

**Exh. BAE-1T  
Dockets UE-170033/UG-170034  
Witness: Betty A. Erdahl**

**BEFORE THE WASHINGTON  
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PUGET SOUND ENERGY,**

**Respondent.**

**DOCKETS UE-170033 and  
UG-170034 (*Consolidated*)**

**TESTIMONY OF**

**Betty A. Erdahl**

**STAFF OF  
WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION**

***Investor Supplied Working Capital  
Adjustments 13.23 and 11.23***

**June 30, 2017**

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- Exh. BAE-2 Comparison of Staff and PSE Working Capital Adjustments
- Exh. BAE-3 Detailed Staff Working Capital Calculation 13.23 and 11.23
- Exh. BAE-4 PSE Response to Staff Data Request No. 337
- Exh. BAE-5 PSE Response to Staff Data Request No. 339
- Exh. BAE-6 PSE Response to Staff Data Request No. 204

1 I. INTRODUCTION

2

3 Q. Please state your name and business address.

4 A. My name is Betty A. Erdahl and my business address is the Richard Hemstad  
5 Building, 1300 S. Evergreen Park Drive SW, Olympia, Washington 98504.

6

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

8 A. I am employed by the Washington Utilities and Transportation Commission  
9 (Commission) as a Regulatory Analyst in the Energy Section of the Regulatory  
10 Services Division.

11

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

13 A. I have been employed with the Commission since June 1991.

14

15 Q. Please describe your education and relevant work experience.

16 A. I graduated from Washington State University in 1988 with a Bachelor of Arts  
17 degree in Accounting. I have also completed relevant coursework such as the  
18 “Basics of Regulation” offered by New Mexico State University, Rate Making  
19 Process Technical Program, USTA class on Understanding Separations, Access  
20 Charges, and Settlements, as well as Utility Ratemaking: The Fundamentals and the  
21 Frontier. Before joining the Commission in June 1991, I worked for two years as an  
22 accountant in the financial sector.

1           As a Regulatory Analyst, I am responsible for auditing the books and records  
2 of regulated companies, analyzing cost of service studies, and examining affiliated  
3 interest transactions. In addition, I participate in the development of Staff  
4 recommendations concerning tariff filings by regulated companies for presentation to  
5 the Commission at open public meetings and adjudications. I have also worked on  
6 policy recommendations relating to spin-offs and mergers of regulated companies,  
7 payphone deregulation, local calling areas, bundling of regulated and nonregulated  
8 telecommunications services, implementation of N11 pursuant to the  
9 Telecommunications Act of 1996, and numbering resources.

10  
11 **Q. Have you testified before this Commission?**

12 A. Yes. I testified in Docket TG-920090, regarding affiliated interests of Waste  
13 Management, Inc.; Docket UT-950200, regarding a general rate case of US WEST  
14 Communications, Inc.; Docket UT-970066, regarding payphone access line rates of  
15 Toledo Telephone Company; Docket UT-020406, a complaint by AT&T  
16 Communications of the Pacific Northwest, Inc. against Verizon Northwest Inc.'s  
17 access charge rates; Dockets UE-111048/UG-111049, regarding a general rate case  
18 of Puget Sound Energy (PSE); and Docket UE-130043, regarding a general rate case  
19 of Pacific Power & Light Company (Pacific Power). I also prepared testimony in  
20 Dockets UE-140188/UG-140189, regarding a general rate case of Avista  
21 Corporation (Avista); Docket UT-040788, regarding a general rate case of Verizon  
22 Northwest Inc.; Docket UT-051291, regarding affiliated interest contracts, overall  
23 earnings review, and provision of a quality of service guarantee program in the

1 Sprint spin-off of its local exchange companies; Docket UT-082119, regarding  
2 retention of pre-merger settlement provisions, a requirement to offer a quality of  
3 service guarantee program, and affiliated interest reporting in the  
4 CenturyTel/Embarq merger case; and Docket UE-140762, et al., regarding a general  
5 rate case of Pacific Power, including an adjustment to investor supplied working  
6 capital (ISWC).

