BEFORE THE WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

Complainant,

v.

PUGET SOUND ENERGY, INC.

Respondent.

DOCKET NOs. UE-072300 and UG-072301

DIRECT TESTIMONY OF GLENN A. WATKINS (GAW-1T)

ON BEHALF OF

PUBLIC COUNSEL

REVISED (RED-LINED)

June 23, 2008

**NON-CONFIDENTIAL**

DIRECT TESTIMONY OF GLENN A. WATKINS (GAW-1T)
DOCKET NOs. UE-072300 AND UG-072301

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DIRECT TESTIMONY OF GLENN A. WATKINS (GAW-1T)
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**EXHIBITS OF GLENN A. WATKINS (GAW-1T)**

| | |
|---|---|
| Exhibit No. ___ (GAW-2) | Background & Experience Profile |
| Exhibit No. ___ (GAW-3) | Electric Class Cost of Service Study<br>(PSE Study Corrected for the Calculation of Income Taxes) |
| Exhibit No. ___ (GAW-4C) | PSE SCCT Hours of Dispatch Generating Units<br>Time Period: 7/1/06 – 6/30/07 (Confidential) |
| Exhibit No. ___ (GAW-5) | Classification of Generation Plant |
| Exhibit No. ___ (GAW-6) | Public Counsel Electric Class Cost of Service Study |
| Exhibit No. ___ (GAW-7) | PSE and Public Counsel Revenue Distribution Proposals |
| Exhibit No. ___ (GAW-8) | Electric Residential Customer Costs<br>(Cost of Equity @ PSE Proposed) |
| Exhibit No. ___ (GAW-9) | Example of Flow Analysis |
| Exhibit No. ___ (GAW-10) | Public Counsel Gas Class Cost of Service Study |
| Exhibit No. ___ (GAW-11) | PSE Natural Gas Operations<br>PSE and Public Counsel Revenue Distribution Proposals |
| Exhibit No. ___ (GAW-12) | Natural Gas Residential Customer Costs<br>(Cost of Equity @ PSE Proposed) |
| Exhibit No. ___ (GAW-13) | Natural Gas Residential Customer Costs<br>(O&M + Depreciation Based) |

# I. INTRODUCTION

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

A: My name is Glenn A. Watkins. My business address is James Center III, 1051 East Cary Street, Suite 601, Richmond, VA 23219.

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

A: I am a Principal and Senior Economist with Technical Associates, Inc., which is an economics and financial consulting firm with offices in Richmond, Virginia.

**Q: On whose behalf are you testifying?**

A: I am testifying on behalf of the Public Counsel Section of the Washington Attorney General's Office (Public Counsel).

**Q: Please describe your professional qualifications.**

A: Except for a six month period during 1987 in which I was employed by Old Dominion Electric Cooperative as its forecasting and rate economist, I have been employed by Technical Associates continuously since 1980.

During my career at Technical Associates, I have conducted marginal and embedded cost of service, rate design, cost of capital, and load forecasting studies involving numerous electric, gas, water/wastewater, and telephone utilities, and have provided expert testimony in Alabama, Arizona, Georgia, Maine, Maryland, Massachusetts, Michigan, New Jersey, Illinois, Pennsylvania, Vermont, Virginia, South Carolina, Washington, and West Virginia. I hold an M.B.A and B.S. in economics from Virginia Commonwealth University. I am a member of several professional organizations as well as a Certified Rate of Return Analyst. A more complete description of my education and experience is provided in Exhibit No.___ (GAW-2).

**Q: What is the purpose of your testimony in this proceeding?**

A: Technical Associates has been retained by Public Counsel to evaluate the accuracy and reasonableness of Puget Sound Energy's (PSE or Company) electric and natural gas class cost of service studies (CCOSS), proposed distribution of revenues by class, and residential rate designs. The purpose of my testimony, therefore, is to comment on PSE's proposals on these issues and to present my findings and recommendations based on the results of the studies I have undertaken on behalf of the Public Counsel.

**Q: Please explain how your direct testimony is structured.**

A: I have separated my direct testimony into three sections: Electric Operations; Natural Gas Operations; and PSE Supplemental Filing. For each operational section, I have three subsections entitled: Class Cost of Service; Class Revenue Distribution; and, Residential Rate Design. My testimony concerning the first two sections (Electric Operations and Natural Gas Operations) is based entirely on the Company's initial filing dated December 3, 2007. I discuss the rate design implications of PSE's April 11, 2008 supplemental filing separately in the last section of my testimony.

## II. ELECTRIC OPERATIONS

### A. ELECTRIC COST OF SERVICE

**Q: Please explain the concept of a class cost of service study (CCOSS).**

A: There are two general types of cost of service studies used for public utility ratemaking: marginal cost studies and embedded, fully allocated cost studies. PSE has utilized a traditional embedded cost of service concept in this case for purposes of establishing its overall retail revenue requirement, as well as for its CCOSS. However, as I will explain

1 later in my testimony certain aspects of the Company's electric CCOSS are premised on
2 forward looking marginal cost principles.

3 Embedded cost of service studies are often referred to as fully allocated cost
4 studies. This is because the vast majority of a public utility's plant investment serves all
5 customers, and the majority of expenses are incurred in a joint manner such that these
6 costs cannot be specifically attributed to any individual customer or group of customers.
7 To the extent that certain costs can be specifically attributed to a particular customer (or
8 group of customers), these costs are directly assigned in a CCOSS. However, the vast
9 majority of PSE's Production, Transmission, and Distribution plant and expenses are
10 incurred jointly to serve all (or most) customers. These joint costs are then allocated to
11 rate classes.

12 It is generally recognized that to the extent possible, joint costs should be
13 allocated to classes based on the concept of cost causation; i.e., costs are allocated based
14 on specific factors that cause costs to be incurred by the utility. Although cost analysts
15 generally strive to abide by the concept of cost causation to the greatest extent practical,
16 some costs (particularly overhead costs), cannot be attributed to specific exogenous
17 factors and must be subjectively assigned or allocated to rate classes. With regards to
18 those costs that can be attributed to a specific factor, cost of service experts often disagree
19 as to what is the most cost causative factor; e.g., peak demand, energy usage, number of
20 customers, etc.
21

1 **Q: How should CCOSS results be used in the ratemaking process?**

2 A: Although there are certain principles used by all cost of service analysts, there are often
3 significant disagreements on the specific factors that drive costs. These disagreements
4 can and do arise as a result of the quality of data and the level of detail available from
5 financial records. Moreover, there are often fundamental differences in opinions
6 regarding cost causation factors that should be considered to properly allocate costs to
7 rate schedules or customer classes. Additionally, and as mentioned earlier, cost
8 causation factors cannot be realistically ascribed to some costs such that subjective
9 decisions are required.

10 In these regards, two different cost studies conducted for the same utility and time
11 period can, and often do, yield different results. As such, regulators should consider
12 CCOSS results as one of many tools in assigning revenue responsibility.

13 **Q: Please explain how you proceeded with your analysis of PSE's electric CCOSS.**

14 A: The process by which I conducted my analysis in this case was identical to how I
15 evaluate all CCOSSs. First, I reviewed the structure and organization of the Company's
16 CCOSS presented by PSE witness, David W. Hoff, in Exhibit No.___ (DWH-4C). Once
17 the basic structure was understood, I reviewed the accuracy and completeness of the
18 primary drivers (allocators) used to assign costs to rate schedules and classes. Next, I
19 reviewed PSE's selection of allocators used to allocate specific rate base, revenue and
20 expense accounts to customer rate classes. I then verified the accuracy of PSE's CCOSS
21 model by replicating the results using my own computer model. Finally, I adjusted
22 certain aspects of the Company's studies to better reflect cost causation and cost
23 incidence by rate schedule and customer class.

1 **Q: Did you find the Company's electric CCOSS to be mathematically accurate?**

2 A: Yes. Perhaps the most fundamental requirement of an embedded CCOSS is that the sum
3 of the parts (customer classes) must equal the whole (system). This is true with respect
4 to the allocation of financial accounts, as well as the various allocation factors.
5 Furthermore, certain costs previously allocated are carried forward for other purposes
6 such as for the development of composite or internal allocators and for the assignment of
7 income taxes. In all regards, I found Mr. Hoff's electric CCOSS to be mathematically
8 accurate and I was able to replicate his results.

9 **Q: How will you present the results of your CCOSS analyses?**

10 A: To understand the importance and impact of each adjustment I have made to Mr. Hoff's
11 CCOSS, I present a summary of each customer class's rate of return on rate base at
12 current rates after each adjustment. That is, I start with a replication of Mr. Hoff's
13 results, and subsequently present and discuss the resulting class rates of return at current
14 rates after each of my adjustments.

15 **Q: Please provide a summary of Mr. Hoff's CCOSS results at current rates.**

16 A: Mr. Hoff's CCOSS generates the following rates of return on rate base at current rates. It
17 should be noted that Mr. Hoff's electric CCOSS reflects all accounting and proforma
18 adjustments proposed by the Company in its initial filing on December 3, 2007.

19 / /

20 / / /

21 / / / /

22 / / / / /

23 / / / / / /

**Table 1**
**Replication of PSE Electric CCOSS**
**at Current Rates**

| Rate Schedule | Class | Rate of Return | Indexed ROR |
|---|---|---|---|
| 7 | Residential | 2.87% | 54% |
| 24 | Secondary Voltage <50kw | 5.77% | 109% |
| 25 | Secondary Voltage >50kw and <350kw | 12.62% | 238% |
| 26 | Secondary Voltage >350 | 11.33% | 213% |
| 31/35/43 | Primary Voltage | 6.96% | 131% |
| 40 | Campus | 5.73% | 108% |
| 46/49 | High Voltage | 4.11% | 77% |
| 449/459 | Transportation | 6.06% | 114% |
| 50-59 | Lighting | 8.69% | 164% |
| 5 | Firm Resale | 2.34% | 44% |
| Total Company | | 5.31% | 100% |

### 1. Income Taxes

**Q: Please explain your disagreements with Mr. Hoff relating to the treatment of income taxes for purposes of PSE's CCOSS.**

A: As is the case for virtually all investor owned public utilities, income taxes represent a significant expense for PSE's electric operations. Although Mr. Hoff has incorporated PSE's total company electric income taxes in his CCOSS, his analysis at current rates inappropriately assigns this expense to individual classes.

It is well understood that income tax expense is based on before tax profits. However, Mr. Hoff's CCOSS analysis at current rates ignores this concept and allocates PSE's total electric income taxes to customer classes based on allocated rate base (investment). In other words, Mr. Hoff's CCOSS analysis at current rates assigns income tax expense based on the level of plant investment rather than profit contributions by customer class. Mr. Hoff's determination of each class's income tax responsibility,

1 therefore, has nothing to do with the reality of tax incidence (revenues minus expenses),
2 but rather is based solely on investment. Mr. Hoff's approach unrealistically assigns the
3 same level of income tax responsibility to individual classes regardless of each class's
4 revenues and expenses.

5 This allocation, or assignment, of total Company income taxes based on rate base
6 investment significantly distorts individual class profitability at current rates and provides
7 inaccurate information as to the adequacy, or inadequacy, of current rates.

8 **Q: Are income taxes normally calculated or allocated for other types of financial or**
9 **profitability analysis?**

10 A: It is universally agreed that when the objective is to evaluate profitability, whether it be
11 for a firm, a specific business unit, or single project, income tax expenses are based on
12 the difference between revenue and deductible expenses. Allocating the total income
13 taxes based on investment (rate base) makes no sense.

14 **Q: Have you conducted a replication analysis of Mr. Hoff's CCOSS with a more proper**
15 **determination of class income tax responsibility?**

16 A: Yes.

17 **Q: Please explain how you calculated electric income taxes for each class.**

18 A: Income taxes were calculated for each class by first determining each class' earnings
19 before interest and income taxes (EBIT). Synchronized interest expense was then
20 determined for each class based on the allocated level of rate base. Subtracting interest
21 from EBIT results in each class's taxable income. This taxable income amount was then
22 multiplied by the system effective income tax rate to arrive at each class' income tax
23 responsibility.

**Q: What individual class rates of return result when Mr. Hoff's study is adjusted for a proper calculation of income taxes?**

A: A summary of this CCOSS scenario is provided in Exhibit No. ___ (GAW-3). A summary comparison of class rates of return (ROR) on rate base is provided below:

**Table 2**
**Electric CCOSS (at Current Rates)**
**ROR**

| | PSE Study | | Indexed ROR | |
|---|---|---|---|---|
| Class | Corrected For Income Taxes | As Filed By PSE | Corrected For Income Taxes | As Filed By PSE |
| Residential | 4.09% | 2.87% | 77% | 54% |
| Secondary Sch. 24 | 5.54% | 5.77% | 104% | 109% |
| Secondary Sch. 25 | 8.97% | 12.62% | 169% | 238% |
| Secondary Sch. 26 | 8.33% | 11.33% | 157% | 213% |
| Primary Sch. 31/35/43 | 6.14% | 6.96% | 115% | 131% |
| Campus Sch. 40 | 5.52% | 5.73% | 104% | 108% |
| High Voltage Sch 46/49 | 4.71% | 4.11% | 89% | 77% |
| Transportation Sch. 44 | 5.68% | 6.06% | 107% | 114% |
| Lighting | 7.01% | 8.69% | 132% | 164% |
| Firm Resale | 3.82% | 2.34% | 72% | 44% |
| Total Electric | 5.31% | 5.31% | 100% | 100% |

As can be seen above, the correction to income taxes produces significantly different results for several classes. Most notably, the Residential class ROR rises from 2.87 percent (54% of the system average) to 4.09 percent (77% of system average), the Firm Resale class rises from 2.34 percent (44% of system average) to 3.82 percent (72% of system average). Rate Schedule 25 decreases from 12.62 percent (238% of system average) to 8.97 percent (169% of system average), and Rate Schedule 26 decreases from 11.33 percent (213% of system average) to 8.33 percent (157% of system average).

**2. Excise Taxes and WUTC Fees**

**Q: Please explain your next adjustments to Mr. Hoff's electric CCOSS.**

A: The next adjustments I made to Mr. Hoff's CCOSS also reflect a more accurate assignment of expenses, specifically related to WUTC filing fees, and Washington State excise taxes. Whereas each of these expenses are incurred on revenue levels, Mr. Hoff allocates them to individual classes based on gross Production, Transmission, and Distribution plant (PTDP) investment.

I separated Account No. 928 into two components and allocated PSE's proforma WUTC fees ($3,628,231) based on retail rate revenues and the remainder ($2,075,607) on the basis of Mr. Hoff's PTDP allocator. With regards to proforma Washington Excise Tax expense booked under Account 236.21, I also allocated these revenue taxes based on retail rate revenue. These adjustments to revenue-related taxes and fees, coupled with my previous adjustment to properly reflect income tax responsibility, results in the following rates of return at current rates:

**Table 3**
**Electric CCOSS (at Current Rates)**
**Incorporating Income Taxes, Other Taxes and Fees Adjustments**

| Class | ROR | Indexed ROR |
|---|---|---|
| Residential | 4.22% | 79% |
| Secondary Sch. 24 | 5.51% | 104% |
| Secondary Sch. 25 | 8.69% | 164% |
| Secondary Sch. 26 | 7.90% | 149% |
| Primary Sch. 31/35/43 | 5.96% | 112% |
| Campus Sch. 40 | 5.10% | 96% |
| High Voltage Sch 46/49 | 4.21% | 79% |
| Transportation Sch. 449 | 6.49% | 122% |
| Lighting | 7.26% | 137% |
| Firm Resale | 4.42% | 83% |
| Total Electric | 5.31% | 100% |

The details underlying these CCOSS results are provided in my filed workpapers.

1 **3. Power Supply Costs**

2 **Q: How has PSE assigned generation and other power supply costs to customer**
3 **classes?**

4 A: Mr. Hoff has utilized the Peak Credit method to classify power supply costs between
5 energy and demand. As noted on pages 10 and 11 of Mr. Hoff's direct testimony, the
6 Peak Credit method has a "long tradition in this region" and indeed has been used in
7 Washington State for many years by PSE, as well as other electric utilities.

8 **Q: Please explain the conceptual basis for the Peak Credit method.**

9 A: In general, electric utilities plan their power supply resources to meet the objective of
10 supplying the energy (kwh) needs of its customers at the lowest total costs, subject to the
11 constraint that enough capacity (kw) must also be available to meet peak load
12 requirements. Because there is typically a cost tradeoff between fixed capacity costs and
13 variable energy costs, an electric utility's power supply portfolio includes a mix of
14 expensive fixed capacity (kw)/cheaper variable (energy) cost resources to meet annual
15 energy requirements and less expensive fixed/more costly variable (energy) costs
16 resources to meet peak load demands. The Peak Credit method (and other peaker
17 methods) attempts to capture this energy/capacity tradeoff by recognizing that peak
18 demands require only peaking generation while more efficient base and intermediate
19 generation facilities are used to meet the annual energy requirements of customers.

20 As such, the Peak Credit method and other peaker methods have substantial
21 intuitive appeal in that base load units which operate with high capacity factors are
22 allocated on the basis of energy consumption, while peaking units, that are seldom used

1 and only called upon during peak load periods, are allocated on peak demand in
2 proportion to those classes contributing to the system peak load(s).

3 **Q: Please explain how Mr. Hoff applied the Peak Credit method in this case.**

4 A: As implied earlier, there are two components that result from the Peak Credit method: a
5 portion of power supply classified and allocated as demand-related (kw) and a portion
6 classified and allocated as energy-related (kwh). PSE has developed its demand/energy
7 relationship by calculating the ratio of the costs of a hypothetical peaker unit (demand) to
8 those of a hypothetical base load unit (energy).

9 **Q: What do you mean by the hypothetical costs of peaker and base load units?**

10 A: Instead of utilizing the actual costs of a particular generating unit actually in service, PSE
11 has estimated the forward-looking capital and operating costs of a natural gas-fired
12 simple cycle gas combustion turbine (SCCT) as a surrogate for a peaker unit and
13 forward-looking estimates of the capital and operating costs of a combined cycle
14 combustion turbine (CCCT) as a surrogate for a base load unit.

15 **Q: Please continue with your explanation of Mr. Hoff's application of the Peak Credit**
16 **method.**

17 A: Of critical importance is an understanding that Mr. Hoff's cost estimates for the
18 hypothetical SCCT and CCCT reflect estimates of both fixed capital costs and variable
19 operating costs. Specifically, Mr. Hoff assumes the SCCT unit will be used solely for
20 peaking purposes and operate only 75 hours per year.[1] Furthermore, Mr. Hoff assumes

[1] There are 8,760 hours in a year.

that the cost of natural gas used to run this SCCT will be purchased at a premium due to the assumed peaking nature of the unit.[2]

**Q: Mr. Watkins, have you investigated the reasonableness of Mr. Hoff's assumption that the hypothetical SCCT would be used solely for peaking purposes?**

A: Yes.

**Q: Please explain your investigation and the reasonableness of Mr. Hoff's assumption that a SCCT will only operate for 75 hours during peak load conditions.**

A: To investigate the assumption that a PSE-owned SCCT would be used only to meet peak loads, I evaluated the characteristics of PSE's dispatch of its generation, and specifically the actual dispatch of its SCCTs. In Public Counsel Data Request No. 456, I requested and was provided hourly PSE Area loads (retail plus wholesale) for the period October 1, 2005 through June 30, 2007. In addition, the hourly output of each PSE owned gas generation unit was provided in response to Public Counsel Data Request No. 457. With these two sets of data, I was able to evaluate the frequency of SCCT dispatch to serve PSE's Area loads. In other words, I was able to examine not only the number of hours in a year that PSE dispatches (utilizes) its SCCT's, but also examine each hourly SCCT dispatch relative to the PSE Area load requirements.

The period October 1, 2005 through June 30, 2007 was separated into two annual periods (October 1, 2005 through September 30, 2006, and July 1, 2006 through June 30, 2007) to enable an analysis of two complete winter seasons. PSE-owned, operated, and

[2] Because PSE's electric peak loads are in the winter and Mr. Hoff assumes this SCCT will only operate during the highest load periods of the winter, he further assumes that there will be a premium on the cost of gas for this unit because he assumes that fuel will be purchased during periods when natural gas is also in high demand.

dispatched four separate SCCTs during this study period. A summary of each unit's hours of dispatch during these two annual periods is provided below:

**[Begin Confidential]**

[redacted]

**(End Confidential)**

**Q: Please continue with your explanation of the operating characteristics of PSE's SCCT dispatch.**

A: Although PSE utilizes its SCCTs significantly more than the 75 hours assumed by Mr. Hoff **[Begin Confidential]** [redacted] **[End Confidential]**, this by itself tells us nothing of whether these units are used primarily to meet peak period demand. Therefore, I also compared each SCCT's hourly dispatch and its coincidence with the PSE area load. In this manner, I was able to determine the extent to which PSE utilizes its SCCTs for peaking purposes.

---

[3] **[Begin Confidential]** [redacted] **[End Confidential].**

1 To avoid disagreement as to what levels of load constitutes "peak" periods, I
2 evaluated the dispatch of PSE's SCCT's at various peak period definitions. Mr. Hoff
3 used the highest 75 hours of peak load to develop his coincident peak demand allocators
4 in his CCOSS, and indicated that 75 hours was selected because "[w]hile the data did not
5 suggest a clear cut-off point, the top 75 hours have peaks that were within 90 percent of
6 the system peak."[4]

7 Indeed, there are about 75 hours per year in which the PSE system load is at or
8 above 90 percent of the annual peak load. In addition to this 90 percent of annual peak
9 load standard, I also evaluated SCCT dispatch under more conservative definitions of
10 "peak" demand, including hours at or above 80 percent of annual peak, 70 percent of
11 annual peak, as well as PSE's previous standard of the highest 200 hours of peak load.

12 The detailed results of my analysis of PSE's utilization of its SCCTs is provided
13 in Exhibit No. ___ (GAW-4C).

14 **Q: Mr. Watkins, please explain what is shown in Exhibit No. ___ (GAW-4C) and your**
15 **conclusions based on the data therein.**

16 A: In Exhibit No.___(GAW-4C), I tabulate the number of hours of operation of each PSE
17 SCCT based on my analysis of the data provided by PSE in response to Public Counsel
18 Data Request No. 457. Specifically, this response provided the hourly generation of each
19 of PSE's generating facilities within the period October 1, 2005 through June 30, 2007.

20 In undertaking my analysis of the operations of PSE's SCCTs throughout this
21 period, I evaluated the operations of PSE's Fredonia, Frederickson and Whitehorn
22 generating facilities. These PSE generating facilities are identified in the Company's

[4] Hoff direct testimony at p. 13, ll. 9-11.

2007 Integrated Resource Plan (IRP) as SCCTs. My analysis, therefore, consists of tabulating the hours of operations of these generating facilities to meet Area loads that are within 90 percent, 80 percent, and 70 percent of the system peak load designated in PSE's response to Public Counsel Data Request No. 456.

