allocation factors and in the included  
5 plant affect these adjustments. Staff witness Wilson explains the underlying  
6 adjustments 5.1 and 5.2 and Staff witness McGuire explains the underlying  
7 adjustments 10.6 and 10.7.

8

9 **Q. What is the impact of Staff's proposed Adjustment 9.1, Production Factor to**  
10 **NOI and revenue requirement?**

11 A. Staff Adjustment 9.1 decreases Washington net operating income by \$840,000,  
12 decreases rate base by \$26,746 and increases revenue requirement by \$1,114,865.  
13 The calculation of Staff Adjustment 9.1 Production Factor is shown in my Exh. JH-5  
14 at page 4.

15

16 **Q. Does this conclude your testimony?**

17 A. Yes.