7  
8 **II. SCOPE AND SUMMARY OF TESTIMONY**

9  
10 **Q. What is the purpose of your testimony in this proceeding?**

11 A. I present Staff adjustments to the Company's investor supplied working capital  
12 ("ISWC"), which PSE includes as a line item in the per books rate base in the test  
13 year results of operations.<sup>1</sup> Staff's ISWC adjustments are identified as electric  
14 Adjustment 13.23 and gas Adjustment 11.23.

15  
16 **Q. Please provide a brief overview of your recommendation.**

17 A. I change the category of almost 60 accounts which changes the overall amount of  
18 ISWC. I also revise the allocation method to determine the level of ISWC for  
19 electric and gas operations along with the corresponding adjustments to the  
20 Company's electric and gas rate base. The change in allocation method is a result of  
21 eliminating the "Operating Investments" column used by PSE, which includes 78  
22 accounts. Staff's adjustment puts those accounts into gas, electric, or non-operating

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<sup>1</sup> See Barnard, Exh. KJB-12 at 1:45, and Free, Exh. SEF-10 at 1:44.

1 investment resulting in significantly more ISWC being allocated to non-operating  
2 operations and less ISWC allocated to electric and gas operations.

3 Staff's recommended allocation method is consistent with the Commission's  
4 accepted approach to ISWC for Pacific Power and Avista.

5  
6 **Q. Are you sponsoring any exhibits in support of your testimony?**

7 A. Yes, I have five supporting exhibits.

8 Exh. BAE-2 depicts Staff's amount of working capital to be included in rate  
9 base and proposes decreases to electric and gas rate base. Since the Company  
10 includes working capital in its per books results of operations, I propose an  
11 adjustment to PSE's working capital to arrive at Staff's ISWC amount. The results  
12 are presented in my exhibit and are incorporated into Staff witness Melissa  
13 Cheesman's Exh. MCC-5.

14 Exh. BAE-3 shows the detailed analysis by account of how Staff's proposed  
15 ISWC was calculated.

16 Exh. BAE-4 is PSE's Response to Staff Data Request No. 337, and Exh.  
17 BAE-5 is PSE's Response to Staff Data Request No. 339. Both of these exhibits  
18 support many of the corrections in Staff's Adjustments 13.23 and 11.23. In  
19 reviewing these responses, the Company discovered that many of the balance sheet  
20 accounts should be re-categorized.

21 Exh. BAE-6, PSE's Response to Staff Data Request No. 204, explains PSE's  
22 use of "Operating Investment" when categorizing total investments to determine its  
23 ratio percentage for working capital.

1                                   **III. INVESTOR SUPPLIED WORKING CAPITAL 101**

2

3 **Q. What is cash working capital?**

4 A. Cash working capital refers to the funds necessary to sustain a company in its day-to-  
5 day operations. It is calculated by subtracting current liabilities from current assets.

6

7 **Q. What is the ratemaking perspective on cash working capital?**

8 A. In rate setting, the goal is to directly measure whether or not investors actually  
9 supply working capital. If they do, it is appropriate to allow a return on the amount  
10 of working capital the investors supply.

11

12 **Q. What is the basic concept of the ISWC method?**

13 A. Broadly speaking, the ISWC method measures the difference between the capital  
14 invested in a business and the investments in the business. In other words, ISWC is  
15 the amount of invested capital that was provided by investors and available for the  
16 company's use, over and above the company's investments in operating plant, non-  
17 operating plant, and other specific items of investment. If there is an excess of  
18 invested capital over investments, that amount is the working capital supplied by  
19 investors, or ISWC.

20                   In summary, the ISWC method directly measures the amount of working  
21 capital that investors provide. If there is such an amount, it is included in rate base  
22 and earns a return.

23

1 **Q. Who provides working capital besides the investor?**

2 A. Working capital may be provided by ratepayers or non-investors via various  
3 regulatory treatments such as deferred income taxes, unamortized investment tax  
4 credits, customer deposits, or trade creditors. The Company has use of those funds  
5 for a period of time.

6

7 **Q. In general, how is ISWC allocated to the regulated portion of PSE's business?**

8 A. Once the amount of investor supplied working capital is calculated, there are two  
9 basic assumptions applied:

- 10 1. ISWC is used for both operating and non-operating investments; and
- 11 2. The operating investments and non-operating investments share pro-  
12 ratably any excess investor-supplied funds.