**[Begin Confidential]**

[redacted]

[redacted]

**[End Confidential]**

Q: **How should PSE's actual dispatch of SCCTs during off-peak hours be reflected in the Peak Credit method?**

A: Given PSE's high levels of SCCT dispatch during off-peak periods, I recommend two adjustments to Mr. Hoff's Peak Credit assumptions and calculations. First, an annual utilization of [**Begin Confidential**] [redacted]**[End Confidential]** is clearly more appropriate than the 75 hours assumed by Mr. Hoff. This adjustment, by itself, increases the levelized cost of the SCCT unit relative to the CCCT baseload unit and increases the demand component from 26 percent to 28 percent. The second necessary adjustment is to recognize the magnitude of SCCT utilization during off-peak periods. In this regard, I recommend a 50 percent on-peak and a 50 percent off-peak SCCT utilization.

Q: **Why do you recommend a 50 percent on-peak and a 50 percent off-peak utilization when PSE actually dispatches its SCCTs in a more off-peak manner?**

A: **[Begin Confidential]** [redacted] **[End Confidential]**

Q: **What is the result of your two adjustments to Mr. Hoff's Peak Credit method?**

1 A: These two adjustments result in a classification of 14 percent demand and 86 percent
2 energy. For purposes of my CCOSS analysis, I have used a split of 15 percent demand
3 and 85 percent energy.

4 **Q: Do any other Washington State utilities recognize the off-peak utilization of SCCTs**
5 **in their application of the Peak Credit method?**

6 A: Yes. In its pending application before this Commission, PacifiCorp assigns 50 percent of
7 SCCT fixed costs to off-peak hours and 50 percent to on-peak hours.[5] This 50/50
8 assignment reduces the ratio of peak to base load costs in the same manner that I
9 recommend in this case.

10 **Q: Have you reviewed the Peak Credit demand/energy classification used by PSE in**
11 **previous cases?**

12 A: Yes.

13 **Q: What are these historical Peak Credit classifications?**

14 A: In response to WUTC Staff Data Request No. 100, PSE provided the allocation
15 (classification) percentages for demand and energy used in each rate case since 1982.
16 During the period 1982 through 1989, PSE made separate demand/energy classifications
17 for Thermal Hydro, and "Other" power supply resources. All power supply resources
18 have been combined since the 1992 case, and the following demand/energy percentages
19

[5] *See WUTC v. PacifiCorp d/b/a/ Pacific Power & Light Company*, Docket No. UE-080220.

have been utilized:

**Table 5**
**Classification Percentages**

| Docket No. | Energy % | Demand % |
|---|---|---|
| UE-921262 | 87% | 13% |
| UE-011570 | 84% | 16% |
| UE-040641 | 86% | 14% |
| UE-060266 | 80% | 20% |
| UE-072300 | 74% | 26% |

As can be seen above, my recommended 85 percent energy and 15 percent demand split is consistent with PSE's classification prior to the 2006 rate case.

Q: **Earlier in your testimony you discussed PSE's use of hypothetical SCCT and CCCT generating units. How were costs developed for the hypothetical generating units?**

A: Mr. Hoff forecasted the future revenue requirements for each of these two units utilizing estimated construction costs, forecasts of natural gas prices, and forecasts of other operating costs.

Q: **Are these forecasted generating unit costs subject to uncertainty?**

A: **[Begin Confidential]** [redacted] **[End Confidential]** Of course, this involves a considerable amount of uncertainty. Furthermore, PSE's choice of which types of plants to use in their Peak Credit method is subject to uncertainty, let alone the estimated construction costs of the particular SCCT and CCCT selected for the hypothetical units. Finally, the future revenue requirement for each hypothetical unit is calculated and levelized to present value. Of critical importance to these calculations are

1 the assumed future costs of gas, costs of capital, and capital structure. For purposes of
2 PSE's analyses, Mr. Hoff has used the Company's proposed capital structure and
3 proposed costs of debt and equity. Each of these parameters represents multiple
4 uncertainties and requires assumptions that may or may not be reasonable.

5 **Q: Did you test the reasonableness of Mr. Hoff's forecasted fuel prices and operating**
6 **expenses incorporated in the calculations of generating unit costs?**

7 A: Yes I did.

8 **Q: Does the use of hypothetical investments, coupled with the uncertainties of future**
9 **assumed cost, cause you concern as to the reasonableness of either PSE's or your**
10 **own Peak Credit results?**

11 A: Yes, they do.

12 **Q: Were you able to test the reasonableness of the assumptions used by Mr. Hoff in his**
13 **Peak Credit analysis?**

14 A: Yes.

15 **Q: Please explain how you tested the reasonableness of Mr. Hoff's Peak Credit input**
16 **assumptions.**

17 A: In response to Public Council Data Request No. 454, I was provided PSE's confidential
18 computer model used to develop Mr. Hoff's proposed 26 percent demand and 74 percent
19 energy classification of electric supply resources. I undertook the calculations of
20 numerous scenarios with alternative future cost assumptions, including various future
21 inflation rates, costs of gas, costs of capital, capacity factors (utilization rates), and plant
22 investment costs. Not surprisingly, I found that the model is most sensitive to the

assigned capital construction costs of the selected plants and the estimation of future gas prices. PSE's model is relatively insensitive to the other model input assumptions.

**Q: Did you conduct other analyses to test the reasonableness of your recommended 15 percent demand and 85 percent energy classification of electric supply resources?**

A: Yes.

**Q: Please discuss these additional analyses.**

A: As is true for every cost allocation methodology, the Peak Credit method is subject to conceptual and practical criticism. To test the reasonableness of my recommended 15 percent demand and 85 percent energy classification of PSE's electric supply resources, I also conducted an analysis utilizing actual PSE booked (embedded) costs. Specifically, I evaluated PSE's actual investment in each generating facility and classified each unit as demand-related (peak) or energy-related (base load). I classified PSE's steam plant (Colstrip), hydro, wind, and CCCT generating unit investments as base load energy-related and its other generating units (SCCTs) as peaking units. The details of this analysis are provided on page 1 of Exhibit No. ___ (GAW-5) and produce the following results:

| | |
|---|---|
| Base Load (Energy) related | 94.46% |
| Peaker (Demand) related | 5.54% |

Recognizing that there are some peaking capabilities of PSE's hydro units and that its combined cycle (CCCT) units do not operate at 100 percent capacity factors, I also conducted sensitivity analyses whereby I reclassified each hydro unit as 25 percent demand-related and 75 percent energy-related and reclassified each CCCT unit as 15 percent demand-related and 85 percent energy-related. This analysis produced an overall

energy supply classification of 11.9 percent demand and 88.1 percent energy, as shown on page 2 of Exhibit No. ___ (GAW-5).

Based on these analyses, the diurnal and short-term peaking capabilities of certain hydro units, minimum water flow requirements, recognition of the fact that PSE meets a substantial portion of its peak load and energy requirements with purchased power (primarily hydro), and that Pacific Northwest regional wholesale market prices may dictate the dispatch of PSE's generating units at times that would otherwise be deemed inappropriate, I conclude that my adjustment to PSE's proposed 26 percent demand and 74 percent energy classification is conservatively reasonable such that a 15 percent demand and 85 percent energy is an appropriate classification of electric supply resources for CCOSS purposes.

**Q: What are your CCOSS results after your adjustment to PSE's electric supply resource classification using your recommended 15 percent demand-related and 85 percent energy-related classification?**

A: Building upon my earlier adjustments, the following class rates of return result from

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classifying electric supply resources as 15 percent demand and 85 percent energy:

**Table 6**
**Electric CCOSS (at Current Rates)**
**Incorporating Income Taxes, Other Taxes and Fees,**
**and Power Supply Cost Adjustments**

| Class | ROR | Indexed ROR |
|---|---|---|
| Residential | 4.67% | 88% |
| Secondary Sch. 24 | 5.23% | 98% |
| Secondary Sch. 25 | 8.11% | 153% |
| Secondary Sch. 26 | 6.92% | 130% |
| Primary Sch. 31/35/43 | 5.04% | 95% |
| Campus Sch. 40 | 3.49% | 66% |
| High Voltage Sch 46/49 | 2.62% | 49% |
| Transportation Sch. 44 | 6.23% | 117% |
| Lighting | 7.08% | 133% |
| Firm Resale | 4.33% | 82% |
| Total Electric | 5.31% | 100% |

**Q: Please explain your remaining adjustments to Mr. Hoff's CCOSS.**

A: My last two adjustments to Mr. Hoff's electric CCOSS relate to: (1) the allocation of Salaries and Wages, which are then used to allocate certain rate base and expense accounts; and (2) the allocation of General Plant.

With regards to Salaries and Wages, Mr. Hoff grouped all labor costs into seven major categories and separately allocated each of these major categories.[6] In contrast, I have allocated Salaries and Wages associated with each individual FERC account based on the analysis of labor expenses by individual FERC account that was conducted by PSE witness, John Story and provided in his filed workpapers. As may be expected, this more detailed analysis did not produce significantly different results than those obtained by the

[6] Mr. Hoff's salaries and wages categories are: Production, Transmission, Distribution, Customer Accounts, Customer Service, and Information, General, and Sales.

more generic grouping of labor costs done by Mr. Hoff. The class rates of return obtained after a more specific allocation of Salaries and Wages (and building upon by previous CCOSS adjustments) is as follows:

**Table 7**
**Electric CCOSS (at Current Rates)**
**Incorporating All Table 6 and Salaries & Wages Adjustments**

| Class | ROR | Indexed ROR |
|---|---|---|
| Residential | 4.70% | 88% |
| Secondary Sch. 24 | 5.24% | 99% |
| Secondary Sch. 25 | 8.11% | 153% |
| Secondary Sch. 26 | 6.90% | 130% |
| Primary Sch. 31/35/43 | 4.86% | 91% |
| Campus Sch. 40 | 3.42% | 64% |
| High Voltage Sch 46/49 | 2.55% | 48% |
| Transportation Sch. 44 | 6.11% | 115% |
| Lighting | 6.70% | 126% |
| Firm Resale | 4.22% | 79% |
| Total Electric | 5.31% | 100% |

**Q: Mr. Watkins, please explain your final CCOSS adjustment which relates to the allocation of General plant.**

A: Mr. Hoff allocated almost all of the Company's $282 million investment in General Plant based on Salaries and Wages.[7] Although I cannot say that Mr. Hoff's rationale and method to allocate General Plant is necessarily unreasonable since this approach is sometimes used in the industry, a more common, and in my opinion preferred, approach is to allocate General Plant based on the investment this "general" plant supports namely: Production, Transmission, and Distribution plant (PTD). As such, I have allocated all General Plant based on the composite investment in PTD plant.

[7] The exception is that Mr. Hoff allocated $1.076 million of General Plant associated with "Stores" equipment based on Production, Transmission, and Distribution Plant.

This adjustment, in conjunction with my earlier adjustment, produces my final recommended class rates of return at current rates and are summarized below:

**Table 8**
**Electric CCOSS (at Current Rates)**
**Incorporating All Public Counsel Adjustments**

| Class | ROR | Indexed ROR |
|---|---|---|
| Residential | 4.74% | 89% |
| Secondary Sch. 24 | 5.30% | 100% |
| Secondary Sch. 25 | 7.94% | 149% |
| Secondary Sch. 26 | 6.71% | 126% |
| Primary Sch. 31/35/43 | 4.83% | 91% |
| Campus Sch. 40 | 3.34% | 63% |
| High Voltage Sch 46/49 | 2.44% | 46% |
| Transportation Sch. 44 | 5.83% | 110% |
| Lighting | 7.46% | 140% |
| Firm Resale | 4.06% | 76% |
| Total Electric | 5.31% | 100% |

The detailed output of my recommended CCOSS is provided in Exhibit No. ___ (GAW-6).

**Q: Please provide a comparison of your CCOSS results to those obtained by PSE witness Hoff.**

A: The following is a comparison of my recommended electric CCOSS rates of return at current rates:

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**Table 9**
**Electric CCOSS (at Current Rates)**
**Comparison of Results**

| | ROR @ Current Rates | |
|---|---|---|
| Class | Public Counsel (Watkins) | PSE (Hoff) |
| Residential | 4.74% | 2.87% |
| Secondary Sch. 24 | 5.30% | 5.77% |
| Secondary Sch. 25 | 7.94% | 12.62% |
| Secondary Sch. 26 | 6.71% | 11.33% |
| Primary Sch. 31/35/43 | 4.83% | 6.96% |
| Campus Sch. 40 | 3.34% | 5.73% |
| High Voltage Sch 46/49 | 2.44% | 4.11% |
| Transportation Sch. 44 | 5.83% | 6.06% |
| Lighting | 7.46% | 8.69% |
| Firm Resale | 4.06% | 2.34% |
| Total Electric | 5.31% | 5.31% |

## B. ELECTRIC CLASS REVENUE DISTRIBUTION

**Q: How did Mr. Hoff determine his proposed distribution of the Company's requested electric revenue increase to individual classes?**

A: Mr. Hoff sponsors PSE's proposed class distribution of the Company requested electric revenue increase of $174.8 million. Mr. Hoff states that his proposed revenue distribution to customer classes is influenced by two "rate spread policy factors": (1) the results of his cost of service study and relationships to system parity of the customer classes; and, (2) the impact on different classes of customers of the proposed revenue spread. Mr. Hoff goes on to describe his proposed rate spread as follows:

> Based upon the parity ratios shown in the Company's cost of service study and the desire to move towards parity in a gradual manner, the Company proposes to apply the average rate increase to retail classes within 5% of parity, apply a rate increase that is 125% of the average to the rate class

that is below 95% of parity (residential class), apply a rate increase that is 75% of the average to the one class that is more than 5%, but less than 10%, above parity (Lighting), and apply an increase that is 50% of the average to the two classes that are over 10% above parity (Medium Secondary Voltage and Large Secondary Voltage). As discussed below, rates in Schedule 40 (Large Demand General Service Greater than 3 aMW) are tied to rates in the high voltage schedules such that the rate increases for that schedule are not independently determined. The wholesale for resale is moved to full parity so that there is not a cross-jurisdictional subsidy.[8]

A summary of PSE's proposed revenue increase to the CCOSS customer rate classes is shown below:

**Table 10**
**PSE-Proposed Electric Revenue Increase[9]**

| Class | Amount | Percent Increase |
|---|---|---|
| Residential (Schedule 7) | $115,972,986 | 11.78% |
| Secondary Voltage | | |
| Schedule 24 | 21,259,081 | 9.43% |
| Schedules 25/29 | 12,298,629 | 4.71% |
| Schedule 26 | 7,498,336 | 4.71% |
| Primary Voltage | | |
| Schedules 31/35 | 9,378,361 | 9.43% |
| Schedule 43 | 1,211,431 | 9.43% |
| Campus Rate (Schedule 40) | 1,947,000 | 5.00% |
| High Voltage (Schedules 46/49) | 3,007,097 | 9.43% |
| Schedules 449/459 | 817,118 | 9.43% |
| Lighting (Schedules 50-59) | 1,092,472 | 7.07% |
| Firm Resale (Schedule 5) | 336,605 | 29.47% |
| Total Company | $174,819,117 | 9.51% |

**Q: Are PSE's proposed customer class revenue increases reasonable for its electric operations?**

[8] Hoff direct testimony at p. 19, l. 16 through p. 20, l. 7.
[9] Exhibit No. ___ (DWH-5), page 1.

A: No, they are not.

**Q: Mr. Watkins, do you have an alternative electric revenue increase Distribution to that proposed by PSE?**

A: Yes. Based on the results of my CCOSS presented in Exhibit No. ___ (GAW-6) as well as a recognition of gradualism and the general interest in moving customer class rates of return toward the system rate of return, I propose the following electric revenue increase Distribution at PSE's requested level:

**Table 11**
**Public Counsel Proposed Revenue Increase**

| Class | Amount | Percent Increase |
|---|---|---|
| Residential (Schedule 7) | $101,002,871 | 10.26% |
| Secondary Voltage | | |
| Schedule 24 | 21,444,363 | 9.51% |
| Schedules 25/29 | 18,602,204 | 7.13% |
| Schedule 26 | 12,852,702 | 8.08% |
| Primary Voltage | | |
| Schedules 31/35 | 9,460,097 | 9.51% |
| Schedule 43 | 1,221,989 | 9.51% |
| Campus Rate (Schedule 40) | 4,264,090 | 10.94% |
| High Voltage (Schedules 46/49) | 3,792,429 | 11.89% |
| Schedules 449/459 | 824,240 | 9.51% |
| Lighting (Schedules 50-59) | 1,101,607 | 7.13% |
| Firm Resale (Schedule 5) | 252,526 | 22.11% |
| Total Company | $174,819,117 | 9.51% |

In formulating my proposed electric revenue increase distribution to the various customer rate classes, I started with the results of my CCOSS, which are presented in Exhibit No. ___ (GAW-6). With the results of my CCOSS as a guide, I proceeded in a similar manner as Mr. Hoff. That is, I formulated increases consistent with the CCOSS

results as follows:

(1) I accepted PSE's proposal to bring Firm Resale (Schedule 5) to parity, an increase of $252,566;

(2) I increased Secondary Voltage Schedules 24, 31, 35, 43, and Transportation Schedules 449/459 at the system average increase because these customer rate classes have RORs close to the system average ROR at current rates; i.e., these classes were increased at 100% of the system average percentage increase;

(3) I increased Secondary Voltage Schedules 25/29 and Lighting Schedules 50-59 at 75% of the system average increase since each is considerably above parity;

(4) I increased Secondary Voltage Schedule 26 at 85% of the system average increase since it is also above parity, but somewhat less so than Schedules 25/29 and 50-59;

(5) I increased Campus Schedule 40 at 115% of the system average increase since it is somewhat below parity;

(6) I increased High Voltage Schedules 46/49 at 125% of the system average increase since this class was considerably below parity; and,

(7) Finally, I treated the residential customer class (Schedule 7) as the residual to "pick-up" the remainder of the revenue increase not assigned to the other customer rate classes.

My approach to the distribution of the $174.8 million overall revenue increase proposed by PSE produces an increase of 108 percent of the system average increase to the residential customer rate class. This relative increase (108% of system average) to the residential class is appropriate and reasonable since this class is currently earning slightly less than the system average rate of return (Indexed ROR of 89%).

**Q: Does your proposed revenue Distribution move all classes towards rate of return parity?**

A: Yes, it does. As shown below, and calculated on page 1 of Exhibit No. ___ (GAW-7), my proposed class electric revenue assignment moves all classes closer to rate of return parity:

**Table 12**
**Indexed Rate of Return**
**Public Counsel CCOSS Results**

| Class | At Current Rates | At Public Counsel Proposed Rates |
|---|---|---|
| Residential (Schedule 7) | 89% | 93% |
| Secondary Voltage: | | |
| Schedule 24 | 100% | 100% |
| Schedules 25/29 | 149% | 126% |
| Schedule 26 | 126% | 118% |
| Primary Voltage: | | |
| Schedules 31/35/43 | 91% | 97% |
| Campus Rate (Schedule 40) | 63% | 91% |
| High Voltage (Schedules 46/49) | 46% | 86% |
| Transportation (Schedules 449/459) | 110% | 87% |
| Lighting (Schedules 50-59) | 140% | 117% |
| Firm Resale (Schedule 5) | 76% | 100% |
| Total Company | 100% | 100% |

**Q: Mr. Watkins, please provide your recommended scale back method to assign class electric revenue increases should the Commission authorize an overall revenue requirement increase less than that proposed by PSE.**

A: I recommend that my customer class revenue increase distribution be scaled back in equal portions (i.e., equal percentages) should the Commission authorize an overall electric revenue increase different than that requested by PSE.

## C. ELECTRIC RESIDENTIAL RATE DESIGN

### 1. Residential Rate Design Concepts

1 **Q: Mr. Watkins, have you identified a common objective in PSE's electric and gas**
2 **residential rate design proposals?**
3 A: Yes. It is clear from the testimony of witnesses, David W. Hoff and Janet K. Phelps, that
4 the primary objectives of PSE's gas and electric residential rate design proposals are to
5 increase revenue collection associated with fixed monthly customer charges with less
6 revenue reliance on volumetric charges.
7 **Q: Is there a fundamental reason why PSE desires more residential revenue**
8 **recognition from customer charges with less relative contributions from volumetric**
9 **charges?**
10 A: Yes. Fixed monthly customer charges represent guaranteed revenue to PSE. This
11 guarantee of revenue obviously reduces the risk of PSE's operations and provides more
12 assurances of net income available to shareholders.
13 **Q: What support do Mr. Hoff and Ms. Phelps offer to justify their proposed increased**
14 **reliance on fixed customer charge revenue?**
15 A: The underlying support provided by both Mr. Hoff and Ms. Phelps is the improper notion
16 that because many of PSE's costs are of a fixed nature, a large percentage of revenue
17 collection should also be fixed in nature.
18 **Q: Does PSE's proposal to increase revenue collection from fixed monthly charges**
19 **comport with the economic theory of competitive markets or the actual practices of**
20 **such competitive markets?**
21 A: No. The most basic tenant of competition is that prices ensure the most efficient
22 allocation of society's resources. Because public utilities are generally afforded
23 monopoly status under the belief that resources are better utilized without the duplication

1 of the fixed facilities required to serve consumers, a fundamental goal of regulatory
2 policy is that regulation should serve as a surrogate for competition to the greatest extent
3 practical. As such, the pricing policy for a regulated public utility should mirror those of
4 competitive firms to the greatest extent practical.

5 **Q: Please briefly discuss how prices are generally structured in competitive markets.**

6 A: Economic theory tells us that efficient price signals result when prices are equal to long-
7 run marginal costs. It is well known that, in the long-run, all costs are variable and
8 hence, efficient pricing results from the incremental variability of costs even though a
9 firm's short-run cost structure may include a high level of sunk or "fixed" costs. Indeed,
10 competitive market-based prices are generally structured based on usage, i.e. variable,
11 pricing.

12 **Q: Please explain how this theory and application of competitive pricing should be**
13 **transferred to that of a regulated public utility, such as PSE.**

14 A: Due to PSE's investment in system infrastructure, there is no debate that many of PSE's
15 short-run costs are fixed in nature. As discussed above, efficient competitive prices are
16 established based on long-run costs, which are entirely variable in nature.