13

14 **Q. What has the Commission said about working capital in the recent past?**

15 A. In the 2005 Pacific Power & Light general rate case, the Commission stated, "...the  
16 objective is to quantify the amount of working capital and current assets supported  
17 by capital on which investors are entitled to a return." The Commission also said:  
18 "We [the Commission] also expect Staff and other parties to provide full evidentiary  
19 support of any proposals and methods they may submit to substantiate adjustments to  
20 a company's figures."<sup>2</sup>

21

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<sup>2</sup> *Wash. Util. & Transp. Comm'n v. Pacific Power and Light Company*, Docket UE-050684, Order 04 at ¶¶ 188-189 (April 17, 2006) ("2005 Pacific Order").



1 **IV. STAFF ADJUSTMENTS 13.23 AND 11.23**

2  
3 **A. Overview of the material differences between Staff's recommendation**  
4 **and the Company's proposal as filed.**

5  
6 **Q. Please summarize Staff's recommendation to the Commission.**

7 A. Staff recommends that the Commission adopt Staff's method of directly allocating  
8 the ISWC result to the electric, gas, and non-operating segments. Staff also  
9 recommends modifying the assignments of about 60 balance sheet items within the  
10 ISWC calculation to more appropriate categories. The net result of Staff's  
11 recommendations reduces electric and gas rate bases by approximately \$33 million  
12 and \$47 million, respectively. Additionally, Staff's recommendation proposes a  
13 reduction to PSE's per books ISWC amount for electric and gas operations by  
14 approximately \$21 million and \$9 million, respectively.

15  
16 **Q. Please summarize the key differences between PSE's proposal and Staff's**  
17 **recommendation.**

18 A. There are meaningful differences between Staff and the Company on this issue. PSE  
19 uses three of the same categories as Staff (i.e., electric, gas, and non-operating) plus  
20 one more category titled "Operating Investments" to determine its cash working  
21 capital needs. Staff's recommendation eliminates "Operating Investments" as a  
22 fourth category and re-assigns the 78 balance sheet accounts included in that  
23 category to either the electric, gas, or non-operating category, as appropriate.

1                   In the end, while PSE’s proposal does determine a working capital level  
2 based on a balance sheet approach, Staff finds the method of apportioning the result  
3 to the industries a convoluted and inaccurate process. Staff determined the  
4 Company’s approach did not properly categorize all of the balance sheet accounts.  
5 Staff’s recommendation also improves the presentation of ISWC and offers a more  
6 balanced allocation of ISWC between utility and non-utility operations.  
7

8 **Q. Why did Staff eliminate the Company’s proposed “Operating Investments”**  
9 **category?**

10 A. Staff has several reasons. The first is consistency. “Operating Investments” is not  
11 used by any other utility in Washington State to calculate working capital. Second,  
12 PSE’s proposed method is not very clear. From a ratemaking perspective, working  
13 capital must go to either electric, gas, or non-utility operations. The three categories  
14 are sufficiently self-explanatory: if working capital funds an electric- or gas-related  
15 operational need, then that capital is for utility operations and merits a return, but if  
16 the capital funds non-utility operations, already earns or pays a return, and/or is not  
17 allowed for rate making, the Commission should not allow a return in utility  
18 operations. The extra category “Operating Expenses” is thus unnecessary and  
19 confusing from a ratemaking perspective. Third, PSE lumps its “Operating  
20 Investment” category with the electric and gas operations, even though some of those  
21 accounts should be non-operating accounts from Staff’s perspective. PSE’s proposal  
22 thereby over-allocates working capital to regulated electric and gas operations.  
23

1 **Q. Has Staff attempted to provide the Commission with full evidentiary support**  
2 **for Staff's proposed working capital adjustment?**

3 A. Yes. I provide Exh. BAE-2, which is a summary of Staff's ISWC and rate base  
4 adjustments, and a comparison to PSE's adjustment. Exh. BAE-3 is a complete  
5 ISWC calculation, with all accounts listed, each account categorized, a calculation of  
6 allocation factors, and allocation of ISWC to electric operations, gas operations, and  
7 non-operating segments of the Company's business.