17 However, marginal cost pricing only relates to efficiency. This pricing does not
18 attempt to always address fairness or equity. From a perspective of fair and equitable
19 pricing of a regulated monopoly's products and services, it is generally agreed that
20 payments for a good or service should be in accordance with the benefits received. Those
21 who receive more benefits should pay more in total than those who receive fewer
22 benefits. With respect to electric or natural gas usage, the volume of consumption is the

1 most direct, and perhaps best, indicator of benefits received, such that volumetric pricing
2 promotes the fairest pricing mechanism to customers and to the utility.
3 The above philosophy is, and has been, the belief of economists, regulators, and
4 the marketplace for many years. As an illustration, consider utility industry pricing in its
5 infancy (1800s). In the beginning, customers paid a fixed monthly fee and consumed as
6 much of the utility service/commodity as they desired (usually water). It soon became
7 apparent that the fixed monthly fee rate schedule was inefficient and unfair. Utilities
8 soon began metering their commodity and charging only for the amount actually
9 consumed. In this way, consumers receiving more benefits from the utility than others
10 paid more in total for the utility service because they used more of the commodity.
11 Furthermore, virtually every capital intensive industry is faced with a high
12 percentage of fixed costs in the short-run. This includes the manufacturing and
13 transportation industries. Prices for competitive products and services in these industries
14 are invariably established on a volumetric basis, including those that were once regulated;
15 e.g., airline travel and rail service.
16 Accordingly, Mr. Hoff and Ms. Phelps's positions, that most of PSE's fixed costs
17 should be recovered through fixed monthly charges, in my view is incorrect since pricing
18 should reflect long-run cost incidence wherein all costs are variable or volumetric in
19 nature, and that users requiring more of PSE's products and services pay more than
20 customers who use less of these products and services.
21 **Q: Why do customer charges exist at all for public utilities?**
22 A: The conventional wisdom in public utility pricing is that some revenues should be
23 collected from fixed monthly charges. Although revenue stability clearly results from

1 such pricing mechanisms, this stability in and of itself simply reduces the risk to
2 shareholders at the expense of efficient price signals. From a practical standpoint, rates
3 charged by public utilities are usually separated into a few classes. Within these classes,
4 there are some customers who consume relatively small amounts of electricity or natural
5 gas, and others that require much greater quantities of the public utility's commodity or
6 service. Due to the incremental costs of connecting and maintaining a customer's
7 account, the general practice is to charge a fixed monthly fee, such that small usage
8 customers within a class provide revenue contributions to the utility to compensate for
9 the cost of connecting and maintaining the customer's account, as well as contribute
10 revenue based on the amount of electricity or natural gas actually used.

11 **Q: Do PSE's tariffs contain other provisions to recognize the costs to connect new**
12 **customers?**

13 A: Yes. PSE's electric and gas tariffs each contain line extension and new customer hook-
14 up fee schedules.[10]

15 **Q: How are PSE's line extension and new customer fees structured?**

16 A: For both electric and natural gas service, new customers are generally charged a
17 connection fee based on their expected level of consumption. That is, customers that are
18 expected to use less electricity or natural gas must pay a higher connection fee than
19 customers with expected higher levels of usage. This pricing mechanism eliminates
20 PSE's claim that customer charges should include the capital costs associated with
21 connecting a new customer. I will discuss PSE's specific electric and gas connection fees
22 later in my testimony with my explanation of residential "customer" costs and customer

[10] See Schedule 85 for PSE's electric tariff and Schedules 7 and Rule 7 for PSE's natural gas tariff.

1 charges for each type of new service. The purpose of this discussion is to bring to the
2 Commission's attention the fact that the claimed desire for higher customer charges due
3 to differences in intraclass consumption is largely already reflected in the upfront fees
4 that small volume residential customers pay in recognition of their expected lower
5 consumption. Therefore, higher monthly customer charges coupled with upfront
6 connection fees represent a clear, double counting of costs to connect such customers.

7 **2. Electric Residential Rate Design**

8 **Q: Please describe PSE's current and proposed residential electric rate structure.**

9 A: PSE's current residential electric rate structure consists of a fixed monthly customer
10 charge ($6.02) and an inverted, two-block energy rate. Mr. Hoff proposes to increase the
11 monthly customer charge by approximately 50 percent, from its current level of $6.02 to
12 a proposed rate of $9.00 per month. Base rate residential energy charges are proposed to
13 increase from 7.4314¢/kwh to 8.5225¢/kwh (14.7%) for the first 600 kwh of monthly
14 usage and from 9.2122¢/kwh to 10.3033¢/kwh (11.8%) for all additional energy
15 consumption.

16 **Q: Earlier you discussed the Company's objective to collect a higher proportion of**
17 **residential revenue from fixed monthly customer charges. Did Mr. Hoff conduct**
18 **any analysis of what he considered to be customer costs?**

19 A: Yes.

20 **Q: Do you agree with Mr. Hoff's customer cost analysis?**

21 A: No.

22 **Q: Please explain why you do not agree with Mr. Hoff's customer cost analysis.**

1 A: On page 15 of Exhibit No.___ (DWH-4C), Mr. Hoff presents a summary of the results of
2 his customer cost analysis. A closer examination of Mr. Hoff's customer cost analysis
3 reveals that he included provisions for various capital costs, including return and
4 depreciation, and operating and maintenance expenses. However, Mr. Hoff's analysis
5 inappropriately includes many costs that should not be deemed customer-related for
6 purposes of evaluating the reasonableness of residential customer charges.
7 **Q: Please identify those capital costs that Mr. Hoff included in his customer cost**
8 **analysis.**
9 A: Mr. Hoff's analysis includes the allocated residential gross plant investments in Meters
10 ($73.7 million), Services ($168.2 million), Distribution Line Transformers ($250.5
11 million), and an allocated portion of General plant ($56.9 million).
12 **Q: Are these rate base, or capital items, appropriately included in a customer cost**
13 **analysis?**
14 A: No. Investments in Meters and Services are often included in traditional customer cost
15 analyses. However, as mentioned earlier and as will be discussed in more detail later,
16 PSE's customer connection fees already contain a provision for service line investments.
17 Mr. Hoff's inclusion of Line Transformer costs is at odds with virtually every
18 accepted industry standard and practice. During my twenty-eight year career and practice
19 in the area of public utility ratemaking, I have never seen a customer cost analysis that
20 includes line transformers. Indeed, virtually every manual and text on the subject of
21 electric cost of service properly considers line transformers as demand-related. Mr.
22 Hoff's rationale for inclusion of transformers in this case is solely due to the fact that
23 every distribution customer is connected to a transformer and that, once installed,

transformers represent a fixed cost of providing service to the customer or group of customers connected to the transformer. Although such logic is meaningless since this notion could be extended to all distribution lines, substation equipment, and even transmission lines, the fundamental reason that transformers should not be considered customer-related is because they are sized and installed based on peak load requirements. Transformers are installed to reduce distribution voltage and are limited in capacity based on the maximum load going through each transformer. If customers were simply connected to a distribution system with no loads, there would not be a need for transformers.

Finally, Mr. Hoff has included $56.9 million in General plant in his customer cost analysis. This General plant represents the Company's investment in corporate overhead required to provide electricity sales to customers. This General overhead is needed to support PSE's electric operations which is that of selling electricity. In fact, the level of General plant included Mr. Hoff's residential customer costs includes the following gross plant amounts:

**Table 13**
**PSE General Plant Investment**
($ Millions)

| | |
|---|---|
| Land and Land Rights | $1.6 |
| Structure & Improvements | $23.7 |
| Office Furniture | $14.7 |
| Transportation Equipment | $0.6 |
| Stores Equipment | $0.1 |
| Tools, Shop and Garage Equipment | $0.7 |
| Laboratory Equipment | $1.5 |
| Power Equipment | $0.1 |
| Communications Equipment | $13.9 |
| Miscellaneous Equipment | $0.1 |

1 As can be seen above, the vast majority of the General plant Mr. Hoff assigns to
2 "customers" relates to corporate office buildings, furniture, and communications
3 equipment. Because General plant represents the overhead investment required to
4 conduct its public service obligations of selling electricity, such costs should not be
5 considered in a customer cost analysis for purposes of justifying fixed customer charges.

6 **Q: What Operations and Maintenance (O&M) expenses did Mr. Hoff include in his**
7 **customer cost analysis?**

8 A: Mr. Hoff's residential customer costs analysis includes allocations for Distribution
9 Supervision and Engineering ($0.3 million), Meters Operations Expenses ($0.9 million),
10 Customer Installation expenses ($1.7 million), Line Transformers Maintenance expenses
11 ($0.2 million), Meters Maintenance expenses ($0.1 million), Customer Accounting
12 Supervision ($0.1 million), Meter Reading ($11.5 million), Customer Records &
13 Collections expenses ($13.7 million), and a provision for Administrative and General
14 expenses ($11.9 million).

15 **Q: Are each of these O&M expenses properly included in a customer cost analysis?**

16 A: No. As can be observed from their descriptions, many of the O&M costs included by Mr.
17 Hoff represent costs that are more appropriately considered demand-related (e.g.,
18 transformer expenses) or are general overhead expenses required in order to sell
19 electricity. Meter Reading and Customer Records & Collections expenses are properly
20 included in Mr. Hoff's customer cost analysis.

21 **Q. What is your overall assessment of Mr. Hoff's residential customer costs analysis?**

22 A. Mr. Hoff's residential customer cost analysis greatly overstates those costs that should be
23 considered in establishing a reasonable fixed monthly customer charge. Because PSE is

in the business of selling electricity and not in the business of simply connecting customers, only those costs that can be directly attributed to connecting and servicing a customer's account should be included in such analysis.

**Q: Please explain PSE's electric line extensions policy for residential customers.**

A: Electric Tariff G, Schedule 85 contains PSE's policy regarding line extensions and connection fees for new customers. In general, customers are charged a connection fee based on the following formula:

+ Primary Voltage Lines Extension Costs
+ Secondary Voltage Lines Extension Costs
+ Exceptional Transmission & Substation Costs
- Margin Allowance
= Line Extension Cost
+ Service Line Costs
= Total Cost to Customer

These line extension costs include, at a minimum, the estimated cost to install conductors (excluding service lines) and transformers. It should be noted that the margin allowance does not include service lines meaning that customers are responsible for the costs of installing service lines to their meters. Customers are charged a non-refundable connection charge for all service line costs, as well as the line extension costs above the prescribed margin allowance. Estimated construction costs differ for underground and overhead service while the margin allowance is constant for both underground and overhead customer service.

**Q: How do these new customer connection fees relate to customer charges?**

A: As discussed earlier, Mr. Hoff has included the Company's allocated investment in Services and Line Transformers in his customer cost analysis. Although the Company's Schedule 85 margin allowance may be sufficient to cover the costs associated with

1 installing new transformers (or connecting to existing facilities), all new customers are
2 charged the costs of labor and materials to install a service line. As such, a higher
3 customer charge as proposed by Mr. Hoff represents a double cost to new customers.

4 **Q: Have you conducted an electric residential customer direct cost analysis applicable**
5 **to PSE?**

6 A: Yes. I have conducted a direct customer cost analysis which is provided in Exhibit
7 No. ___ (GAW-8) and results in a monthly customer cost of $3.30 at a 10.80 percent
8 return on equity and $3.25 at a 9.25 percent return on equity. It should be noted that my
9 direct customer analysis does not include Services investment for the reasons noted
10 earlier in my testimony.

11 **Q: Mr. Watkins, have you assessed the policy implications of Mr. Hoff's proposal to**
12 **increase the monthly customer charge?**

13 A: No. Public Counsel witness, Barbara Alexander, discusses various policy implications of
14 increasing PSE's monthly residential customer basic charge in her direct testimony.

15 **Q: Do you have any objections to the structures of PSE's residential rates?**

16 A: No, I do not have any objections to the general structure of PSE's residential rates. In
17 fact, PSE's inverted block rate structure sends efficient and proper pricing signals,
18 particularly during periods of peak demand.

19 **Q: What is your recommendation as to residential monthly customer charges for PSE**
20 **in this case?**

21 A: Given the results of my residential monthly direct customer cost studies indicating a
22 monthly customer cost range from $3.25 to $3.30, and in consideration of rate continuity,
23 I recommend that the current monthly customer charge of $6.02 be maintained.

1 Furthermore, I recommend the $6.02 residential monthly customer charge remain at the
2 current level regardless of the overall level in revenue requirement that may be
3 authorized by the Commission in this case.

4 **Q: What is your recommendation for the usage element of residential rates?**

5 A: As I stated earlier, I am not recommending any changes to the Company's energy usage
6 blocks; i.e., the first block is 600 kwh and the second block for all additional kwh. I do
7 recommend, however, that the ratio of the specific charges for these two blocks be
8 maintained, since the Company has not provided any evidence in support of changing this
9 ratio.

10 As such, any increase in residential revenue authorized by the Commission should
11 be reflected in energy charges, and these energy charges should be increased by an equal
12 percentage.

13 **III. NATURAL GAS OPERATIONS**

14 **A. NATURAL GAS CLASS COST OF SERVICE**

15 **Q: Mr. Watkins did PSE employ the same general procedures to conduct its natural**
16 **gas CCOSS as used for its electric study?**

17 A: Yes. PSE used the same general computer model to conduct its gas CCOSS as it did for
18 its electric CCOSS. PSE's natural gas CCOSS was conducted and sponsored by PSE
19 witness Janet Phelps.

20 **Q: Were you able to replicate Ms. Phelps's CCOSS results using your own**
21 **computerized model?**

22 A: Yes.

23 **Q: Did you find Ms. Phelps's CCOSS study to be mathematically accurate?**

1 A: Yes. However, I did discover what appears to be a slight oversight in Ms. Phelps's
2 calculation of class rates of return at present rates.
3 **Q: Please explain this slight oversight.**
4 A: Ms. Phelps's Exhibit No. ___ (JKP-5), page 1, presents a summary of PSE's gas CCOSS
5 excluding gas costs with Line 15 showing the resulting class rates of return at current
6 rates. In calculating these class rates of return, Ms. Phelps included certain revenue-
7 related expenses at proposed, not current, rates and conducted her allocations based on
8 these proforma expenses at PSE proposed rate levels.[11] In an attempt to correct for these
9 presumed oversights, Ms. Phelps then subtracted the expenses at proposed rate levels
10 after all allocations had been made; i.e., she backed the proposed expense levels out for
11 summary presentation purposes but not for allocating costs to individual classes.
12 Because Ms. Phelps's CCOSS includes numerous "internal" or composite allocators
13 based on previous account allocations, including those erroneous expense levels at
14 proposed rates, certain specific rate base and expense items are incorrectly allocated to
15 classes because the allocators for the accounts include a provision for expenses at
16 proposed rate levels.
17 **Q: Have you corrected for this apparent oversight?**
18 A: Yes. ~~A replication of Ms. Phelps's CCOSS, corrected to exclude those revenue~~
19 ~~dependent expenses at proposed rate levels, and is provided above:~~ This minor correction
20 results in an immaterial difference as shown below:
21

[11] These expenses, at proposed rate levels, reflect the additional amounts resulting from the Company's proposed revenue increase and include the incremental increases to: Federal Income Taxes ($19,012,582); "Other" Taxes ($2,181,139); WUTC Fees ($113,542); and, Uncollectibles ($154,417).

~~**Table 14**~~
~~**Gas CCOSS (at Current Rates) Incorporating Expense Oversight Adjustments**~~

| ~~Class~~ | ~~PSE CCOSS As Filed~~ | ~~PSE CCOSS Corrected For Expense Oversights~~ |
|---|---|---|
| ~~Residential (16, 23, 53)~~ | ~~6.18%~~ | ~~6.23%~~ |
| ~~Commercial & Industrial (31, 61)~~ | ~~4.08%~~ | ~~3.55%~~ |
| ~~Large Vol. (41)~~ | ~~15.96%~~ | ~~18.74%~~ |
| ~~Interruptible (85)~~ | ~~19.77%~~ | ~~23.61%~~ |
| ~~Limited Interruptible (86)~~ | ~~21.97%~~ | ~~26.42%~~ |
| ~~Non-Exclusive Interruptible (87)~~ | ~~4.97%~~ | ~~4.69%~~ |
| ~~Transport and Contracts~~ | ~~10.24%~~ | ~~11.42%~~ |
| ~~CNG~~ | ~~-14.23%~~ | ~~-19.86%~~ |
| ~~Rentals~~ | ~~-9.92%~~ | ~~-14.35%~~ |
| ~~Total Company~~ | ~~5.98%~~ | ~~5.98%~~ |

**Table 14**
**Gas CCOSS (at Current Rates) Incorporating Expense Oversight Adjustments**

| | Operating Income | | Rate Base | |
|---|---|---|---|---|
| Class | PSE As Filed | Corrected For Expenses | PSE As Filed | Corrected For Expenses |
| Residential (16, 23, 53) | $56,171,759 | $56,171,790 | $909,282,355 | $909,282,284 |
| Commercial & Industrial (31, 61) | 12,724,166 | 12,726,426 | 311,614,874 | 311,609,632 |
| Large Vol. (41) | 6,374,954 | 6,374,278 | 39,932,031 | 39,933,599 |
| Interruptible (85) | 3,096,603 | 3,096,217 | 15,663,138 | 15,664,036 |
| Limited Interruptible (86) | 1,798,694 | 1,798,520 | 8,187,623 | 8,188,026 |
| Non-Exclusive Interruptible (87) | 1,429,584 | 1,429,108 | 28,757,555 | 28,758,660 |
| Transport and Contracts | 1,385,521 | 1,385,237 | 13,533,683 | 13,534,340 |
| CNG | <62,500> | <62,512> | 439,245 | 439,274 |
| Rentals | <2,180,152> | <2,180,434> | 21,984,537 | 21,985,190 |
| Total Company | $80,738,630 | $80,738,630 | $1,349,395,041 | $1,349,395,041 |

**Q:** ~~**Did Ms. Phelps also inappropriately allocate class income taxes at current rates based on rate base (investment) rather than calculate income taxes for each class?**~~ **Did Ms. Phelps allocate class income taxes at current rates in the same manner as Mr. Hoff did for PSE's Electric Operations?**

A: ~~Yes.~~ No. Whereas Mr. Hoff allocated income taxes based on total rate base. Ms. Phelps utilized a different approach to allocate income taxes at current rates. Ms. Phelps

allocated individual class income taxes based on each class' proportional relationship of revenues minus operating expenses (including depreciation) to total Company (gas) revenues minus operating expenses. While Ms. Phelps' method of allocating income taxes based on revenue minus operating expenses is far superior to Mr. Hoff's method, she did not reflect or consider a major income tax depreciation: interest expense. I have calculated each class's income tax responsibility consistent with the method used in my electric CCOSS.

**Q: Please provide a summary of class rates of return after correcting for Ms. Phelps's improper allocation of income taxes at current rates.**

A: Building upon my previous adjustment (to correct for expense levels at proposed rates) the following results are obtained:

**Table 15**
**Gas CCOSS (at Current Rates)**
**Incorporating Expense Oversight**
**and Income Taxes Adjustments**

| Class | ROR |
|---|---|
| Residential (16, 23, 53) | 6.13% |
| Commercial & Industrial (31, 61) | 4.59% |
| Large Volume (41) | 13.31% |
| Interruptible (85) | 16.10% |
| Limited Interruptible (86) | 17.71% |
| Non-Exclusive Interruptible (87) | 5.24% |
| Transport and Contracts | 9.10% |
| CNG | -8.85% |
| Rentals | -5.68% |
| Total Company | 5.98% |

**1. Separate Allocation of Mains to Large Customers**

1 **Q: What methodology does Ms. Phelps use to allocate distribution Mains to the various**
2 **customer classes?**
3 A: Ms. Phelps has employed two separate allocation methods to assign Mains cost
4 responsibility to the various customer classes. Under Ms. Phelps's approach, distribution
5 Mains investment is first allocated to the firm portion of PSE's largest customers taking
6 service under Rate Schedules 85, 87, 57 and Special Contracts, using one methodology,
7 while all other customers are then assigned cost responsibility for Mains based on the
8 Peak and Average method.
9 **Q: Mr. Watkins, on pages 31 through 33 of her direct testimony, Ms. Phelps refers to a**
10 **direct assignment of Mains plant to the largest customers who are served on**
11 **Schedules 85, 87, 57, and Special Contracts. Is Ms. Phelps's reference to this "direct**
12 **assignment" of Mains to PSE's largest customers the same as your reference to the**
13 **separate allocation method used for certain Rate Schedules 85, 87, 57, and Special**
14 **Contract customers?**
15 A: Yes. However, it should be clearly understood that the cost responsibility assigned to
16 these largest customers is anything but a direct assignment of Mains plant. Rather the
17 cost responsibility assigned to these customers is the result of a separate "special"
18 allocation procedure. Indeed, and as I will explain later in my testimony, this special
19 allocation for PSE's largest customers involves a much higher degree of uncertainty,
20 assumptions, and allocations than does the Peak and Average approach used to allocate
21 Mains costs to all other PSE customers.
22 **Q: Notwithstanding Ms. Phelps's characterization of a direct assignment of Mains**
23 **plant to PSE's largest customers, do you have any concerns or criticisms of the**

1 **overall approach Ms. Phelps used to allocate PSE's investment in distribution**
2 **Mains to all customer classes?**
3 A: Yes. I have three areas of concern and criticism regarding the Company's allocation of
4 distribution Mains. These are: (1) the special treatment (allocation) of PSE's largest
5 customers; (2) the use of minimum monthly usages for interruptible customers in
6 assigning the "average" portion of the Peak and Average allocation of Mains; and, (3) the
7 Company's biased and inaccurate allocation of peak day load to individual classes based
8 on an adjusted design day demand.
9 **Q: Please outline the basic approach used by Ms. Phelps to conduct her special**
10 **allocation of Mains to PSE's largest customers.**
11 A: Ms. Phelps has utilized a modified version of a natural gas computer model developed for
12 engineering analyses, known as "SynerGEE." The general concept behind PSE's special
13 allocation is that gas flowing from the City Gate to each large customer's meter is traced
14 given assumed load levels throughout the entire PSE distribution system. Each large
15 customer's load is estimated over the modeled path (from the City Gate to the customer's
16 meter) such that the customer in question is allocated costs in proportion to its estimated
17 load relative to the total load in each of the segments of the modeled path. To estimate
18 the customer's load contribution on various pipe segments, SynerGEE allows for the
19 segmentation of PSE's Distribution system. The basic concept of this system
20 segmentation can be seen schematically in my Exhibit No.___ (GAW-9) which is a
21 reproduction of a schematic provided by PSE in response to Public Counsel Data Request
22 No. 625. Using "Customer 6" as an example, various pipe segments are established from
23 this customer's meter to the PSE City Gate.

1 **Q: What concerns and criticisms do you have regarding this special allocation of**
2 **Distribution Mains for PSE's largest customers?**
3 A: I have three areas of concern regarding this approach being used for ratemaking purposes.
4 My first two concerns are conceptual in nature, while my third involves the practical
5 accuracy of this approach.
6 The first conceptual concern I have regarding PSE's special allocation method is
7 that as a matter of regulatory ratemaking policy, all analyses should be reasonably
8 transparent so that all assumptions, mechanics, and procedures can be explained and
9 verified. Such is not the case with this special allocation method. Indeed, this procedure
10 produces a black box output such that the Company has conducted analyses that require a
11 myriad of input assumptions and calculations that cannot be verified. I will discuss some
12 of these assumptions later under my third practical concern over this allocation approach.
13 My second concern is by far the most important from a ratemaking policy
14 perspective and that is the need and/or desire to afford special discriminatory treatment to
15 one group of customers at the expense of other customers absent any compelling reason
16 to do so.
17 PSE's special allocations to its large customers "skeletonizes" the PSE
18 Distribution system such that costs are assigned to a particular customer based on that
19 customer's physical geographic location relative to the PSE system as a whole. In other
20 words, the closer a customer happens to be to the City Gate, the fewer costs are assigned
21 to this customer because this customer is only assigned costs based on the pipes upstream
22 from its physical location. The classic analogy to this skeletonization approach is a
23 private lane through a neighborhood, with a homeowner closer to the public road arguing

1 that he or she should only be responsible for costs from the public road to his or her
2 driveway and that homeowners further down the private lane should bear more cost
3 responsibility for maintenance and upkeep of this private lane.

4 There are two fatal flaws with this reasoning as applied to public utility
5 ratemaking. The first is that under such thinking the customer must assume that the
6 distribution system was built and sited to specifically accommodate this one customer.
7 That is, the physical pipe locations were installed to connect this one customer to the City
8 Gate (source of supply). For example, consider Customers 4 and 6 in Exhibit
9 No. ___ GAW-9). Under this approach, Customer 6 would be allocated fewer costs than
10 Customer 4 (assuming they were the same size) simply because of the physical
11 configuration of PSE's routing of Distribution Mains. If PSE rerouted any upstream
12 Mains pipes, this customer's responsibility for costs could change dramatically.

13 The second fatal flaw with a skeletonization approach is that these customers
14 receive all of the benefits of PSE's economies of scale and scope and apply these
15 economies only to a self-serving portion of the system. Put succinctly, under this
16 approach, selected customers are allocated per unit (average) costs that are the result of
17 system economies but do not equitably share in all costs of the system that make these
18 per unit (average) costs possible. Indeed, the most basic concept of a regulated utility's
19 granted monopoly status is that societal costs and individual consumers' costs are lower
20 with a single company servicing the collective needs of all consumers.

21 The concept of skeletoniztion has been addressed extensively in economic
22 literature as well as in the Courts in the arena of anti-trust and undue price discrimination.
23 The economic standard applied in these situations is a customer's stand-alone cost. That

is, stand-alone costs are those costs that a customer would incur to design, construct, and operate a system to serve only itself, without enjoying any of the other benefits of an integrated system serving multiple customers.

**Q: Please discuss your third concern which you referred to as practical in nature.**

A: PSE's application of the modified SynerGEE model required a myriad of assumptions. Notwithstanding the inability to verify each of the assumptions which I discussed earlier, there are several assumptions required for this analysis that are clearly questionable as they relate to the allocation of cost responsibility.

Although Ms. Phelps claims on page 32 of her direct testimony that the SynerGEE model "was run to simulate the entire distribution system under design day conditions," the SynerGEE model itself is somewhat static in that it measures loads at particular points in time. This is of critical importance because, under a "design day" situation, loads vary throughout the day due to differences in customer demands for gas throughout the day. On such a design day, residential customer demands would increase in the morning and fall somewhat during the middle of the day as households are at work and the ambient temperature increases. Residential loads will then increase in the early evening hours and decline again later at night. Commercial loads tend to follow a similar, yet delayed diurnal pattern. As such, the PSE system load is not constant throughout the entire design day. However, the SynerGEE model requires assumed loads at all nodes. In the PSE application of the SynergGEE model, it is not known what point in time these loads are intended to represent. Nor is it known what loads are assumed to exist at each nodal end point. For example, the maximum diurnal load in a commercial/industrial area of PSE's system will peak at a different time than that for

1 residential areas of the system. The assumptions used for these various geographic areas
2 are critical to the ultimate costs allocated under this approach.
3 A second practical concern of this approach is the underlying assumption that the
4 PSE system contains no excess capacity for future expansion or growth. Indeed, much of
5 PSE's Distribution system was put into service many years ago when the total system
6 loads were smaller. PSE prudently planned for this growth such that the distribution
7 Mains particularly its trunk lines, now serve much higher demands. These demands will
8 continue to grow as new customers are added to the PSE system. Yet the same Mains
9 currently in service will continue to serve all customers in the future. Finally, as I will
10 discuss later in my testimony, PSE's estimation of class contributions to design day
11 demands are questionable at best.
12 To run the SynerGEE model, PSE's system must be "loaded" at a prescribed level
13 of demand. It has been represented by PSE that this level of loading is that for PSE's
14 design day. Because the demographics of the Company's service area vary significantly,
15 PSE's questionable assumptions as to design day loads for particular segments of the
16 distribution system are most suspect. In fact, Ms. Phelps developed class contributions to
17 design day demand independently. It is my understanding that Ms. Phelps had no input
18 as to the assumptions used to run SynerGEE for this application. Therefore, it is not
19 known what individual loads were used in the "Special" allocation of Mains to PSE's
20 larges gas customers, let alone whether or not they are reasonable.
21 **Q: What is your recommendation with regards to the special allocation used to assign**
22 **Mains to PSE's largest customers?**

A: This special allocation should be rejected and not considered by the Commission. There is no compelling reason, other than a desired end result, to treat PSE's largest customers any differently than all other retail customers.

**Q: How does your rejection of PSE's special allocation for its largest customers affect your CCOSS analysis?**

A: I have treated these large customers' firm loads in the same manner as all other firm customers and incorporated these contributions to peak load directly in my Peak and Average Mains allocator.

**Q: What are the CCOSS results with this adjustment?**

A: Building upon my previous adjustments to Ms. Phelps's CCOSS, incorporating the Peak and Average method used to allocate Mains to all customer classes produces the following results at current rates:

**Table 16**
**Gas CCOSS (at Current Rates)**
**Incorporating Expense Oversight, Income Taxes, and Peak and Average Method Adjustments**

| Class | ROR |
|---|---|
| Residential | 6.14% |
| Commercial & Industrial | 4.16% |
| Large Volume | 13.33% |
| Interruptible (85) | 15.18% |
| Ltd. Interruptible (86) | 17.72% |
| Non-Exclusive Interruptible (87) | 4.80% |
| Transportation | 9.03% |
| CNG | -8.85% |
| Rental | -5.68% |
| Total Company | 5.98% |

**2. Peak and Average Classification**

1 **Q: Before continuing with your next disagreement and adjustment to PSE's CCOSS,**
2 **please explain the Company's Peak and Average method further.**
3 A: As discussed previously, and but for Ms. Phelps's special allocation of Mains to the
4 largest customer' firm loads, the Company has utilized the Peak and Average method to
5 allocate distribution Mains investments. As the name implies, this method allocates
6 Mains costs partially on the basis of peak day demand and partially on the basis of
7 average day demand (usage). It is noted that average day use is the exact same as annual
8 throughput (usage) in relative terms. That is, class contributions to average daily use are
9 the same as class contributions to annual use. In the application of the Peak and Average
10 method, Ms. Phelps has elected to utilize PSE system load factors as a basis to classify
11 this allocator between peak (demand) and average demand (throughput).[12] Ms. Phelps's
12 load factor approach results in a distribution Mains classification of 67 percent peak day
13 and 33 percent average day.
14 **Q: Are there accepted ways to classify distribution Mains between Peak and Average**
15 **other than the load factor approach?**
16 A: Yes. Many utilities and cost analysts classify natural gas distribution Mains as 50 percent
17 peak-related and 50 percent average-related. The rationale behind this 50/50 split
18 between peak day demand and average usage (throughput) is that an equal weighting
19 strikes a reasonable balance between the fact that a local distribution company (LDC)
20 system is constructed and in place to serve usage requirements of customers throughout
21 the year, yet Mains are also physically sized to meet current and future peak load
22 requirements.

[12] Load factor is the ratio of average daily demand to peak day demand.

1 **Q: Are there a priori ramifications of using an equal weighting of 50 percent Peak day**
2 **and 50 percent Average day versus the load factor approach to classify Mains?**
3 A: Yes. The equal weighting method invariably allocates fewer costs to low volume, low
4 load factor customers, and more costs to large volume, high load factor customers than
5 does the load factor approach of classifying Mains utilized by PSE.
6 **3. Treatment of Interruptible Volumes**
7 **Q: Please explain your disagreement with Ms. Phelps as it relates to her treatment of**
8 **interruptible customers for the allocation of distribution Mains.**
9 A: Because of curtailment possibilities, there is no question that interruptible service is of a
10 lesser quality that firm service. As a result of this lower quality of service, questions
11 arise regarding what level of cost responsibility should be assigned interruptible
12 customers. At one extreme is the belief that interruptible customers should not be
13 assigned any Mains cost responsibility because the distribution system is claimed to be
14 designed only to meet firm loads, even though these customers may use these Mains
15 virtually every day of the year. At the other extreme is the thought that interruptible
16 service should be treated the same as firm customers so long as there are no curtailments
17 due to constraints of the local distribution system. That is, many natural gas LDCs have
18 sufficient distribution system capacity to meet all loads, firm and interruptible, each and
19 every day of the year.
20 To strike a balance between these two extremes, interruptible customers are
21 usually assigned some, but not a full share, of distribution Mains costs in order to
22 recognize the lesser quality of interruptible service. Although Ms. Phelps has assigned a

1 minimal level of Mains-related cost responsibility to interruptible customers, her
2 approach leans heavily towards the no cost responsibility view.
3 Remembering that Ms. Phelps has classified distribution Mains as 67 percent peak
4 day related and 33 percent average day (throughput) related, she then assigned zero peak
5 day responsibility to interruptible loads (i.e., 67% times 0% cost responsibility). With
6 respect to the average portion of this method, Ms. Phelps did not use the average or total
7 usage throughout the year for interruptible customers, but rather the minimum monthly
8 usage times 12 months, i.e., (33% times [minimum monthly usage times 12 months]). In
9 my opinion, Ms. Phelps's approach represents a clear bias with the objective to shift cost
10 responsibility away from interruptible customers.
11 Consider for example that Ms. Phelps assigns 67 percent of Mains investment
12 based on peak day demand, while interruptible loads are assumed to not have any cost
13 responsibility for this "peak" portion of Mains. Thus, for the remaining 33 percent, she
14 lowers interruptible customers' responsibility even more by not using annual usage, but
15 rather minimum monthly usage times 12.
16 **Q: What is your recommendation as to the assignment of distribution Mains cost**
17 **responsibility to interruptible customers in this case?**
18 A: Although it is common practice to utilize an equal weighting between Peak day and
19 Average day demands, I have accepted the Company's load factor approach in this case.
20 Furthermore, I assign no interruptible cost responsibility to the peak portion of the Peak
21 and Average method to recognize the lower quality of non-firm service. However, I have
22 incorporated interruptible customers' average daily usage (throughput) in the average
23 component of the Peak and Average allocation method. In my opinion, my treatment

1 strikes a balance between firm and interruptible customers that is more than fair to non-
2 firm customers.

3 **Q: Please provide a summary of class rates of return with your recommended**
4 **allocation of Mains, incorporating your adjustments for interruptible customers'**
5 **average, not minimum monthly usage.**

6 A: Building upon my previous CCOSS adjustments, the following class rates of return are
7 obtained at current rate levels:

8

9 **Table 17**
10 **Gas CCOSS (at Current Rates)**
**Incorporating Table 16 and**
**Interruptible Customer Usage Adjustments**

11

| Class | ROR |
|---|---|
| Residential | 6.27% |
| Commercial & Industrial | 4.73% |
| Large Volume | 13.97% |
| Interruptible (85) | 11.20% |
| Ltd. Interruptible (86) | 18.86% |
| Non-Exclusive Interruptible (87) | 3.18% |
| Transportation | 4.67% |
| CNG | -8.87% |
| Rental | -5.68% |
| Total Company | 5.98% |

12
13
14
15
16
17

18 **4. Design Day versus Actual Peak Day**

19 **Q: What definition of peak day demand has PSE used for purposes of its proposed**
20 **CCOSS?**

21 A: As discussed on pages 28 through 30 of her direct testimony, Ms. Phelps has used a
22 design day concept to measure peak day demand.

23 **Q: Has the Commission rejected this design day concept in prior PSE rate cases?**

A: Yes, that is my understanding. In previous cases, this issue has been explored in great detail. It is my understanding that this Commission has historically relied upon actual peak day volumes, rather than hypothetical design day volumes, for CCOSS purposes.

**Q: Please explain how Ms. Phelps developed her design day demands for the PSE system as well as individual class contributions to this design day level.**

A: Ms. Phelps started with a total PSE system design day demand and then used a top-down approach to estimate class contributions to this system design day demand.

**Q: How did Ms. Phelps estimate her PSE system design day demand?**

A: It is my understanding that Ms. Phelps was not responsible for the development and estimation of PSE's system design day demand. Rather, this total system estimate was provided to her by the Company's forecasting department.

**Q: On pages 28 and 29 of her direct testimony, Ms. Phelps indicates that the system design day is based on 52 heating degree days, as explained in the Company's 2007 Integrated Resource Plan. Does the PSE system design day demand used by Ms. Phelps match the design day demand contained in the Company 2007 IRP?**

A: No.

**Q: Why not?**

A: It is my understanding that the PSE system design day demand used by Ms. Phelps in this case was adjusted to reflect the test year proforma mix and level of customers.

**Q: Please continue with your explanation of how Ms. Phelps developed class contributions to this adjusted system design day demand.**

A: As indicated earlier, Ms. Phelps used a top-down approach, such that she started with the total system design day demand provided to her by the forecasting department, and then allocated this total system amount to individual customer classes.

Ms. Phelps's starting point was the large volume customer classes (Rate Schedules 85, 86, and 87). By utilizing their billed demand during the system peak month in 2007, Ms. Phelps assumed that these customers' demands would be the same under design day conditions as under actual, historical conditions. In other words, Ms. Phelps assumed no weather sensitivity for these customers. Next, Ms. Phelps estimated the design day demand for Commercial Schedule 50 customers (Compressed Natural Gas), incorporating a similar approach as used for Rate Schedules 85, 86, and 87 customers, except that actual average day usage during the 2007 peak month was used since there is no billing demand associated with Rate Schedule 50. After, the above classes' contributions to the design day demand were calculated, the residual (remaining) system design day load was allocated proportionally based on average daily usage in the peak month to the Residential (Rate Schedule 23) and Small Commercial/Industrial (Rate Schedule 31) classes.

**Q: Does Ms. Phelps's allocation of adjusted system design day demand to individual classes produce realistic results?**

A: In my opinion, no. Under Ms. Phelps's approach, she assumed that all usage above the actual 2007 amount is solely attributable to the Residential and Small Commercial/Industrial classes. While I would agree that these two customer classes tend to be the most weather sensitive, it is shortsighted to assume that other classes have

virtually no weather sensitivity, particularly at an extreme design day average temperature of 13 degrees Fahrenheit.[13]

**Q: Is there any evidence to suggest that large volume commercial and industrial customers have some weather sensitive characteristics in their natural gas consumption patterns?**

A: Yes. As part of her filed workpapers, Ms. Phelps provided test year weather normalized monthly usages by rate class. The following are the monthly usages for the large volume user classes. Please note that I have sorted these usages from the spring to the winter:

**Table 18**
**Weather Normalized Monthly Usage**

| | Rate Schedule | | |
|---|---|---|---|
| Month | 85 | 86 | 87 |
| April 2007 | 1,394 | 1,478 | 3,134 |
| May 2007 | 1,149 | 1,083 | 2,656 |
| June 2007 | 849 | 626 | 2,127 |
| July 2007 | 764 | 450 | 878 |
| August 2007 | 798 | 461 | 1,752 |
| September 2007 | 932 | 670 | 1,884 |
| October 2006 | 1,307 | 1,324 | 3,035 |
| November 2006 | 1,502 | 2,127 | 3,599 |
| December 2006 | 1,766 | 2,430 | 4,312 |
| January 2007 | 1,779 | 2,337 | 4,047 |
| February 2007 | 1,612 | 2,018 | 3,611 |
| March 2007 | 1,657 | 1,957 | 3,654 |

It is clear from the above data that a significant portion of these large volume customers' loads are weather sensitive and therefore, would increase significantly under extreme design day temperatures.

[13] PSE's design day temperature is 52 heating degree days. Heating degree days are defined as a base of 65 degrees minus the average of high and low temperature for the day. Thus, 65-52=13 degrees average daily temperature.

**Q: In view of the shortcomings of Ms. Phelps's design day analysis, have you conducted an analysis of peak day demands by class?**

A: Yes. In accordance with what I understand to be prior Commission practice, I have estimated class contributions to actual system peak day loads. These system peak day loads represent the average of the five highest daily send outs occurring during the most recent three years which were provided in response to Public Counsel Data Request No. 657.

**Q: Please provide a comparison of the estimated system design day demand as used by Ms. Phelps to the average of the five highest actual system peak day demands during the last three years.**

A: **[Begin Confidential]**

[redacted]

[redacted][14]

[redacted]

[redacted]

**[End Confidential]**

**Q: Please explain how you calculated individual class contributions to this actual firm peak day demand.**

---

[14] **[Begin Confidential ]**[redacted] **[End Confidential]**

A: Remembering that Ms. Phelps's assignments of design day demands to the large volume classes are based on actual test year experience, I accepted these levels since my system peak day amount is also based on actual experience. After these large volume contributions were determined, only Residential and Small Commercial/Industrial (Schedule 31) loads remained. I allocated this residual to these two classes in proportion to each class's average usage in the peak month. In other words, I used the same method as employed by Ms. Phelps to estimate class contribution to peak day demand.

**Q: Please provide a comparison of Ms. Phelps's design day based on your actual peak day load factors.**

A: **[Begin Confidential]** [redacted]

[redacted]

**[End Confidential]**

**Q: Did you adjust Ms. Phelps's CCOSS to reflect actual system peak day demands?**

A: Yes.

**Q: Please provide a summary of CCOSS results incorporating actual system peak day loads.**

A: Building upon my previous adjustments to Ms. Phelps's CCOSS, the following class rates of return results with the incorporation of actual system peak demands:

**Table 23**
**Gas CCOSS (at Current Rates)**
**Incorporating All Public Counsel Adjustments**

| Class | ROR |
|---|---|
| Residential | 6.62% |
| Commercial/Industrial (31) | 5.01% |
| Large Volume (41) | 10.64% |
| Interruptible (85) | 7.44% |
| Limited Interruptible (86) | 14.60% |
| Non-Exclusive Interruptible (87) | 0.95% |
| Transportation & Contracts (57) | 2.27% |
| CNG (50) | -8.78% |
| Rentals | -5.68% |
| Total System | 5.98% |

These class rates of return reflect my recommended CCOSS findings. The details of my CCOSS are provided in Exhibit No.___ (GAW-10).

**B. NATURAL GAS CLASS REVENUE DISTRIBUTION**

**Q. How did Ms. Phelps determine her proposed distribution of PSE's requested gas revenue increase to individual customer classes?**

A. Ms. Phelps discusses her proposed class distribution of the overall gas revenue increase of $56.77 million to individual customer classes beginning on page 43 of her direct testimony. Ms. Phelps states that the results of her cost of service study is the "Company's best indicator of what it costs to serve each class of customer." Accordingly, she uses these results to formulate her rate spread to customer classes. While she states the Company's long-term goal is to move customer class rates of return toward cost of service levels, Ms. Phelps indicates that moving all the way to cost-based rates in a single step would cause unreasonably large impacts on certain customers. In

this regard, Ms. Phelps proposes to allocate a "relatively larger portion of the revenue increase to those classes with current parity ratios below 100 percent."

A summary of PSE's proposed revenue increase for each customer class is shown below:

**Table 24**
**PSE Proposed Gas Revenue Increase**[15]

| Class | Income Amount | Percent Margin Increase |
|---|---|---|
| Residential | $38,682,592 | 17.06% |
| Commercial & Industrial | 16,178,327 | 24.74% |
| Large Volume | 127 | 0.00% |
| Interruptible | -146 | 0.00% |
| United Interruptible | -302,266 | -8.53% |
| Non-Exclusive Interruptible | 1,242,877 | 21.42% |
| Transportation & Contracts | 558,839 | 14.27% |
| Compressed Natural Gas | 5,074 | 17.54% |
| Rentals | 404,902 | 5.20% |
| Total Company | $56,770,327 | 17.02% |

**Q. Are PSE's proposed customer class revenue increases reasonable for its gas operations?**

A. No, they are not.

**Q. Mr. Watkins, do you have an alternative gas revenue increase distribution to that proposed by Ms. Phelps?**

A. Yes. Based on the results of my CCOSS, presented in Exhibit No.___ (GAW-10), and considering the principle of gradualism, I propose the following gas revenue increase distribution at PSE's requested overall revenue level:

[15] *See* Ms. Phelps direct testimony, Exhibit No. ___(JKP-10), page 1, columns M and N. Note that Ms. Phelps's total increase of $56,770,327 is not exactly the same as the level proposed for overall revenue requirement purposes of $56,770,922 due to Ms. Phelps' application of her proposed rates multiplied by billing determinants. This difference is attributable to Ms. Phelps's ultimate rounding of proposed distribution rates.

**Table 25**
**Public Counsel Revenue Distribution**
**at PSE Proposed Gas Revenue Increase**

| Class | Amount | Percent Margin Increase |
|---|---|---|
| Residential | $36,493,752 | 16.10% |
| Commercial & Industrial | 13,914,794 | 21.28% |
| Large Volume | 1,168,693 | 8.51% |
| Interruptible | 948,869 | 14.47% |
| Limited Interruptible | 0 | 0.00% |
| Non-Exclusive Interruptible | 1,383,297 | 23.83% |
| Transportation & Contracts | 865,122 | 22.13% |
| Compressed Natural Gas | 7,388 | 25.54% |
| Rentals | 1,989,015 | 25.54% |
| Total Company | $56,770,930 | 17.02% |

In formulating my proposed gas revenue increase distribution to the various customer classes, I began with the results of my CCOSS, which is presented in Exhibit No. ___ (GAW-10). With the results of my CCOSS as a guide, I proceeded in a similar manner as I did for PSE's electric operations. That is, I formulated increases consistent with my CCOSS results that provides for the movement to equal rates of return (parity) for all classes. My specific methodology is discussed narratively below with the actual calculation provided in Exhibit No.___ (GAW-11):

(1) I propose no increase to Limited Interruptible (Schedule 86) since this customer class exhibits the highest rate of return (14.60%) compared to the system average rate of return of 5.98% and is currently providing a ROR exceeding PSE's proposed overall ROR on rate base of 8.60%;

(2) I increased Large Volume (Schedule 41) at 50% of the system average percentage increase because this customer class has the next highest ROR (10.64%) at almost twice the system average rate of return (5.98%);

(3) I increased Interruptible (Schedule 85) at 85% of the system average percentage increase as this class's rate of return at current rates of 7.44% is also in excess of the system average rate of return of 5.98%, but below that of the 8.60% overall ROR requested by PSE;

(4) I increased Commercial & Industrial (Schedules 31 and 61) at 125% of the system average increase because this class's rate of return of 5.01% is less than the system average ROR at current rates;

(5) I increased Transportation & Contracts (Schedule 57 and Special Contracts) at 130% of the system average percentage because this class is only producing a current ROR of 2.27% and is the second lowest class rate of return compared to the system average rate of return of 5.98%;

(6) I increased Non-Exclusive Interruptible (Schedule 87) at 140% of the system average because their rate of return is even lower than for the Transportation & Contracts class;

(7) I increased both Compressed Natural Gas and Rentals at 150% of system average percentage increase since these classes are achieving the lowest rates of return at current rates of -8.78% and -5.68%, respectively; and,

(8) Finally, I treated the Residential class (Schedules 16, 23 and 53) as the residual to recover the remainder of the required revenue increase.