8

9 **B. Details of Staff's Analysis**

10

11 **Q. Please explain the foundations of Staff's analysis.**

12 A. I begin with the balance sheet. The starting point for my analysis is PSE's total  
13 company balance sheet as of September 30, 2016, on an average of monthly averages  
14 basis. The Company provided that document in its work paper 5.03 E&G RB - 5.04  
15 E&G WC 17GRC, tab BS.

16

17 **Q. How did Staff calculate the total ISWC?**

18 A. Staff reviewed the underlying balance sheet accounts in Exh. BAE-3. The amounts  
19 of each account are put into one of four categories. Next, the "Total Investments"  
20 category is subcategorized into either electric, gas, or non-operating accounts. I then  
21 calculated ISWC by subtracting total investments from the total invested capital to  
22 determine the overall amount of capital provided by investors. As my Exhibit BAE-3

1 shows at Line 2405, Column e, investors are supplying capital to the tune of  
2 \$296,337,743 for PSE's cash flow needs.

3

4 **Q. How did Staff allocate the \$296,337,743 in ISWC?**

5 A. As noted above, Staff allocated the \$296 million of ISWC to three categories:  
6 electric, gas, and non-operating investment. The investment allocated to each  
7 category (Line 2402, Columns h, i, and j) is then divided by the total investments  
8 (Line 2403, Column j). The result is each category's prorated share of working  
9 capital. The calculated allocation factors are shown on Line 2407 (Columns h, i, and  
10 j) of my exhibit BAE-3 as 69.5 percent for electric, 23.3 percent for gas, and 7.2  
11 percent for non-operating. Therefore, investors supply the utility with about \$275  
12 million of the \$296 total ISWC for company operations. Non-operating investments  
13 receive the balance of \$21 million of working capital. As my exhibit BAE-2 shows,  
14 approximately \$206 million (Line 23, Column d) is allocated to electric operations  
15 and just under \$69 million (Line 26, Column d) is allocated to gas operations.

16

17 **Q. Please describe Staff's methodology and reasoning for categorizing the**  
18 **underlying balance sheet accounts that make up the ISWC.**

19 A. Staff categorized the accounts related to electric operations to the electric category.  
20 Similarly, accounts related to gas operations were assigned to the gas category. The  
21 non-operating category represents accounts that accrue or earn interest on behalf of  
22 the Company or rate payer, construction work in progress, non-utility, and/or

1 accounts not allowed for rate making purposes. The substantive difference between  
2 Staff and PSE lies in the non-operating category.

3

4 **Q. What types of accounts did Staff assign to the non-operating category?**

5 A. The following types of accounts were put into the non-operating category by Staff,  
6 but not limited to: accounts earning or accruing interest on behalf of PSE or the rate  
7 payer (e.g., bank accounts, escrow accounts, and Purchase Gas Adjustment  
8 accounts), accounts that are not allowed for rate making purposes (e.g., charity and  
9 donations), and accounts that are related to non-utility operations.

10

11 **Q. Why did Staff assign these accounts to the non-operating category?**

12 A. If an investment account that earns interest is put into the electric or gas category it  
13 would result in the opportunity for PSE to benefit from a second return from the rate  
14 payers in addition to the interest the Company is already earning. Examples include  
15 Account 13400332, LNG Facility Port of Tacoma Escrow, PGA accounts, Article  
16 103-602 accounts because these accounts all earn or accrue interest. Additionally,  
17 non-utility and/or accounts not allowed to earn a return for rate making purposes,  
18 such as hedging, charity, and donations are put into the non-operating category to  
19 assure that rate payers are not required to pay a return on those accounts. Hedging,  
20 for example, is considered non-operating because it is simply a result of market  
21 changes. It is thus more of an accounting artifact and does not represent a real  
22 investment by the company. As for charity and donations, these accounts have

1 always been disallowed for rate making purposes because they are not related to  
2 providing electric or gas service to customers.

3

4 **Q. Is the Company's working capital allocation fair and reasonable?**

5 A. No. As noted above, PSE's additional column for "Operating Investments" is not  
6 used by any other utility in Washington State to calculate working capital. PSE's  
7 allocation is also confusing and does not allocate a reasonable amount to the non-  
8 operating category because PSE lumps all of its "Operating Investment" category  
9 with the electric and gas operations. Many of the accounts PSE includes in the  
10 "Operating Investment" category should be non-operating, thereby allocating more  
11 capital to regulated electric and gas operations than should be allocated to these  
12 categories. By putting these "Operating Investment" accounts in the proper category,  
13 the percent of ISWC allocated to non-operating increases from 0.18 percent as  
14 proposed by PSE to 7.2 percent as calculated by Staff and shown on Exh. BAE-2,  
15 Line 30, Col. b vs. Col. d.