My recommended distribution results in an increase to the Residential class of 94.6 percent of the system average percentage increase. This relative percentage increase of 94.6 percent of system average is appropriate and reasonable since this class is currently earning somewhat in excess of the system rate of return; i.e., 6.62 percent compared to 5.98 percent.

**Q. Does your proposed revenue distribution move all classes towards rate of return parity?**

A. Yes. As shown below, and calculated on page 1 of Exhibit No.___ (GAW-11), my proposed class revenue assignment moves all classes closer to rate of return parity.

**Table 26**
**Indexed ROR**
**at PSE Proposed Gas Revenue Increase**

| Class | At Current Rates | At Public Counsel Proposed Rates |
|---|---|---|
| Residential | 111% | 107% |
| Commercial & Industrial | 84% | 92% |
| Large Volume | 178% | 142% |
| Interruptible | 124% | 113% |
| Limited Interruptible | 244% | 170% |
| Non-Exclusive Interruptible | 16% | 32% |
| Transportation & Contracts | 38% | 51% |
| Compressed Natural Gas | -147% | -90% |
| Rentals | -95% | -1% |
| Total Company | 100% | 100% |

**Q: Mr. Watkins, please provide your recommended scale back method to assign class natural gas revenue increases should the Commission authorize an overall revenue requirement increase less than that proposed by PSE.**

A: I recommend that my customer class revenue increase distribution be scaled back in equal portions (i.e., equal percentages) should the Commission authorize an overall electric revenue increase different than that requested by PSE.

## C. NATURAL GAS RESIDENTIAL RATE DESIGN

**Q: Please describe PSE's current and proposed residential natural gas rate structure.**

A: Currently, PSE's residential natural gas base rates include a fixed monthly customer charge of $8.25, a flat delivery (distribution charge) of $0.30039/therm and a "new" customer delivery charge applicable to certain new customers ranging from $0.11/therm to $0.17/therm. Ms. Phelps proposes to increase the fixed monthly customer charge to

$18.00 (118% increase) and decrease the flat distribution charge to $0.22510 (25% decrease).

**Q: Did Ms. Phelps conduct a residential customer cost analysis similar to that performed by Mr. Hoff?**

A: Yes.

**Q: Please comment on Ms. Phelps's residential customer cost analysis.**

A: Ms. Phelps conducted an analysis that portrays the monthly residential customer cost to be $18.39. The results of Ms. Phelps's customer cost analysis is summarized on page 4 of her Exhibit No.___ (JKP-5). A closer examination of Ms. Phelps's study revealed that many costs included in her determination of the monthly $18.39 amount cannot be deemed directly customer-related. To illustrate, of the $75.2 million of Intangible plant that Ms. Phelps assigned to the residential class, $56.2 million is deemed customer-related and included in her customer cost analysis. Similarly, of the $79.2 million in total General plant assigned to the residential class, Ms. Phelps's customer cost study portrays $51.7 million to be customer-related and included in this analysis. Examples of Ms. Phelps's improper assignment of expenses to residential customer costs include all of Informational and Instructional Advertising ($0.4 million), $59.9 million in Administrative and General expenses (out of a total $80.0 million allocated to the residential class), and $0.7 million in increased Excise Tax associated with the Company's proposed rate increase. Overall, of the $909.3 million of total Rate Base allocated to the residential class, Ms. Phelps included $410.3 million as part of Residential customer costs. With respect to expenses, Ms. Phelps' CCOSS allocates

1 $161.1 million in total expenses (excluding income taxes) to the residential class. Of this
2 $161.1 million, Ms. Phelps includes $98.3 million in her customer cost analysis.
3 In summary, Ms. Phelps has greatly overstated customer costs by including costs
4 not required to connect customers or maintain customer accounts, but are rather general
5 overhead costs.
6 **Q: Please explain PSE's natural gas line extension and new customer connection policy.**
7 A: PSE's Natural Gas Schedule 7 (Facilities Extension Standards), coupled with its Natural
8 Gas Rule No. 7 (Extension of Distribution Facilities-Other than the Kittitas County), and
9 sets forth the terms and pricing structure for new customer connections.
10 PSE's connection pricing methodology is based on a philosophy that small
11 volume customers will utilize the Company's system less than similar, yet larger, usage
12 customers. The Company's connection pricing method recognizes that the volume of
13 natural gas used by small customers may not be sufficient to recover the investment
14 required to add these customers to the system. In other words, PSE must install a service
15 line, meter (and base) and regulator for every new customer. If a prospective customer is
16 only planning to use natural gas, example as a decorative fireplace, this customer will not
17 generate enough base rate (non-gas or margin) future revenue over time to justify the
18 Company's investment. Conversely, a prospective customer who will use natural gas for
19 space heating, hot water heating, and cooking will use substantially more gas and provide
20 significantly more base rate revenue to PSE, thereby justifying PSE's investment to add
21 this customer.
22 PSE's Rule 7 provides the formulaic cost/benefit method used to evaluate whether
23 each new customer will or will not provide enough future revenue to recover the

1 investment required to connect the perspective customer. If a new customer is not
2 expected to consume enough gas (and hence, generate revenue) to justify the incremental
3 costs to add this customer, this customer will be required to make an upfront cash
4 contribution to PSE. Furthermore, depending on the specific differences between the
5 expected connection costs and future revenues (i.e. benefits), the customer may pay an
6 upfront cash contribution and agree to pay a "new customer" surcharge on gas used for a
7 period of up to five years.

8 **Q: What criteria are used to evaluate whether a potential customer will or will not use**
9 **enough natural gas to justify the costs of connecting this customer?**

10 A: The cost/benefit method outlined in Natural Gas Schedule 7 provides various usage
11 allowances based on the number and type of natural gas appliances installed in a
12 customers house. For customers who use natural gas for space heating, an allowance is
13 given based on the square footage of the customer's home. Specific usage allowances are
14 also given for water heaters, cooking ranges, clothes dryers, hot tubs, and fireplaces.
15 These allowances represent the "benefits" portion of this method. Natural Gas Schedule
16 7 also provides a schedule of specific incremental costs considered in PSE's cost/benefit
17 method. These costs include a flat cost per foot to extend any Mains ($40.79), a fixed
18 cost to run a Service line ($3,026), a fixed cost for a new meter ($132), and a provision
19 for annual Operating and Maintenance expenses ($48.00).

20 **Q: You mentioned a surcharge imposed on certain new customers. What is the current**
21 **structure and level of this surcharge?**

22 A: Depending on the expected level of revenue shortfall from PSE's cost/benefit analysis, as
23 well as the upfront cash contribution made by the customer, the monthly "new customer"

1 residential surcharge imposed is either $0.115/therm or $0.17/therm for all gas consumed
2 each month. This surcharge is in addition to the base rate distribution usage charge of
3 $0.30039/therm and in addition to the monthly fixed customer charge of $8.25.

4 **Q: What are the ratemaking implications of PSE's connection polices?**

5 A: First, it is obvious that PSE recognizes customers do not connect to its gas distribution
6 system simply for the sake of being connected. Rather, customers join the Company's
7 system in order to consume gas. More importantly, PSE's cost/benefit methodology
8 recognizes that expected revenue is a function of a customer's usage rather than of a
9 customer simply being connected to the system. This realistic understanding—that
10 revenue contributions are, and should be, a function of usage—dovetails with my earlier
11 discussion that prices should reflect variability in usage rather than fixed per customer
12 amounts. Such a pricing structure is not only the most efficient but also the fairest to all
13 customers in that customers pay in relation to the level of gas consumed.

14 **Q: If a customer is charged an up front connection fee and/or a new customer**
15 **surcharge, will this customer be overcharged if fixed monthly customer charges are**
16 **increased?**

17 A: Yes. Connection fees and new customer surcharges represent a payment to PSE to
18 compensate the Company for the costs of installing services lines and costs associated
19 with metering and regulating equipment. If customer charges are increased or designed
20 to also recover the costs of Services, Meters and other expenses, the customer will be
21 double-charged: once for the connection and/or "new customer" surcharge and again for
22 the ongoing monthly customer charge that must be paid.

1 **Q: Is the proper solution to this double payment problem the abandonment of**
2 **connection fees?**
3 A: No. Although PSE's line extension and customer polices (Schedule 7 and Rule 7) are
4 admittedly complicated and even perhaps self-serving to the Company, they do provide
5 pricing and costing signals that are in the best interest of PSE and all of its customers. As
6 I explained earlier, there is no doubt that there are circumstances in which it is neither
7 beneficial to PSE nor its existing customers to extend service to a customer that will have
8 little or no gas consumption.
9 The more appropriate solution is to maintain a pricing policy for PSE's recurring
10 revenues that is volumetrically based and with a minimum level of customer charges.
11 **Q: Mr. Watkins, your discussion thus far has been limited to new customers on the**
12 **PSE system. Do these circumstances and concepts apply to existing customers as**
13 **well?**
14 A: Yes. First, it is well recognized that pricing should be forward looking. Therefore,
15 recognition of how new customers affect costs and revenue collection is an important
16 point to consider in establishing pricing policies for all customers.
17 Second, PSE is a relatively young and rapidly growing gas distribution company.
18 This growth has occurred for several years and will undoubtedly continue in the
19 foreseeable future.
20 Third, existing customers, like new customers, are not connected to the PSE
21 system simply for the sake of being connected, but rather because they desire to use gas
22 throughout the year. PSE's service lines and meters were not installed simply to enable
23 this connection, but rather to serve as the means of enabling customers the ability to

1 purchase or transport gas. As such, service lines are merely an extension of PSE's
2 Distribution Mains with the primary difference being one of accounting nomenclature
3 because service lines are typically located on customer owned property.

4 **Q: What ramifications do these factors have on determining a reasonable fixed**
5 **monthly customer charge for PSE's residential rates?**

6 A: Given PSE's new customer connection policies and pricing methodology, the relatively
7 young age of the PSE system, its level of growth, recognition that service lines represent
8 an extension of distribution Mains, and most importantly, that efficient and fair pricing
9 dictates volumetric based rates, PSE's natural gas fixed monthly customer charges should
10 remain at their current levels regardless of any increase in overall revenue requirement
11 authorized by this Commission.

12 **Q: Have you conducted an analysis to determine if PSE's current residential customer**
13 **charges are reasonable?**

14 A: Yes. Similar to the direct customer cost analysis I conducted for PSE's electric
15 operations, I have also conducted an analysis of the Company's residential gas customer
16 costs that should be considered in evaluating the reasonableness of fixed monthly
17 customer charges.

18 **Q: Mr. Watkins, does your analysis include the policy implications of increasing PSE's**
19 **natural gas fixed monthly customer charges?**

20 A: No. In her direct testimony, Public Counsel witness, Barbara Alexander, discusses
21 various potential policy implications of increasing PSE's monthly basic charge for
22 residential gas customer.

23 **Q: Please explain your natural gas Residential customer cost analysis.**

1 A: Exhibit No. ___ (GAW-12) presents the results of my residential natural gas customer
2 cost analysis.

3 **Q: Please explain your residential natural gas customer cost analysis.**

4 A: The direct customer costs provided on page 1 of Exhibit No.___ (GAW-12) include those
5 rate base and expense items required for each customer connection as well as those
6 required to maintain a customer's account. In recognition of PSE's connection fees and
7 new customer surcharges and the concepts enumerated earlier, I have excluded Services
8 investment from my analysis shown on page 1, and excluded all rate base items on page
9 2. The results of these analyses indicate a monthly customer cost in the range of $4.25 to
10 $7.48 using PSE's requested return on equity, and $4.25 to $7.24 at a 9.25 percent cost of
11 equity.

12 **Q: Mr. Watkins, are there other reasonable ways to evaluate customer costs while at**
13 **the same time recognize PSE's customer connection policies?**

14 A: Yes. Considering that PSE recognizes a customer's desired use of facilities in order to
15 consume natural gas, another reasonable method is to include the costs required to
16 maintain a customer's account plus a provision for depreciation on the assets employed to
17 render service. In this manner, depreciation expense represents a return of the investment
18 to connect the customer and thus, provides for the replacement of such facilities. Profit
19 (return) on the assets is then recovered from volumetric usage charges, which recognizes
20 the utilization of these assets.

21 **Q: Have you conducted an analysis such as you just described?**

22 A: Yes. Exhibit No.___ (GAW-13) presents this analysis in which a depreciation allowance
23 is provided for all investments required to connect a customer but excludes profit (return)

1 for the reasons discussed. This analysis also includes all direct Operating and
2 Maintenance expenses required to maintain a customer's account. This customer cost
3 analysis results in a monthly customer cost of $7.23.

4 **Q: Should the Commission authorize higher or lower revenue than that proposed by**
5 **you or the Company, how should PSE's residential rates be established?**

6 A: I recommend that PSE's current residential monthly customer charge of $8.25 be
7 maintained regardless of the change in revenue authorized by the Commission. As such,
8 any required change in residential revenue should be derived from the volumetric
9 distribution charge.

10 **IV. PSE SUPPLEMENTAL FILING**

11 **Q: Does PSE offer revised class revenue distribution proposals that incorporate the**
12 **Company's supplemental request for an overall revenue requirement increase**
13 **above those contained in its original December 31, 2007 filing?**

14 A: Yes. Revised class revenue distribution proposals appear in David Hoff's prefiled
15 supplemental testimony relating to PSE's electric operations, identified as Exhibit No.___
16 (DWH-8T), and in Janet Phelps's prefiled supplemental testimony concerning the
17 Company's natural gas operations, identified as Exhibit No.___ (JKP-14T).

18 **Q: Please explain Mr. Hoff's and Ms. Phelps's modified class revenue distribution**
19 **proposals that incorporate PSE's proposed additional overall increases in**
20 **requirement provided in the Supplemental testimonies of John Story.**[16]

21 A: Mr. Hoff and Ms. Phelps both utilized the same methodologies employed in their initial
22 filings to distribute the Company's latest proposed revenue requirement for its electric

[16] Exhibit No.___(JHS-9T) and Karl Karzmar, Exhibit No.___(KRK-7T).

1 and natural gas operations. I discussed Mr. Hoff's and Ms. Phelps's class revenue
2 distribution methodologies earlier in my testimony.

3 **Q: Do Mr. Hoff's and Ms. Phelps's supplemental testimonies effect your class revenue**
4 **distribution proposals in any way?**

5 A: No. As discussed earlier, my proposals (for purposes of the dollar amounts provided and
6 discussed in revenue distribution) are based on the amounts PSE requested in its initial
7 filing and provide an "apples to apples" comparison of the Company's and my proposals.
8 Recognizing that the Commission may ultimately authorize an overall revenue
9 requirement different than that proposed by PSE, I have provided a method by which my
10 revenue distribution proposals should be applied to a different overall change in
11 revenues.

12 **Q: Does this complete your direct testimony?**

13 A: Yes.

BACKGROUND & EXPERIENCE PROFILE

# GLENN A. WATKINS

VICE PRESIDENT/SENIOR ECONOMIST
TECHNICAL ASSOCIATES, INC.

## EDUCATION

| | |
|---|---|
| 1982 - 1988 | M.B.A., Virginia Commonwealth University, Richmond, Virginia |
| 1980 - 1982 | B.S., Economics; Virginia Commonwealth University |
| 1976 - 1980 | A.A., Economics; Richard Bland College of The College of William and Mary, Petersburg, Virginia |

## POSITIONS

| | |
|---|---|
| Jul. 1995-Present | Vice President/Senior Economist, Technical Associates, Inc. |
| Mar. 1993-1995 | Vice President/Senior Economist, C. W. Amos of Virginia |
| Apr. 1990-Mar. 1993 | Principal/Senior Economist, Technical Associates, Inc. |
| Aug. 1987-Apr. 1990 | Staff Economist, Technical Associates, Inc., Richmond, Virginia |
| Feb. 1987-Aug. 1987 | Economist, Old Dominion Electric Cooperative, Richmond, Virginia |
| May 1984-Jan. 1987 | Staff Economist, Technical Associates, Inc. |
| May 1982-May 1984 | Economic Analyst, Technical Associates, Inc. |
| Sep. 1980-May 1982 | Research Assistant, Technical Associates, Inc. |

## EXPERIENCE

### I. Public Utility Regulation

A. Costing Studies -- Conducted, and presented as expert testimony, numerous embedded and marginal cost of service studies. Cost studies have been conducted for electric, gas, telecommunications, water, and wastewater utilities. Analyses and issues have included the evaluation and development of alternative cost allocation methods with particular emphasis on ratemaking implications of distribution plant classification and capacity cost allocation methodologies. Distribution plant classifications have been conducted using the minimum system and zero-intercept methods. Capacity cost allocations have been evaluated using virtually every recognized method of allocating demand related costs (e.g., single and multiple coincident peaks, non-coincident peaks, probability of loss of load, average and excess, and peak and average).

Embedded and marginal cost studies have been analyzed with respect to the seasonal and diurnal distribution of system energy and demand costs, as well as cost effective approaches to incorporating energy and demand losses for rate design purposes. Economic dispatch models have been evaluated to determine long range capacity requirements as well as system marginal energy costs for ratemaking purposes.

B. Rate Design Studies -- Analyzed, designed and provided expert testimony relating to rate structures for all retail rate classes, employing embedded and marginal cost studies. These rate structures have included flat rates, declining block rates, inverted block rates, hours use of demand blocking, lighting rates, and interruptible rates. Economic development and special industrial rates have been developed in recognition of the competitive environment for specific customers. Assessed alternative time differentiated rates with diurnal and seasonal pricing structures. Applied Ramsey (Inverse Elasticity) Pricing to marginal costs in order to adjust for embedded revenue requirement constraints.

## GLENN A. WATKINS

C. Forecasting and System Profile Studies -- Development of long range energy (Kwh or Mcf) and demand forecasts for rural electric cooperatives and investor owned utilities. Analysis of electric plant operating characteristics for the determination of the most efficient dispatch of generating units on a system-wide basis. Factors analyzed include system load requirements, unit generating capacities, planned and unplanned outages, marginal energy costs, long term purchased capacity and energy costs, and short term power interchange agreements.

D. Cost of Capital Studies -- Analyzed and provided expert testimony on the costs of capital and proper capital structures for ratemaking purposes, for electric, gas, telephone, water, and wastewater utilities. Costs of capital have been applied to both actual and hypothetical capital structures. Cost of equity studies have employed comparable earnings, DCF, and CAPM analyses. Econometric analyses of adjustments required to electric utilities cost of equity due to the reduced risks of completing and placing new nuclear generating units into service.

E. Accounting Studies -- Performed and provided expert testimony for numerous accounting studies relating to revenue requirements and cost of service. Assignments have included original cost studies, cost of reproduction new studies, depreciation studies, lead-lag studies, Weather normalization studies, merger and acquisition issues and other rate base and operating income adjustments.

### II. Transportation Regulation

A. Oil and Products Pipelines -- Conducted cost of service studies utilizing embedded costs, I.C.C. Valuation, and trended original cost. Development of computer models for cost of service studies utilizing the "Williams" (FERC 154-B) methodology. Performed alternative tariff designs, and dismantlement and restoration studies.

B. Railroads -- Analyses of costing studies using both embedded and marginal cost methodologies. Analyses of market dominance and cross-subsidization, including the implementation of differential pricing and inverse elasticity for various railroad commodities. Analyses of capital and operation costs required to operate "stand alone" railroads. Conducted cost of capital and revenue adequacy studies of railroads.

### III. Insurance Studies

Conducted and presented expert testimony relating to market structure, performance, and profitability by line and sub-line of business within specific geographic areas, e.g. by state. These studies have included the determination of rates of return on Statutory Surplus and GAAP Equity by line - by state using the NAIC methodology, and comparison of individual insurance company performance vis a vis industry Country-Wide performance.

Conducted and presented expert testimony relating to rate regulation of workers compensation, automobile, and professional malpractice insurance. These studies have included the determination of a proper profit and contingency factor utilizing an internal rate of return methodology, the development of a fair investment income rate, capital structure, cost of capital.

Other insurance studies have included testimony before the Virginia Legislature regarding proper regulatory structure of Credit Life and P&C insurance; the effects on competition and prices resulting from proposed insurance company mergers, maximum and minimum expense multiplier limits, determination of specific class code rate increase limits (swing limits); and investigation of the reasonableness of NCCI's administrative assigned risk plan and pool expenses.

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### IV. Anti-Trust and Commercial Business Damage Litigation

Analyses of alleged claims of attempts to monopolize, predatory pricing, unfair trade practices and economic losses. Assignments have involved definitions of relevant market areas(geographic and product) and performance of that market, the pricing and cost allocation practices of manufacturers, and the economic performance of manufacturers' distributors.

Performed and provided expert testimony relating to market impacts involving automobile and truck dealerships, incremental profitability, the present value of damages, diminution in value of business, market and dealer performance, future sales potential, optimal inventory levels, fair allocation of products, financial performance; and business valuations.

### MEMBERSHIPS AND CERTIFICATIONS

Member, Association of Energy Engineers (1998)
Certified Rate of Return Analyst, Society of Utility and Regulatory Financial Analysts (1992)
Member, American Water Works Association
National Association of Business Economists
Richmond Association of Business Economists
National Economics Honor Society

Puget Sound Energy
Electric Class Cost of Service Study
(PSE Study Corrected for the Calculation of Income Taxes )

| Description | | Alloc | Total Company | Residential Sch 7 | Sec. Voltage Sch 24 | Sec. Voltage Sch 25 | Sec. Voltage Sch 26 | Prim. Voltage Sch 31/35/43 | Campus Sch 40 | High Voltage Sch 46/49 | Transportation Sch 449/459 | Street & Area Lighting | Firm Resale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Revenue | | | $1,881,488,806 | $1,013,357,511 | $229,990,175 | $263,974,312 | $160,751,386 | $114,224,930 | $39,448,308 | $33,291,306 | $9,695,709 | $15,695,457 | $1,159,713 |
| Total O&M Expenses | | | $1,304,026,861 | $716,133,883 | $158,301,772 | $169,034,912 | $109,597,496 | $80,106,945 | $29,760,423 | $26,326,966 | $4,744,919 | $9,310,044 | $709,522 |
| Total Depreciation Expenses | | | $233,507,011 | $141,726,506 | $28,326,097 | $26,011,496 | $14,566,604 | $12,187,967 | $3,637,374 | $2,856,248 | $1,585,392 | $2,410,079 | $197,249 |
| Total Taxes Other than Income | | | $116,380,829 | $69,167,509 | $13,964,517 | $13,406,825 | $7,708,271 | $6,291,588 | $1,939,216 | $1,563,324 | $1,133,733 | $1,083,486 | $122,360 |
| Total Expenses Before Interest & Income Taxes | | | $1,653,914,721 | $927,027,898 | $200,592,385 | $208,453,233 | $131,874,371 | $98,586,500 | $35,337,013 | $30,746,539 | $7,464,043 | $12,803,609 | $1,029,132 |
| Earnings Before Interest and Taxes | | | $227,574,085 | $86,329,613 | $29,397,790 | $55,521,079 | $28,877,015 | $15,638,430 | $4,111,295 | $2,544,767 | $2,231,667 | $2,791,848 | $130,581 |
| Interest | | 75 | $123,453,265 | $72,663,406 | $14,962,888 | $14,608,259 | $8,358,622 | $6,849,917 | $2,104,335 | $1,672,604 | $1,092,771 | $1,015,708 | $124,756 |
| Earnings Beore Income Taxes | | | $104,120,820 | $13,666,207 | $14,434,902 | $40,912,819 | $20,518,393 | $8,788,513 | $2,006,961 | $872,163 | $1,138,896 | $1,776,140 | $5,826 |
| Income Taxes @ | 49.92% | | $51,973,585 | $6,821,707 | $7,205,414 | $20,422,293 | $10,242,087 | $4,386,928 | $1,001,807 | $435,354 | $568,498 | $886,589 | $2,908 |
| Operating Income | | | $175,600,500 | $79,507,906 | $22,192,376 | $35,098,786 | $18,634,928 | $11,251,502 | $3,109,488 | $2,109,413 | $1,663,169 | $1,905,259 | $127,673 |
| Rate Base | | | $3,305,098,647 | $1,945,349,323 | $400,587,392 | $391,093,248 | $223,777,550 | $183,386,407 | $56,337,377 | $44,779,062 | $29,255,735 | $27,192,589 | $3,339,963 |
| RoR | | | 5.31% | 4.09% | 5.54% | 8.97% | 8.33% | 6.14% | 5.52% | 4.71% | 5.68% | 7.01% | 3.82% |
| Indexed RoR | | | 100.00% | 76.93% | 104.27% | 168.92% | 156.74% | 115.45% | 103.88% | 88.66% | 107.00% | 131.87% | 71.95% |

Dockets UE-072300 & UG-072301
Exhibit No.___(GAW-3)
Page 1 of 1

Docket Nos. UE-072300 and UG-072301
Exhibit No. __ (GAW-4C)
**NON-CONFIDENTIAL**

BEFORE THE WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

Complainant,

v.

PUGET SOUND ENERGY, INC.

Respondent.

DOCKET NOs. UE-072300 and UG-072301

DIRECT TESTIMONY OF GLENN A. WATKINS (GAW-1TC)

ON BEHALF OF

PUBLIC COUNSEL

May 30, 2008

**Re: EXHIBIT NO. ___ (GAW-4C) IS CONFIDENTIAL IN ITS ENTIRETY**

Puget Sound Energy
Classification of Generation Plant
Scenario A

| | Generating Unit | Gross Plant | Classification | | Classified Amount | |
|---|---|---|---|---|---|---|
| | | | Base Load | Peak Load | Base Load | Peak Load |
| Steam | Colstrip | $711,063,674 | 100% | | $711,063,674 | $0 |
| CCCT | Frederickson 1 | $73,647,607 | 100% | | $73,647,607 | $0 |
| SCCT | Frederickson | $34,005,912 | | 100% | $0 | $34,005,912 |
| CCCT | Encogen | $155,434,396 | 100% | | $155,434,396 | $0 |
| Hydro | Lower Baker | $30,455,274 | 100% | | $30,455,274 | $0 |
| Hydro | Upper Baker | $66,173,289 | 100% | | $66,173,289 | $0 |
| Hydro | Electron | $55,695,000 | 100% | | $55,695,000 | $0 |
| Hydro | Snoqualmie | $13,970,582 | 100% | | $13,970,582 | $0 |
| Diesel | Crystal Mountain | $771,671 | | 100% | $0 | $771,671 |
| SCCT | Fredonia | $51,393,071 | | 100% | $0 | $51,393,071 |
| Wind | Hopkins Ridge | $179,696,732 | 100% | | $179,696,732 | $0 |
| SCCT | Whitehorn 2 & 3 | $33,269,424 | | 100% | $0 | $33,269,424 |
| Wind | Wild Horse | $344,895,360 | 100% | | $344,895,360 | $0 |
| CCCT | Goldendale | $306,756,121 | 100% | | $306,756,121 | $0 |
| CCCT | Sumas | $99,273,738 | 100% | | $99,273,738 | $0 |
| | Total | $2,156,501,851 | | | $2,037,061,773 | $119,440,078 |
| | Percent | | | | 94.46% | 5.54% |

Puget Sound Energy
Classification of Generation Plant
Scenario B

| Generating Unit | | Net Plant | Classification | | Classified Amount | |
|---|---|---|---|---|---|---|
| | | | Base Load | Peak Load | Base Load | Peak Load |
| Steam | Colstrip | $711,063,674 | 100% | | $711,063,674 | $0 |
| CCCT | Frederickson 1 | $73,647,607 | 85% | 15% | $62,600,466 | $11,047,141 |
| SCCT | Frederickson | $34,005,912 | | 100% | $0 | $34,005,912 |
| CCCT | Encogen | $155,434,396 | 85% | 15% | $132,119,237 | $23,315,159 |
| Hydro | Lower Baker | $30,455,274 | 75% | 25% | $22,841,456 | $7,613,819 |
| Hydro | Upper Baker | $66,173,289 | 75% | 25% | $49,629,967 | $16,543,322 |
| Hydro | Electron | $55,695,000 | 75% | 25% | $41,771,250 | $13,923,750 |
| Hydro | Snoqualmie | $13,970,582 | 75% | 25% | $10,477,937 | $3,492,646 |
| Diesel | Crystal Mountain | $771,671 | | 100% | $0 | $771,671 |
| SCCT | Fredonia | $51,393,071 | | 100% | $0 | $51,393,071 |
| Wind | Hopkins Ridge | $179,696,732 | 100% | | $179,696,732 | $0 |
| SCCT | Whitehorn 2 & 3 | $33,269,424 | | 100% | $0 | $33,269,424 |
| Wind | Wild Horse | $344,895,360 | 100% | | $344,895,360 | $0 |
| CCCT | Goldendale | $306,756,121 | 85% | 15% | $260,742,703 | $46,013,418 |
| CCCT | Sumas | $99,273,738 | 85% | 15% | $84,382,677 | $14,891,061 |
| | Total | $2,156,501,851 | | | $1,900,221,457 | $256,280,394 |
| | Percent | | | | 88.12% | 11.88% |

Puget Sound Energy
Public Counsel Electric Class Cost of Service Study
(Summary)

| Account Description | Allocator | Alloc | Total | Residential Sch 7 | Sec. Voltage Sch 24 | Sec. Voltage Sch 25 | Sec. Voltage Sch 26 | Prim. Voltage Sch 31/35/43 | Campus Sch 40 | High Voltage Sch 46/49 | Transportation Sch 449/459 | Street & Area Lighting | Firm Resale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Revenue | | | $1,881,488,806 | $1,013,251,566 | $230,003,864 | $263,999,672 | $160,776,687 | $114,245,340 | $39,459,664 | $33,300,440 | $9,695,869 | $15,596,001 | $1,159,704 |
| TOTAL O & M EXPENSES | | | $1,304,026,881 | $699,833,574 | $160,132,154 | $173,055,178 | $113,688,247 | $83,326,513 | $31,528,577 | $27,799,793 | $4,634,310 | $9,329,466 | $699,068 |
| TOTAL DEPRECIATION EXPENSES | | | $233,507,011 | $138,779,184 | $28,146,635 | $27,094,992 | $15,448,375 | $12,834,951 | $3,882,467 | $3,081,883 | $1,763,804 | $2,263,176 | $211,543 |
| TOTAL TAXES OTHER THAN INCOME | | | $116,380,829 | $64,624,096 | $14,203,973 | $15,317,915 | $9,199,824 | $6,869,477 | $2,299,040 | $1,872,212 | $857,521 | $1,039,288 | $97,483 |
| Total Expense Before Income Taxes | | | $1,653,914,721 | $903,236,854 | $202,482,763 | $215,468,086 | $138,336,446 | $103,030,942 | $37,710,085 | $32,753,887 | $7,255,635 | $12,631,930 | $1,008,094 |
| Earnings Before Interest & Taxes | | | $227,574,085 | $110,014,712 | $27,521,101 | $48,531,586 | $22,440,241 | $11,214,399 | $1,749,579 | $546,553 | $2,440,234 | $2,964,070 | $151,610 |
| Interest | | 75 | $123,453,265 | $71,521,352 | $15,000,011 | $14,946,203 | $8,658,987 | $7,080,627 | $2,211,312 | $1,763,962 | $1,150,821 | $990,854 | $129,134 |
| Earnings Before Taxes | | | $104,120,820 | $38,493,360 | $12,521,090 | $33,585,383 | $13,781,253 | $4,133,771 | -$461,732 | -$1,217,410 | $1,289,413 | $1,973,217 | $22,475 |
| Income Taxes @ | 49.92% | | $51,973,585 | $19,214,581 | $6,250,104 | $16,764,685 | $6,879,135 | $2,063,439 | -$230,481 | -$607,690 | $643,631 | $984,963 | $11,219 |
| Operating Income | | | $175,600,500 | $90,800,131 | $21,270,997 | $31,766,901 | $15,561,106 | $9,150,960 | $1,980,060 | $1,154,242 | $1,796,603 | $1,979,107 | $140,391 |
| Rate Base | | | $3,305,098,647 | $1,914,774,187 | $401,581,260 | $400,140,700 | $231,818,958 | $189,563,006 | $59,201,375 | $47,224,915 | $30,809,860 | $26,527,195 | $3,457,191 |
| ROR | | | 5.31% | 4.74% | 5.30% | 7.94% | 6.71% | 4.83% | 3.34% | 2.44% | 5.83% | 7.46% | 4.06% |
| Indexed ROR | | | 100.00% | 89.25% | 99.69% | 149.42% | 126.34% | 90.86% | 62.95% | 46.00% | 109.75% | 140.42% | 76.43% |
| Required Income @ 8.60% | | | $284,238,484 | $164,670,580 | $34,535,988 | $34,412,100 | $19,936,430 | $16,302,419 | $5,091,318 | $4,061,343 | $2,649,648 | $2,281,339 | $297,318 |
| Income Deficiency | | | $108,637,984 | $73,870,449 | $13,264,991 | $2,645,199 | $4,375,324 | $7,151,458 | $3,111,258 | $2,907,100 | $853,045 | $302,231 | $156,928 |
| Conversion Factor | | | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 |
| Additional Reveunue Required | | | $174,819,118 | $118,871,560 | $21,345,886 | $4,256,627 | $7,040,727 | $11,508,053 | $5,006,604 | $4,678,076 | $1,372,711 | $486,347 | $252,526 |
| PC Proposed Increase | | | $174,819,118 | $101,002,871 | $21,444,363 | $18,602,204 | $12,852,702 | $10,682,086 | $4,264,090 | $3,792,429 | $824,240 | $1,101,607 | $252,526 |
| Difference from Required Rev. Increase @ 8.60% ROR | | | $0 | -$17,868,689 | $98,477 | $14,345,577 | $5,811,975 | -$825,967 | -$742,514 | -$885,647 | -$548,471 | $615,260 | $0 |
| Conversion Factor | | | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 | 0.6214308 |
| Income Difference from Required | | | $0 | -$11,104,154 | $61,197 | $8,914,783 | $3,611,740 | -$513,281 | -$461,421 | -$550,368 | -$340,837 | $382,341 | $0 |
| Operating Income @ PC Proposed Rates | | | $284,238,484 | $153,566,426 | $34,597,185 | $43,326,884 | $23,548,171 | $15,789,137 | $4,629,897 | $3,510,975 | $2,308,811 | $2,663,680 | $297,318 |
| ROR @ PC Proposed Rates | | | 8.60% | 8.02% | 8.62% | 10.83% | 10.16% | 8.33% | 7.82% | 7.43% | 7.49% | 10.04% | 8.60% |
| Indexed ROR | | | | 93% | 100% | 126% | 118% | 97% | 91% | 86% | 87% | 117% | 100% |

Puget Sound Energy
Public Counsel Electric Class Cost of Service Study
(Rate Base)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential Sch 7 | Sec. Voltage Sch 24 | Sec. Voltage Sch 25 | Sec. Voltage Sch 26 | Prim. Voltage Sch 31/35/43 | Campus Sch 40 | High Voltage Sch 46/49 | Transportation Sch 449/459 | Street & Area Lighting | Firm Resale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| **RATE BASE** | | | | | | | | | | | | | | |
| **Plant-In-Service** | | | | | | | | | | | | | | |
| | **Intangible Plant** | | | | | | | | | | | | | |
| 300 | Production Plant | PP.T | 63 | 49,116,606 | 25,673,323 | 5,949,423 | 6,910,775 | 4,647,847 | 3,291,576 | 1,289,853 | 1,156,563 | 0 | 179,880 | 17,365 |
| 300.01 | Distribution Plant | DP.T | 66 | 12,327,993 | 8,113,860 | 1,490,115 | 1,186,355 | 528,107 | 558,254 | 107,216 | 57,294 | 92,948 | 182,388 | 11,455 |
| 300.01 | General Plant | GP.T | 71 | 168,572,155 | 98,928,289 | 20,278,179 | 19,862,456 | 11,529,050 | 9,413,902 | 2,932,568 | 2,366,212 | 1,546,072 | 1,544,222 | 171,205 |
| | Sub-total | | | 230,016,754 | 132,715,472 | 27,717,717 | 27,959,586 | 16,705,004 | 13,263,733 | 4,329,639 | 3,580,069 | 1,639,019 | 1,906,490 | 200,025 |
| | **Production Plant** | | | | | | | | | | | | | |
| 310 | Thermal Baseload Generation | PC3 | 59 | 829,109,314 | 433,376,680 | 100,428,805 | 116,656,835 | 78,457,648 | 55,563,213 | 21,773,270 | 19,523,282 | 0 | 3,036,453 | 293,128 |
| 330 | Hydro Baseload Generation | PC3 | 59 | 160,755,038 | 84,026,899 | 19,472,024 | 22,618,458 | 15,212,062 | 10,773,086 | 4,221,594 | 3,785,346 | 0 | 588,734 | 56,834 |
| 340 | Other Production Generation | PC3 | 59 | 1,169,304,950 | 611,197,448 | 141,636,207 | 164,522,835 | 110,649,965 | 78,361,609 | 30,707,160 | 27,533,969 | 0 | 4,282,354 | 413,403 |
| | Sub-total | | | 2,159,169,302 | 1,128,601,027 | 261,637,035 | 303,798,128 | 204,319,675 | 144,697,908 | 56,702,025 | 50,842,597 | 0 | 7,907,542 | 763,365 |
| | **Transmission Plant** | | | | | | | | | | | | | |
| 350 | Transmission Plant - Integrated Generation | PC3 | 59 | 217,184,510 | 113,522,669 | 26,307,244 | 30,558,163 | 20,551,917 | 14,554,738 | 5,703,490 | 5,114,108 | 0 | 795,396 | 76,785 |
| 350.01 | Bulk Transmission Plant (>230 kV) | PC4 | 60 | 117,203,204 | 55,670,816 | 12,928,148 | 16,012,446 | 10,092,513 | 7,146,208 | 2,798,670 | 2,509,987 | 9,737,130 | 390,816 | 716,470 |
| 350.02 | Sub Transmission Plant (<230 kV) | PC4 | 60 | 236,988,945 | 112,972,728 | 26,141,163 | 30,355,687 | 20,407,411 | 14,449,881 | 5,659,008 | 5,075,281 | 19,888,815 | 790,243 | 1,448,728 |
| | Sub-total | | | 571,376,659 | 282,366,213 | 65,376,554 | 75,926,297 | 51,051,841 | 36,150,828 | 14,161,168 | 12,699,376 | 29,425,945 | 1,976,456 | 2,241,982 |
| | **Distribution Plant** | | | | | | | | | | | | | |
| 360.01 | Land & Land Rights - Assigned | DIR360.01 | 33 | 1,012,984 | 0 | 0 | 0 | 0 | 0 | 522,558 | 469,441 | 0 | 0 | 20,965 |
| 360.02 | Land & Land Rights - Allocated | NCP_360 | 30 | 14,644,606 | 6,390,341 | 1,958,336 | 2,658,914 | 2,198,559 | 1,155,113 | 0 | 0 | 137,828 | 144,847 | 666 |
| 360.03 | Land & Land Rights - Transm Related | PC4 | 60 | 10,718,471 | 5,109,500 | 1,182,305 | 1,372,919 | 922,981 | 653,535 | 255,944 | 229,543 | 890,480 | 35,741 | 65,623 |
| 361.01 | Structures & Improve - Assigned | DIR361.01 | 34 | 516,444 | 0 | 0 | 0 | 0 | 0 | 91,698 | 211,704 | 198,439 | 0 | 14,602 |
| 361.02 | Structures & Improve - Allocated | NCP_361 | 31 | 4,659,632 | 2,311,555 | 609,421 | 697,743 | 572,966 | 410,596 | 0 | 0 | 19,994 | 37,283 | 74 |
| 361.03 | Structures & Improve - Transm Related | PC4 | 60 | 1,043,991 | 497,671 | 115,158 | 133,724 | 89,899 | 63,655 | 24,929 | 22,358 | 86,734 | 3,481 | 6,382 |
| 362.01 | Station Equipment - Assigned | DIR362.01 | 35 | 22,590,134 | 0 | 0 | 0 | 0 | 465,179 | 4,746,514 | 7,375,038 | 9,780,010 | 0 | 223,393 |
| 362.02 | Station Equipment - Allocated | NCP_362 | 32 | 267,547,095 | 156,544,382 | 41,139,548 | 40,703,891 | 25,844,767 | 21,027,004 | 0 | 0 | 683,343 | 1,533,770 | 70,389 |
| 362.03 | Station Equipment - Transm Related | PC4 | 60 | 95,790,098 | 45,663,179 | 10,556,166 | 12,269,662 | 8,248,604 | 5,840,591 | 2,287,351 | 2,051,411 | 7,958,150 | 319,414 | 585,571 |
| 364 | Poles Towers & Fixtures | OH_NCP | 39 | 230,087,210 | 158,698,935 | 27,727,723 | 21,923,445 | 8,077,829 | 12,413,637 | 0 | 0 | 25,905 | 1,067,057 | 132,678 |
| 364.01 | OH Lines Direct Assignment | DIR364.01 | 36 | 957,726 | 0 | 0 | 0 | 0 | 0 | 783,835 | 0 | 0 | 0 | 173,891 |
| 365 | OVHD Cond & Devices | OH_NCP | 39 | 239,765,816 | 165,388,973 | 28,896,600 | 22,847,639 | 8,418,354 | 12,936,940 | 0 | 0 | 26,997 | 1,112,040 | 138,271 |
| 366 | UNGD Conduit | UG_NCP | 40 | 501,935,042 | 343,599,440 | 56,725,987 | 51,342,606 | 23,737,604 | 23,650,174 | 0 | 0 | 62,064 | 2,686,023 | 131,144 |
| 366.01 | UG Lines Direct Assignment | DIR366.01 | 37 | 14,663,077 | 0 | 0 | 0 | 0 | 0 | 12,557,576 | 1,548,219 | 0 | 0 | 557,282 |
| 367 | UNGDCond & Devices | UG_NCP | 40 | 537,940,287 | 368,246,816 | 60,795,105 | 55,025,559 | 25,440,370 | 25,346,669 | 0 | 0 | 66,516 | 2,878,700 | 140,551 |
| 368.OH | Line Transf OVHD | TFR | 16 | 125,492,624 | 104,824,822 | 17,580,509 | 2,933,246 | 31,675 | 0 | 0 | 0 | 0 | 122,373 | 0 |
| 368.UG | Line Transf UNGD | TFR | 17 | 228,268,921 | 145,719,631 | 40,524,327 | 32,968,315 | 9,027,161 | 0 | 0 | 0 | 0 | 29,487 | 0 |
| 368.03 | Line Transf Assigned | TFR | Dir | 2,244,856 | | | | | 1,049,213 | 1,176,246 | | | | 19,397 |
| 369.OH | Services - OVHD | OH_SVC | 23 | 42,092,559 | 36,463,376 | 5,396,070 | 230,687 | 2,426 | 0 | 0 | 0 | 0 | 0 | 0 |
| 369.UG | Services - UNGD | RESID | Dir | 131,754,580 | 131,754,580 | | | | | | | | | |
| 370 | Meters | METER | 6 | 129,474,364 | 73,742,332 | 27,760,476 | 10,186,263 | 1,064,815 | 15,053,218 | 632,405 | 540,443 | 306,345 | 0 | 188,046 |
| 372 | Leased Prop Assigned - Water Hirs | DIR372.00 | 8 | 1,051,383 | 1,042,190 | 8,797 | 396 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 373 | Str & Area Lighting Sys | DIR373.00 | Dir | 29,598,724 | | | | | | | | | 29,598,724 | |
| 374 | Asset Retirement Obligation | LINE.T | 61 | 6,729,328 | 4,570,253 | 768,281 | 666,784 | 289,736 | 328,000 | 58,859 | 6,830 | 801 | 34,164 | 5,620 |
| 375 | Easements | LINE.T | 61 | 24,814,955 | 16,853,188 | 2,833,100 | 2,458,823 | 1,068,426 | 1,209,528 | 217,046 | 25,187 | 2,952 | 125,981 | 20,723 |
| | Sub-total | | | 2,685,374,886 | 1,767,421,166 | 324,587,910 | 258,420,636 | 115,036,173 | 121,603,055 | 23,354,961 | 12,480,175 | 20,246,558 | 39,729,084 | 2,495,168 |
| | **General Plant** | | | | | | | | | | | | | |
| 389 | Land & Land Rights | PTDP.T | 62 | 7,669,895 | 4,512,893 | 925,046 | 906,082 | 525,930 | 429,442 | 133,777 | 107,941 | 70,528 | 70,444 | 7,810 |
| 390 | Structures & Improvements | PTDP.T | 62 | 112,994,773 | 66,312,135 | 13,592,566 | 13,313,905 | 7,727,981 | 6,310,187 | 1,965,715 | 1,586,084 | 1,036,340 | 1,035,100 | 114,760 |
| 391 | Office Furniture & Equip | PTDP.T | 62 | 70,060,037 | 41,115,448 | 8,427,786 | 8,255,007 | 4,791,572 | 3,912,499 | 1,218,801 | 983,418 | 642,561 | 641,792 | 71,154 |
| 392 | Transportation Equip | PTDP.T | 62 | 2,692,595 | 1,580,177 | 323,902 | 317,262 | 184,153 | 150,368 | 46,842 | 37,795 | 24,695 | 24,666 | 2,735 |
| 393 | Stores Equip | PTDP.T | 62 | 1,076,322 | 631,651 | 129,475 | 126,820 | 73,612 | 60,107 | 18,724 | 15,108 | 9,872 | 9,860 | 1,093 |
| 394 | Tools & Shop & Garage Equip | PTDP.T | 62 | 6,279,098 | 3,684,953 | 755,336 | 739,851 | 429,442 | 350,656 | 109,234 | 88,138 | 57,589 | 57,520 | 6,377 |
| 395 | Lab Equip | PTDP.T | 62 | 13,388,039 | 7,856,907 | 1,610,498 | 1,577,481 | 915,640 | 747,654 | 232,905 | 187,925 | 122,789 | 122,642 | 13,597 |
| 396 | Power Operated Equip | PTDP.T | 62 | 1,252,830 | 735,236 | 150,708 | 147,616 | 85,684 | 69,964 | 21,795 | 17,586 | 11,490 | 11,477 | 1,272 |
| 397 | Communication Equip | PTDP.T | 62 | 66,310,039 | 38,914,723 | 7,976,684 | 7,813,154 | 4,535,101 | 3,703,080 | 1,153,564 | 930,780 | 608,167 | 607,440 | 67,346 |
| 398 | Miscellaneous Equip | PTDP.T | 62 | 713,533 | 418,744 | 85,834 | 84,074 | 48,800 | 39,847 | 12,413 | 10,016 | 6,544 | 6,536 | 725 |
| 39 | Other Tangible Property | PTDP.T | 62 | 23,898 | 14,025 | 2,875 | 2,816 | 1,634 | 1,335 | 416 | 335 | 219 | 219 | 24 |
| | Sub-total | | | 282,481,059 | 165,776,892 | 33,980,710 | 33,284,071 | 19,319,550 | 15,775,139 | 4,914,186 | 3,965,128 | 2,590,795 | 2,587,696 | 286,893 |
| | **TOTAL PLANT-IN-SERVICE** | | | **5,928,418,660** | **3,476,880,770** | **713,199,926** | **699,388,718** | **406,432,243** | **331,490,662** | **103,461,978** | **83,567,345** | **53,902,318** | **54,107,267** | **5,987,433** |