16 Finally, PSE identifies many accounts the Company categorized incorrectly  
17 as shown in Staff Exh. BAE-4 and BAE-5.<sup>3</sup> To the Company's credit, PSE's  
18 discovery responses acknowledge many of the issues my testimony raises, and the  
19 Company identifies incorrect categories for certain accounts in its original filing.<sup>4</sup>

20

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<sup>3</sup> PSE Response to Staff Data Request No. 337 Attachment A, Tab Coding Changes, and PSE Response to Staff Data Request No. 339 Attachment A.

<sup>4</sup> PSE Response to Staff Data Request No. 337 Attachment A, Tab Coding Changes (*see* second column from the right, labeled "Regulatory Treatment Should Have Been.").

1           **C.     Explanation of Exhibits**

2

3           **Q.     Please explain your Exh. BAE-2.**

4           A.     I began my analysis with PSE’s total company balance sheet as of September 30,  
5                   2016, as provided in PSE work papers 5.03 E&G RB - 5.04 E&G WC 17GRC, tab  
6                   BS.

7                   Exh. BAE-2 shows the total average invested capital on Line 3. The electric  
8                   and gas operating investments are shown on Lines 7 and 9, respectively. Non-  
9                   operating and other investments are on Line 14, and the sum of the total investments  
10                  is shown on Line 16.

11                  Line 18 shows the ISWC, which is calculated by subtracting the total  
12                  investments (Line 16) from the total invested capital (Line 3). As shown on Line 18,  
13                  Col. d, the ISWC is \$296,337,743, which ties to Exh. BAE-3 at Line 2405, Col. e.

14

15           **Q.     Please walk through the results of Staff’s ISWC analysis as documented in Exh.**  
16                   **BAE-2.**

17           A.     Exh. BAE-2 shows that Staff proposes an ISWC amount of about \$296 million (Line  
18                   18, Col. d) resulting in a proposed adjustment to decrease PSE’s per books results of  
19                   operations ISWC by \$8.8 million (Line 18, Col. c), and decreases of approximately  
20                   \$33 million and \$47 million to electric and gas rate base, respectively. Non-  
21                   operating ISWC is just over \$21 million (Line 29, Col. d), which is 7.2 percent (Line  
22                   30, Col. d) of the total and prorated share of working capital. Therefore, investors

1 supply approximately \$206 million (Line 23, Col. d) to electric operations and just  
2 under \$69 million (Line 26, Col. d) to gas operations.

3  
4 **Q. Please explain how Exh. BAE-3 calculates ISWC.**

5 A. Column C shows PSE's total company balance sheet as of September 30, 2016,  
6 average of monthly average balances. These amounts go into the following  
7 categories and columns:

- 8 • Current Assets (Col. d);
- 9 • Current Liabilities (Col. e);
- 10 • Average Invested Capital (Col. f); and
- 11 • Total Investments (Col. g).

12 Next, my exhibit BAE-3 documents the "Total Investments" as sub-  
13 categorized into electric (Col. h), gas (Col. i), or non-operating (Col. j).

14 Once all accounts are categorized appropriately, total investments are  
15 subtracted from average invested capital to determine whether or not the investors  
16 have provided working capital to meet the day-to-day needs of the business. Staff's  
17 ISWC calculation of \$296,337,743 (shown on Line 2405, Col. e) is the amount being  
18 provided by investors. This working capital amount is then allocated based on  
19 electric, gas, and non-operating investment divided by the total average investments  
20 to get each component's prorated share of working capital. The calculated allocation  
21 factors are shown on Line 2407 as 69.5 percent for electric, 23.3 percent for gas, and  
22 7.2 percent for non-operating.





1                   • Allocate ISWC based on percentage of total average investment as shown  
2                   in Exh. BAE-2, decreasing ISWC for electric and gas as proposed by  
3                   Staff.

4

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

6   A.    Yes.

7