**Accumulated Reserve for Depreciation**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Intangible Plant** | | | | | | | | | | | | | |
| 111 | Accum Amortization | GP.T | 71 | -116,972,014 | -68,646,220 | -14,071,004 | -13,782,534 | -7,999,994 | -6,532,295 | -2,034,906 | -1,641,912 | -1,072,817 | -1,071,534 | -118,799 |
| | Sub-total | | | -116,972,014 | -68,646,220 | -14,071,004 | -13,782,534 | -7,999,994 | -6,532,295 | -2,034,906 | -1,641,912 | -1,072,817 | -1,071,534 | -118,799 |
| | **Production Plant** | | | | | | | | | | | | | |
| 108.01 | Accum Depreciation Thermal Baseload Generati | PP.T | 63 | -477,221,768 | -249,444,533 | -67,605,178 | -67,145,767 | -45,158,940 | -31,981,277 | -12,532,338 | -11,237,282 | 0 | -1,747,733 | -168,720 |
| 108.02 | Accum Depreciation Hydro Baseload Generatio | PP.T | 63 | -117,167,011 | -61,243,372 | -14,192,270 | -16,485,562 | -11,087,378 | -7,852,011 | -3,076,927 | -2,758,966 | 0 | -429,102 | -41,424 |
| 108.03 | Accum Depreciation Other Production Generatio | PP.T | 63 | -405,325,557 | -211,864,275 | -49,096,495 | -57,029,870 | -38,355,485 | -27,163,113 | -10,644,269 | -9,544,321 | 0 | -1,484,427 | -143,301 |
| | Sub-total | | | -999,714,336 | -522,552,180 | -121,093,943 | -140,661,200 | -94,601,803 | -66,996,401 | -26,253,535 | -23,540,569 | 0 | -3,661,261 | -353,445 |
| | **Transmisson Plant** | | | | | | | | | | | | | |
| 108.04 | Accum Depreciation Transmisson Plant | TP.T | 64 | -217,102,108 | -107,288,772 | -24,840,685 | -28,849,199 | -19,397,821 | -13,735,985 | -5,380,723 | -4,825,296 | -11,180,776 | -750,980 | -851,871 |
| | Sub-total | | | -217,102,108 | -107,288,772 | -24,840,685 | -28,849,199 | -19,397,821 | -13,735,985 | -5,380,723 | -4,825,296 | -11,180,776 | -750,980 | -851,871 |
| | **Distribution Plant** | | | | | | | | | | | | | |
| 108.05_36 | Structures & Improve | D361.T | Acct 361 | -2,303,899 | -1,040,531 | -268,382 | -307,974 | -245,524 | -175,662 | -43,198 | -86,696 | -113,033 | -15,099 | -7,800 |
| 108.05_36 | Station Equipment | D362.T | Acct 362 | -162,134,404 | -80,765,202 | -20,652,158 | -21,158,554 | -13,617,483 | -10,917,183 | -2,809,447 | -3,765,087 | -7,357,867 | -740,194 | -351,229 |
| 108.10_36 | Poles Towers & Fixtures | D364.T | Acct 364, 365 | -82,807,813 | -57,004,117 | -9,959,704 | -7,874,827 | -2,901,529 | -4,458,936 | -137,869 | 0 | -9,305 | -383,283 | -78,243 |
| 108.10_36 | OVHD Cond & Devices | D364.T | Acct 364, 365 | -113,912,790 | -78,416,489 | -13,700,853 | -10,832,836 | -3,991,426 | -6,133,840 | -189,657 | 0 | -12,800 | -527,256 | -107,634 |
| 108.10_36 | UNGD Conduit | D366.T | Acct 366, 367 | -149,886,187 | -101,179,193 | -16,704,013 | -15,116,777 | -6,989,975 | -6,964,230 | -1,784,887 | -220,058 | -18,276 | -790,949 | -117,828 |
| 108.10_36 | UNGDCond & Devices | D366.T | | -192,090,860 | -129,667,311 | -21,407,212 | -19,375,636 | -8,958,080 | -8,925,086 | -2,287,442 | -282,018 | -23,422 | -1,013,650 | -151,003 |
| 108.10_36 | Line Transformers | D368.T | | -127,635,539 | -89,625,285 | -20,831,766 | -12,871,440 | -3,247,777 | -376,164 | -421,708 | 0 | 0 | -54,445 | -6,954 |
| 108.10_36 | Services | D369.T | | -93,218,644 | -90,200,218 | -2,893,429 | -123,697 | -1,301 | 0 | 0 | 0 | 0 | 0 | 0 |
| 108.10_37 | Meters | D370.T | | -47,633,433 | -27,129,698 | -10,213,039 | -3,747,519 | -391,744 | -5,536,057 | -232,661 | -198,828 | -112,704 | 0 | -69,182 |
| 108.10_37 | Leased Prop Assigned - Water Htrs | DIR372.00 | 8 | -1,056,248 | -1,047,013 | -8,837 | -398 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 108.10_37 | Str & Area Lighting Sys | DIR373.00 | Dir | -15,811,486 | | | | | | | | | -15,811,486 | |
| 108.10_37 | Easements | LINE.T | 61 | -11,696,597 | -7,943,797 | -1,335,390 | -1,158,973 | -503,606 | -570,114 | -102,305 | -11,872 | -1,392 | -59,382 | -9,768 |
| | Sub-total | | | -1,000,189,901 | -664,218,853 | -117,974,783 | -92,570,631 | -40,848,443 | -44,059,273 | -8,009,176 | -4,564,559 | -7,648,799 | -19,395,742 | -899,641 |
| | **General Plant** | | | | | | | | | | | | | |
| 108.06 | Accum Depreciation General Plant | GP.T | 71 | -106,290,251 | -62,377,518 | -12,786,064 | -12,523,927 | -7,269,443 | -5,935,773 | -1,849,080 | -1,491,974 | -974,849 | -973,682 | -107,950 |
| 108.07 | RWIP | PTDGP.T | 72 | -12,883,306 | -7,560,700 | -1,549,781 | -1,518,009 | -881,120 | -719,467 | -224,125 | -180,840 | -118,160 | -118,019 | -13,085 |
| | Sub-total | | | -119,173,557 | -69,938,218 | -14,335,836 | -14,041,937 | -8,150,563 | -6,655,240 | -2,073,205 | -1,672,814 | -1,093,009 | -1,091,701 | -121,035 |
| | **TOTAL ACCUMULATED RESERVE FOR DEPRECIATION** | | | **-2,453,151,916** | **-1,432,644,242** | **-292,316,250** | **-289,905,501** | **-170,998,624** | **-137,979,194** | **-43,751,544** | **-35,245,149** | **-20,995,401** | **-25,971,219** | **-2,344,790** |

**Rate Base Adjustments and Working Capital**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Working Capital Assets** | | | | | | | | | | | | | |
| WC | Working Capital | EPIS.T | 74 | 95,493,209 | 56,004,564 | 11,488,013 | 11,265,546 | 6,546,690 | 5,339,553 | 1,666,535 | 1,346,078 | 868,243 | 871,544 | 96,444 |
| | Sub-total | | | 95,493,209 | 56,004,564 | 11,488,013 | 11,265,546 | 6,546,690 | 5,339,553 | 1,666,535 | 1,346,078 | 868,243 | 871,544 | 96,444 |
| | **Other Items** | | | | | | | | | | | | | |
| BEP | Bonneville Exchange Power, Tenaska & Cabot | PC3 | 59 | 206,861,228 | 108,126,674 | 25,056,800 | 29,105,663 | 19,575,037 | 13,862,916 | 5,432,390 | 4,871,022 | 0 | 757,589 | 73,135 |
| 186.01 | Misc Def Debits - Conservation Related | PC3 | 59 | 577 | 302 | 70 | 81 | 55 | 39 | 15 | 14 | 0 | 2 | 0 |
| 186.02 | Misc Def Debits - WUTC AFUDC Non Project | PTDGP.T | 72 | 32,402,291 | 19,015,615 | 3,897,794 | 3,817,885 | 2,216,070 | 1,809,504 | 563,687 | 454,824 | 297,180 | 296,824 | 32,908 |
| 186.03 | Misc Def Debits - Colstrip FERC Adj. - General | GP.T | 71 | 12,307,614 | 7,222,849 | 1,480,529 | 1,450,177 | 841,747 | 687,318 | 214,110 | 172,759 | 112,880 | 112,745 | 12,500 |
| 282 | Accum Deferred Income Tax - Prod | PP.T | 63 | -37,188,678 | -19,438,578 | -4,504,610 | -5,232,499 | -3,519,121 | -2,492,220 | -976,613 | -875,693 | 0 | -136,196 | -13,148 |
| 282.01 | Accum Deferred Income Tax - Trans/Dist | TDP.T | 65 | 57,676,154 | 36,301,158 | 6,906,161 | 5,921,190 | 2,941,372 | 2,793,777 | 664,400 | 445,923 | 879,686 | 738,593 | 83,894 |
| 282.02 | Accum Deferred Income Tax - Other | PTDGP.T | 72 | -463,936,503 | -272,267,044 | -55,808,908 | -54,664,769 | -31,729,856 | -25,908,619 | -8,070,914 | -6,512,208 | -4,256,045 | -4,249,955 | -471,185 |
| 235 | Customer Deposits | CUS | 14 | -13,420,983 | -10,908,880 | -1,493,272 | -535,719 | -442,381 | -40,731 | 0 | 0 | 0 | 0 | 0 |
| 252 | Customer Advances | CUST_4 | 3 | -60,361,006 | -53,519,000 | -6,324,991 | -470,072 | -44,274 | 0 | -2,669 | 0 | 0 | 0 | 0 |
| | Sub-total | | | -265,661,306 | -165,466,905 | -30,790,429 | -20,608,063 | -10,161,352 | -9,288,014 | -2,175,594 | -1,443,358 | -2,965,299 | -2,480,397 | -281,896 |
| | **TOTAL OTHER RATE BASE** | | | -170,168,097 | -129,462,341 | -19,302,416 | -9,342,517 | -3,614,662 | -3,948,461 | -509,059 | -97,280 | -2,097,056 | -1,608,853 | -185,452 |
| **TOTAL RATE BASE** | | | | **3,305,098,647** | **1,914,774,187** | **401,581,260** | **400,140,700** | **231,818,958** | **189,563,006** | **59,201,375** | **47,224,915** | **30,809,860** | **26,527,195** | **3,457,191** |

Puget Sound Energy
Public Counsel Electric Class Cost of Service Study
(Expense)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential Sch 7 | Sec. Voltage Sch 24 | Sec. Voltage Sch 25 | Sec. Voltage Sch 26 | Prim. Voltage Sch 31/35/43 | Campus Sch 40 | High Voltage Sch 46/49 | Transportation Sch 449/459 | Street & Area Lighting | Firm Resale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| **O & M Expenses** | | | | | | | | | | | | | | |
| | **Production - O&M - Fuel** | | | | | | | | | | | | | |
| FUEL.ST | Steam Prod O&M - Fuel | PP.T | 63 | 60,795,254 | 31,777,770 | 7,364,041 | 8,553,977 | 5,752,984 | 4,074,227 | 1,596,546 | 1,431,564 | 0 | 222,651 | 21,494 |
| FUEL.OT | Other Prod O&M - Fuel | PP.T | 63 | 126,387,410 | 66,062,888 | 15,309,123 | 17,782,885 | 11,959,893 | 8,469,921 | 3,319,064 | 2,976,082 | 0 | 462,870 | 44,684 |
| | Sub-total | | | 187,182,664 | 97,840,659 | 22,673,164 | 26,336,862 | 17,712,877 | 12,544,148 | 4,915,611 | 4,407,645 | 0 | 685,521 | 66,178 |
| | **Production - O&M - Purchase Power** | | | | | | | | | | | | | |
| 555 | Purch Pwr - Other | PC3 | 59 | 728,285,381 | 380,675,859 | 88,216,148 | 102,470,788 | 68,916,797 | 48,806,442 | 19,125,529 | 17,149,151 | 0 | 2,667,205 | 257,482 |
| 555.01 | Purch Pwr - Res Exchange | BPAX | 55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 555.02 | Purch Pwr - Transp Ancillary | ANCIL | 49 | 695,897 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 694,664 | 0 | 1,233 |
| 555.03 | Purch Pwr - Transp Imbalance | ANCIL | 49 | 691,750 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 690,524 | 0 | 1,226 |
| 557 | Regulation & Frequency Response | ENERGY_1 | 53 | 15,104,830 | 6,915,268 | 1,690,277 | 1,985,115 | 1,354,013 | 964,624 | 385,709 | 343,444 | 1,318,043 | 51,405 | 96,933 |
| | Sub-total | | | 744,777,857 | 387,591,127 | 89,906,425 | 104,455,882 | 70,270,810 | 49,771,066 | 19,511,238 | 17,492,595 | 2,703,231 | 2,718,610 | 356,873 |
| | **Production - O&M - Wheeling** | | | | | | | | | | | | | |
| 565 | Wheeling by Others - Wheeling | PP.T | 63 | 69,765,605 | 36,466,586 | 8,450,606 | 9,816,118 | 6,601,838 | 4,675,380 | 1,832,117 | 1,642,791 | 0 | 255,503 | 24,685 |
| | Sub-total | | | 69,765,605 | 36,466,586 | 8,450,606 | 9,816,118 | 6,601,838 | 4,675,380 | 1,832,117 | 1,642,791 | 0 | 255,503 | 24,685 |
| | **Production - O&M - Other** | | | | | | | | | | | | | |
| 500 | Steam Prod O&M | PP.T | 63 | 35,655,505 | 18,637,186 | 4,318,899 | 5,016,779 | 3,374,039 | 2,389,473 | 936,351 | 839,591 | 0 | 130,581 | 12,606 |
| 535 | Hydro Prod O&M - O&M | PP.T | 63 | 15,167,314 | 7,927,978 | 1,837,195 | 2,134,062 | 1,435,265 | 1,016,446 | 398,309 | 357,149 | 0 | 55,547 | 5,362 |
| 545 | Other Prod O&M - O&M | PP.T | 63 | 45,748,396 | 23,912,755 | 5,541,437 | 6,436,863 | 4,329,117 | 3,065,654 | 1,201,400 | 1,077,251 | 0 | 167,545 | 16,174 |
| 556 | System Control & Load Dispatch | ENERGY_1 | 53 | 841,961 | 385,465 | 94,218 | 110,653 | 75,474 | 53,769 | 21,500 | 19,144 | 73,469 | 2,865 | 5,403 |
| | Sub-total | | | 97,413,176 | 50,863,384 | 11,791,749 | 13,698,357 | 9,213,896 | 6,525,542 | 2,557,560 | 2,293,135 | 73,469 | 356,539 | 39,545 |
| | **Transmission - O&M** | | | | | | | | | | | | | |
| 565.01 | Transmission O&M | TP.T | 64 | 10,232,042 | 5,056,530 | 1,170,744 | 1,359,665 | 914,221 | 647,378 | 253,594 | 227,417 | 526,951 | 35,394 | 40,149 |
| 565.02 | Transmission O&M - Direct Assigned | DIR565.02 | 50 | 115,688 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 109,261 | 0 | 6,427 |
| | Sub-total | | | 10,347,730 | 5,056,530 | 1,170,744 | 1,359,665 | 914,221 | 647,378 | 253,594 | 227,417 | 636,212 | 35,394 | 46,576 |
| | **Distribution Expense - Operating** | | | | | | | | | | | | | |
| 581 | Dist O&M - Load Dispatch | DEM_12NCI | 47 | 5,026,360 | 2,979,526 | 599,514 | 670,091 | 396,044 | 355,174 | 0 | 0 | 0 | 33,986 | 2,026 |
| 582 | Dist O&M - Station | D362.T | Acct 362 | 1,713,652 | 853,634 | 218,279 | 223,632 | 143,928 | 115,387 | 29,694 | 39,794 | 77,768 | 7,823 | 3,712 |
| 583 | Dist O&M - OVHD Lines | D364.T | Acct 364 | 1,916,424 | 1,319,248 | 230,498 | 182,247 | 67,160 | 103,193 | 3,191 | 0 | 215 | 8,870 | 1,811 |
| 584 | Dist O&M - UNGD Lines | D366.T | Acct 366 | 2,670,432 | 1,802,625 | 297,801 | 269,359 | 124,535 | 124,076 | 31,800 | 3,921 | 326 | 14,092 | 2,099 |
| 585 | Dist O&M - Street Lighting | DIR373.00 | Acct 373 | 1,258,852 | | | | | | | | | 1,258,852 | |
| 586 | Dist O&M - Meter | D370.T | Acct 370 | 1,677,243 | 898,321 | 338,175 | 124,088 | 12,971 | 183,377 | 7,704 | 6,584 | 3,732 | 0 | 2,291 |
| 587 | Dist O&M - Cust Installations - Meters | D370.T | Acct 370 | 3,056,150 | 1,740,635 | 655,266 | 240,440 | 25,134 | 355,320 | 14,927 | 12,757 | 7,231 | 0 | 4,439 |
| 589 | Dist O&M - Rents | DEM_12NCI | 47 | 436,263 | 258,608 | 51,167 | 58,161 | 34,375 | 30,827 | 0 | 0 | 0 | 2,950 | 176 |
| 580 | Dist O&M - Supr & Eng | DES1.T | Acct 581 to 589 | 2,035,205 | 1,135,748 | 274,410 | 203,806 | 92,696 | 146,093 | 10,065 | 7,269 | 10,291 | 152,919 | 1,908 |
| 588 | Dist O&M - Miscellaneous | DES1.T | Acct 581 to 589 | 1,485,184 | 828,808 | 200,250 | 148,727 | 67,645 | 106,611 | 7,345 | 5,304 | 7,510 | 111,592 | 1,392 |
| | Sub-total | | | 21,175,765 | 11,817,153 | 2,855,160 | 2,120,550 | 964,477 | 1,520,059 | 104,726 | 75,628 | 107,072 | 1,591,085 | 19,854 |
| | **Customer Accounts Expense** | | | | | | | | | | | | | |
| 901 | CAE - Suprv | CAES1.T | Accts 902-905 | 222,285 | 164,013 | 39,089 | 7,830 | 2,815 | 3,022 | 2,446 | 1,392 | 908 | 680 | 90 |
| 902 | CAE - Meter Reading | CUST_6 | 5 | 16,085,014 | 11,461,990 | 4,051,903 | 406,346 | 42,860 | 36,065 | 4,038 | 31,452 | 28,307 | 0 | 2,052 |
| 903 | CAE - Records & Collections | | 4 | 16,729,057 | 13,681,729 | 2,068,353 | 229,013 | 21,569 | 143,736 | 316,811 | 125,068 | 73,588 | 61,877 | 7,311 |
| 904 | CAE - Uncollect Accts | PTDP.T | 62 | 6,301,611 | 3,698,165 | 758,045 | 742,504 | 430,982 | 351,913 | 109,626 | 88,454 | 57,796 | 57,727 | 6,400 |
| 905 | CAE - Miscellaneous | CUST_1 | 2 | -2,437 | -2,153 | -254 | -19 | -2 | -2 | 0 | 0 | 0 | -7 | 0 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sub-total | | | 39,335,630 | 29,023,744 | 6,917,135 | 1,385,675 | 498,225 | 534,734 | 432,922 | 246,366 | 160,599 | 120,276 | 15,853 |
| | **Customer Service & Information Expense** | | | | | | | | | | | | | |
| 908.01 | Cust Svc Exp - Cust Assistance | DIR908.01 | 26 | 662,257 | 589,960 | 64,695 | 4,808 | 453 | 401 | 41 | 11 | 11 | 1,871 | 5 |
| 908.02 | Cust Svc Exp - Weatherization | PC3 | 59 | 5,111 | 2,672 | 619 | 719 | 484 | 343 | 134 | 120 | 0 | 19 | 2 |
| 909 | Cust Svc Exp - Info & Instruct | CUST_1 | 2 | 989,686 | 874,229 | 103,318 | 7,679 | 723 | 641 | 65 | 18 | 17 | 2,988 | 9 |
| 911 | Cust Svc Exp - Demonstration | DIR373.00 Dir | | 1,368 | | | | | | | | | 1,368 | |
| 912 | Cust Svc Exp - Demonstration & Selling | CUST_1 | 2 | 254,738 | 225,020 | 26,593 | 1,976 | 186 | 165 | 17 | 5 | 4 | 769 | 2 |
| 913 | Cust Svc Exp - Advertising | CUST_1 | 2 | 66,097 | 58,388 | 6,900 | 513 | 48 | 43 | 4 | 1 | 1 | 200 | 1 |
| 916 | Cust Svc Exp - Misc Selling | CUST_1 | 2 | 105,999 | 93,633 | 11,066 | 822 | 77 | 69 | 7 | 2 | 2 | 320 | 1 |
| | Sub-total | | | 2,085,256 | 1,843,899 | 213,192 | 16,517 | 1,972 | 1,661 | 269 | 158 | 35 | 7,534 | 19 |
| | **General Expenses** | | | | | | | | | | | | | |
| 920 | A&G Exp - Salaries | ADJPTDCE. | 73 | 17,982,689 | 10,474,904 | 2,322,557 | 1,938,813 | 1,150,041 | 974,247 | 309,116 | 256,271 | 193,912 | 342,235 | 20,493 |
| 920.01 | A&G Exp - Salaries - Dir Assign | DIR920.01 | 27 | 259,892 | 0 | 0 | 0 | 0 | 0 | 142,447 | 39,225 | 73,989 | 0 | 4,231 |
| 921 | A&G Exp - Office Supplies | ADJPTDCE. | 73 | 12,777,169 | 7,442,733 | 1,650,246 | 1,377,585 | 817,139 | 692,232 | 219,636 | 182,088 | 137,780 | 243,168 | 14,561 |
| 922 | A&G Exp - Transf (credit) | ADJPTDCE. | 73 | -101,799 | -59,298 | -13,148 | -10,976 | -6,510 | -5,515 | -1,750 | -1,451 | -1,098 | -1,937 | -116 |
| 923 | A&G Exp - Outside Svcs | ADJPTDCE. | 73 | 7,527,593 | 4,384,842 | 972,233 | 811,596 | 481,412 | 407,824 | 129,397 | 107,276 | 81,172 | 143,261 | 8,579 |
| 924 | A&G Exp - Prop Insurance - Other | PTDGP.T | 72 | 3,697,809 | 2,170,097 | 444,823 | 435,704 | 252,902 | 206,504 | 64,329 | 51,905 | 33,915 | 33,874 | 3,756 |
| 925 | A&G Exp - Injuries & Damages - Other | SW.T | 78 | 6,030,235 | 3,705,309 | 767,764 | 595,774 | 337,355 | 320,760 | 95,759 | 73,738 | 40,951 | 87,780 | 5,046 |
| 926 | A&G Exp - Pensions & Benefits | SW.T | 78 | 17,124,886 | 10,522,474 | 2,180,324 | 1,691,900 | 958,034 | 910,907 | 271,940 | 209,403 | 116,293 | 249,281 | 14,330 |
| 928 | A&G Exp - Reg Comm Exp - WUTC Fees | RETAIL RAT | 80 | 3,628,231 | 1,942,595 | 445,123 | 515,018 | 314,000 | 221,729 | 76,941 | 62,963 | 17,109 | 30,499 | 2,255 |
| 928 | A&G Exp - Reg Comm Exp - Non WUTC Fees | PTDP.T | 62 | 2,075,607 | 1,218,091 | 249,683 | 244,564 | 141,956 | 115,912 | 36,108 | 28,135 | 19,037 | 19,014 | 2,108 |
| 930 | A&G Exp - Miscellaneous | ADJPTDCE. | 73 | 3,040,720 | 1,771,227 | 392,727 | 327,839 | 194,463 | 164,738 | 52,269 | 43,333 | 32,789 | 57,869 | 3,465 |
| 931 | A&G Exp - Rents | ADJPTDCE. | 73 | 4,402,309 | 2,564,356 | 568,584 | 474,640 | 281,541 | 238,505 | 75,674 | 62,738 | 47,472 | 83,782 | 5,017 |
| | Sub-total | | | 78,445,241 | 46,137,330 | 9,980,916 | 8,402,457 | 4,922,334 | 4,247,842 | 1,471,866 | 1,116,624 | 793,320 | 1,288,827 | 83,725 |
| | **TOTAL OPERATING EXPENSES** | | | 1,250,528,824 | 666,640,411 | 153,959,090 | 167,592,083 | 111,100,651 | 80,467,810 | 31,079,904 | 27,502,360 | 4,473,938 | 7,059,289 | 653,289 |
| | **Distribution Expense - Maintenance** | | | | | | | | | | | | | |
| 591 | Dist O&M - Structure | D361.T | Acct 361 | 179 | 81 | 21 | 24 | 19 | 14 | 3 | 7 | 9 | 1 | 1 |
| 592 | Dist O&M - Station Eqpt | D362.T | Acct 362 | 4,405,173 | 2,194,381 | 561,117 | 574,875 | 369,985 | 296,619 | 76,332 | 102,297 | 199,912 | 20,111 | 9,543 |
| 593 | Dist O&M - OVHD Lines | D364.T | Acct 364 | 28,941,806 | 19,923,266 | 3,480,974 | 2,752,297 | 1,014,101 | 1,558,424 | 48,186 | 0 | 3,252 | 133,960 | 27,347 |
| 594 | Dist O&M - UNGD Lines | D366.T | Acct 366 | 10,467,286 | 7,065,744 | 1,166,507 | 1,055,804 | 488,138 | 486,340 | 124,646 | 15,369 | 1,276 | 55,235 | 8,228 |
| 595 | Dist O&M - Lines Transformers | D368.T | Acct 368 | 324,038 | 228,046 | 52,887 | 32,678 | 8,245 | 955 | 1,071 | 0 | 0 | 138 | 18 |
| 596 | Dist O&M - Street Lighting | DIR373.00 | Dir | 2,039,664 | | | | | | | | | 2,039,664 | |
| 597 | Dist O&M - Meters | D370.T | Acct 370 | 217,074 | 123,635 | 46,543 | 17,078 | 1,785 | 25,238 | 1,060 | 906 | 514 | 0 | 315 |
| 590 | Dist O&M - Supr & Eng | DES2.T | Acct 591 to 597 | 39,755 | 25,308 | 4,548 | 3,798 | 1,613 | 2,029 | 216 | 102 | 176 | 1,927 | 39 |
| | Sub-total | | | 46,434,975 | 29,560,461 | 5,312,597 | 4,436,555 | 1,883,887 | 2,369,617 | 251,514 | 118,679 | 205,139 | 2,251,036 | 45,490 |
| | **General Expense - Maintenance & Other** | | | | | | | | | | | | | |
| 935 | A&G Exp - Maint of Gen Plant | GP.T | 71 | 3,399,565 | 1,995,069 | 408,946 | 400,563 | 232,604 | 189,849 | 59,141 | 47,719 | 31,179 | 31,142 | 3,453 |
| 411.01 | Regulatory Debit | PP.T | 63 | 17,719,489 | 9,262,003 | 2,146,336 | 2,493,157 | 1,676,775 | 1,187,481 | 465,332 | 417,246 | 0 | 84,894 | 6,265 |
| 411.02 | Gain / Loss on Disposition of Plant | TDP.T | 65 | -2,792,428 | -1,757,644 | -334,366 | -286,678 | -142,408 | -135,263 | -32,167 | -21,590 | -42,591 | -35,759 | -4,062 |
| 411.03 | Gain From Disposition - Production | PP.T | 63 | -420,047 | -219,559 | -50,880 | -59,101 | -39,749 | -28,150 | -11,031 | -9,891 | 0 | -1,538 | -149 |
| 411.04 | Other Utility Operating Income - FAS133 | POWER.T | 77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 411.05 | Loss on FV of OPT - FAS133 | POWER.T | 77 | -10,843,497 | -5,647,268 | -1,309,569 | -1,521,400 | -1,023,412 | -724,632 | -284,115 | -254,731 | -33,356 | -39,598 | -5,217 |
| | Sub-total | | | 7,063,082 | 3,632,702 | 860,468 | 1,026,540 | 703,710 | 489,085 | 197,160 | 178,754 | -44,767 | 18,141 | 290 |
| | **TOTAL MAINTENANCE EXPENSES** | | | 53,498,057 | 33,193,163 | 6,173,065 | 5,463,095 | 2,587,597 | 2,858,703 | 448,674 | 297,433 | 160,372 | 2,270,177 | 45,780 |
| | **TOTAL O & M EXPENSES** | | | 1,304,026,881 | 699,833,574 | 160,132,154 | 173,055,178 | 113,688,247 | 83,326,513 | 31,528,577 | 27,799,793 | 4,634,310 | 9,329,466 | 699,068 |
| | **Depreciation Expense** | | | | | | | | | | | | | |
| 403.01 | Depr Exp - Production Steam Baseload | PP.T | 63 | 28,694,254 | 14,998,529 | 3,475,693 | 4,037,321 | 2,715,304 | 1,922,961 | 753,541 | 675,672 | 0 | 105,087 | 10,145 |
| 403.02 | Depr Exp - Production Hydro | PP.T | 63 | 4,854,139 | 2,537,266 | 587,975 | 682,984 | 459,342 | 325,303 | 127,475 | 114,302 | 0 | 17,777 | 1,716 |
| 403.03 | Depr Exp - Production Other | PP.T | 63 | 30,491,286 | 15,937,841 | 3,693,365 | 4,290,166 | 2,885,355 | 2,043,390 | 800,733 | 717,987 | 0 | 111,668 | 10,780 |
| 403.04 | Depr Exp - Transmission | TP.T | 64 | 6,688,117 | 3,305,172 | 765,250 | 888,738 | 597,575 | 423,155 | 165,760 | 148,650 | 344,439 | 23,135 | 26,243 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 403.05 | Depr Exp - Distribution | DP.T | 66 | 80,211,030 | 52,792,135 | 9,695,306 | 7,718,917 | 3,436,083 | 3,632,233 | 697,603 | 372,778 | 604,756 | 1,186,691 | 74,530 |
| 403.06 | Depr Exp - General | GP.T | 71 | 19,713,263 | 11,568,930 | 2,371,383 | 2,322,767 | 1,348,237 | 1,100,886 | 342,942 | 276,711 | 180,802 | 180,585 | 20,021 |
| 403.07 | Depr Exp - FAS 143 | PP.T | 63 | 426,601 | 222,985 | 51,674 | 60,023 | 40,369 | 28,589 | 11,203 | 10,045 | 0 | 1,562 | 151 |
| 403.08 | Depr Exp - VROW | DP.T | 66 | 4,430,220 | 2,915,818 | 535,492 | 426,332 | 189,782 | 200,816 | 38,530 | 20,589 | 33,402 | 65,543 | 4,116 |
| 404 | Amort Exp - Limited Term Plant - Hydro Prod | PP.T | 63 | 979,509 | 511,991 | 118,647 | 137,818 | 92,690 | 65,642 | 25,723 | 23,065 | 0 | 3,587 | 346 |
| 404.01 | Amort Exp - Limited Term Plant - Other Prod | PP.T | 63 | 22,899 | 11,969 | 2,774 | 3,222 | 2,167 | 1,535 | 601 | 539 | 0 | 84 | 8 |
| 404.02 | Amort Exp - Limited Term Plant - General | GP.T | 71 | 24,914,335 | 14,621,232 | 2,997,039 | 2,935,597 | 1,703,951 | 1,391,340 | 433,423 | 349,717 | 228,504 | 228,230 | 25,303 |
| 404.03 | Amort Exp - FAS 143 | PP.T | 63 | 660,096 | 345,033 | 79,956 | 92,876 | 62,464 | 44,237 | 17,335 | 15,543 | 0 | 2,417 | 233 |
| 405 | Amort Exp - WUTC AFUDC - Non Project | PTDP.T | 62 | 1,409,935 | 827,435 | 169,606 | 166,129 | 96,429 | 78,738 | 24,528 | 19,791 | 12,931 | 12,916 | 1,432 |
| 406 | Amort Exp - Acq Adjustment - Transmission | PC4 | 60 | 25,800 | 12,299 | 2,846 | 3,305 | 2,222 | 1,573 | 616 | 553 | 2,143 | 86 | 158 |
| 406.01 | Amort Exp - Acq Adjustment - Distribution | DP.T | 66 | 11,200 | 7,371 | 1,354 | 1,078 | 480 | 507 | 97 | 52 | 84 | 166 | 10 |
| 406.02 | Amort Exp - FERC Colstrip - Production | PP.T | 63 | 715,283 | 373,879 | 86,641 | 100,641 | 67,686 | 47,935 | 18,784 | 16,843 | 0 | 2,620 | 253 |
| 406.03 | Amort Exp - Acq Adjustment - Encogen | PP.T | 63 | 4,332,173 | 2,264,433 | 524,750 | 609,543 | 409,948 | 290,323 | 113,767 | 102,011 | 0 | 15,866 | 1,532 |
| 407 | Amort Exp - Property Losses | PP.T | 63 | 1,537,229 | 803,512 | 186,202 | 216,290 | 145,466 | 103,018 | 40,369 | 36,198 | 0 | 5,630 | 543 |
| 407.01 | Amort Exp - Storm T&D | TDP.T | 65 | 23,389,642 | 14,721,354 | 2,800,683 | 2,401,244 | 1,192,826 | 1,132,972 | 269,437 | 180,837 | 356,743 | 299,525 | 34,022 |
| | **TOTAL DEPRECIATION EXPENSES** | | | **233,507,011** | **138,779,184** | **28,146,635** | **27,094,992** | **15,448,375** | **12,834,951** | **3,882,467** | **3,081,883** | **1,763,804** | **2,263,176** | **211,543** |
| **Taxes (other than Income)** | | | | | | | | | | | | | | |
| 236 | Property Taxes | PTDGP.T | 72 | 36,842,385 | 21,621,330 | 4,431,909 | 4,341,051 | 2,519,738 | 2,057,461 | 640,929 | 517,149 | 337,903 | 337,498 | 37,418 |
| 236.11 | Payroll Taxes | SW.T | 78 | 6,739,597 | 4,141,180 | 858,078 | 665,857 | 377,040 | 358,493 | 107,023 | 82,412 | 45,768 | 98,106 | 5,640 |
| 236.21 | Other Taxes - Wash Excise - Allocated | RETAIL RAT | 80 | 70,768,716 | 37,889,277 | 8,681,884 | 10,045,145 | 6,124,412 | 4,324,709 | 1,500,688 | 1,228,053 | 333,699 | 594,865 | 43,984 |
| 236.24 | Other Taxes - MT Corp Lic | REVFAC1.T | 76 | 451,680 | 248,754 | 55,245 | 58,157 | 36,961 | 27,884 | 10,042 | 8,664 | 2,243 | 3,440 | 299 |
| 236.25 | Other Taxes - MT Elec Energy Lic | ENERGY_1 | 53 | 1,590,441 | 723,555 | 176,856 | 207,706 | 141,672 | 100,930 | 40,357 | 35,935 | 137,909 | 5,379 | 10,142 |
| | **TOTAL TAXES OTHER THAN INCOME** | | | **116,380,829** | **64,624,096** | **14,203,973** | **15,317,915** | **9,199,824** | **6,869,477** | **2,299,040** | **1,872,212** | **857,521** | **1,039,288** | **97,483** |

**INCOME TAXES**

| | | | | | |
|---|---|---|---|---|---|
| 409.10 | Current Federal Income Tax @ Rate | RB.T | 75 | -40,382,647 | Class Income Taxes are Calculated and Not Allocated |
| 410.10 | Provision for Def Inc Tax | RB.T | 75 | 155,001,217 | Class Income Taxes are Calculated and Not Allocated |
| 411.10 | Prov for Def Income Tax (Credit) | RB.T | 75 | -62,644,985 | Class Income Taxes are Calculated and Not Allocated |
| | TOTAL FIT | | | 51,973,585 | Class Income Taxes are Calculated and Not Allocated |

Puget Sound Energy
Public Counsel Electric Class Cost of Service Study
(Revenue)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential Sch 7 | Sec. Voltage Sch 24 | Sec. Voltage Sch 25 | Sec. Voltage Sch 26 | Prim. Voltage Sch 31/35/43 | Campus Sch 40 | High Voltage Sch 46/49 | Transportation Sch 449/459 | Street & Area Lighting | Firm Resale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| **REVENUE** | | | | | | | | | | | | | | |
| 447 | Sales of Electricity - Firm Revenue | PROFORMA_RETAIL | | 0 | | | | | | | | | | |
| 447.01 | Sales of Electricity - Transportation Revenue - R | DIR_449 | | 1,821,740,023 | 980,974,299 | 224,604,546 | 259,853,388 | 158,401,794 | 111,882,634 | 38,799,981 | 31,773,067 | 0 | 15,450,314 | 0 |
| 447.02 | Sales of Electricity - Small Firm Resale | DIR_RESALE_SMALL | | 6,435,623 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,435,623 | 0 | 0 |
| 447.03 | Sales of Electricity - Unbilled Revenue | UNBILLED | | 355,704 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 355,704 |
| 447.04 | Other Elect Revenue - OATT - Sch 449 | DIR_449_OATT | | 6,354,482 | 3,116,081 | 868,234 | 1,047,085 | 666,299 | 442,141 | 177,079 | 122,890 | -105,327 | 0 | 0 |
| 447.05 | Other Elect Revenue - Firm Resale | DIR_RESALE_LARGE | | 2,336,798 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,336,798 | 0 | 0 |
| | ***SALES REVENUE*** | | | 786,676 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 786,676 |
| | | | | 1,838,009,306 | 984,090,380 | 225,492,780 | 260,900,473 | 159,068,093 | 112,324,775 | 38,977,060 | 31,895,957 | 8,667,094 | 15,450,314 | 1,142,380 |
| **NON FIRM REVENUE** | | | | | | | | | | | | | | |
| 447.07 | Sales of Electricity - Non Firm Revenue | | | 6,086,572 | 3,260,643 | 727,003 | 837,401 | 557,027 | 392,619 | 151,342 | 136,487 | 0 | 21,883 | 2,167 |
| | ***TOTAL NON FIRM REVENUE*** | | | 6,086,572 | 3,260,643 | 727,003 | 837,401 | 557,027 | 392,619 | 151,342 | 136,487 | 0 | 21,883 | 2,167 |
| **OTHER OPERATING REVENUE** | | | | | | | | | | | | | | |
| 450.01 | Late Payment Revenue - Interest | DIR450.01 | 1 | 2,866,365 | 2,306,882 | 315,956 | 156,743 | 52,837 | 38,998 | 3,469 | 8,181 | 2,555 | 2,745 | 0 |
| 450.02 | Late Payment Revenue - Field Call | DIR450.02 | 28 | 335,677 | 299,962 | 33,587 | 1,644 | 0 | 27 | 0 | 0 | 0 | 458 | 0 |
| 451.01 | Misc Service Revenue - Temporary Service | CUST_4 | 3 | 1,054,095 | 934,612 | 110,454 | 8,209 | 773 | 0 | 47 | 0 | 0 | 0 | 0 |
| 451.02 | Misc Service Revenue - Seas Svc Charge | DIR451.02 | 11 | 299 | 26 | 26 | 247 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 451.03 | Misc Service Revenue - Reconnection Charge | DIR451.03 | 22 | 1,091,204 | 1,067,434 | 22,626 | 1,030 | 0 | 38 | 0 | 0 | 0 | 76 | 0 |
| 451.04 | Misc Service Revenue - Modified Service Charg | CUST_4 | 3 | 803,588 | 712,500 | 84,205 | 6,258 | 589 | 0 | 36 | 0 | 0 | 0 | 0 |
| 451.05 | Misc Service Revenue - Water Heater Rental | DIR451.05 | 13 | 7,628 | 6,227 | 1,341 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 451.06 | Misc Service Revenue - Billing Initiation Charge | DIR451.06 | 18 | 1,240,167 | 1,141,099 | 95,159 | 3,480 | 365 | 57 | 7 | 0 | 0 | 0 | 0 |
| 451.07 | Misc Service Revenue - NSF Handling Chg | DIR451.07 | 21 | 190,792 | 180,834 | 9,334 | 402 | 28 | 42 | 0 | 0 | 28 | 125 | 0 |
| 451.08 | Misc Service Revenue - Deferred FIT CIAC | CUST_4 | 3 | 9,888,851 | 8,767,936 | 1,036,214 | 77,011 | 7,253 | 0 | 437 | 0 | 0 | 0 | 0 |
| 454.04 | Rental Revenue - Transf & Equip | DIR454.04 | 12 | 2,624,783 | 0 | 0 | 0 | 0 | 458,655 | 73,798 | 1,069,030 | 1,019,808 | 0 | 3,493 |
| 454.01 | Rental Revenue - Steam Plant | PP.T | 63 | 38,300 | 20,019 | 4,639 | 5,389 | 3,624 | 2,567 | 1,006 | 902 | 0 | 140 | 14 |
| 454.03 | Rental Revenue - Distribution Pole Contacts | D364.T | | 4,858,526 | 3,344,563 | 584,359 | 462,034 | 170,239 | 261,616 | 8,089 | 0 | 546 | 22,488 | 4,591 |
| 454.05 | Rental Revenue - Personal Cell Site | D364.T | | 3,050,165 | 2,099,705 | 366,858 | 290,063 | 106,876 | 164,242 | 5,078 | 0 | 343 | 14,118 | 2,882 |
| 454.07 | Rental Revenue - Pole Rental | DIR373.00 | Dir | 47,934 | | | | | | | | | 47,934 | |
| 454.06 | Rental Revenue - Land & Bldg | PTDP.T | 62 | 609,645 | 357,778 | 73,336 | 71,833 | 41,695 | 34,046 | 10,606 | 8,557 | 5,591 | 5,585 | 619 |
| 454.08 | Rental Revenue - Reserve of Power Capacity | DIR_40 | Dir | 22,372 | | | | | | 22,372 | | | | |
| 456.13 | Other Elect Revenue - CLX Reconciliation Adjus | CUST_5 | 4 | -733 | -599 | -91 | -10 | -1 | -5 | -14 | -5 | -3 | -3 | 0 |
| 456.01 | Other Elect Revenue - Wheeling | PC3 | 59 | 6,835,150 | 3,572,743 | 827,932 | 961,715 | 646,802 | 458,061 | 179,498 | 160,949 | 0 | 25,032 | 2,417 |
| 456.05 | Other Elect Revenue - Dist O&M | LINE.T | 61 | 72,853 | 49,476 | 8,318 | 7,219 | 3,137 | 3,551 | 637 | 74 | 9 | 370 | 61 |
| 456.08 | Other Elect Revenue - PCS | D364.T | | 790,443 | 544,133 | 95,070 | 75,169 | 27,897 | 42,563 | 1,316 | 0 | 89 | 3,659 | 747 |
| 456.09 | Other Elect Revenue - Non-Core Gas Sales | PP.T | 63 | 947,407 | 495,211 | 114,758 | 133,301 | 89,652 | 63,491 | 24,880 | 22,309 | 0 | 3,470 | 335 |
| 456.14 | Other Elect Revenue -Green Energy Option | PC3 | 59 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 456.16 | Other Elect Revenue - Intollight | DIR373.00 | Dir | -2,393 | | | | | | | | | -2,393 | |
| 456.17 | Other Elect Revenue - AG Settlement | DIR_449 | 20 | -190 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -190 | 0 | 0 |
| | **TOTAL OTHER OPERATING INCOME** | | | 37,392,928 | 25,900,543 | 3,784,061 | 2,261,788 | 1,151,567 | 1,527,946 | 331,262 | 1,267,996 | 1,028,775 | 123,804 | 15,157 |
| | **TOTAL REVENUE** | | | 1,881,488,806 | 1,013,251,566 | 230,003,864 | 263,999,672 | 160,776,687 | 114,245,340 | 39,459,664 | 33,300,440 | 9,695,869 | 15,596,001 | 1,159,704 |

Puget Sound Energy
Public Counsel Electric Class Cost of Service Study
(Allocator Amounts)

| | Acct. No. | Account Description | Alloc | Total | Residential Sch 7 | Sec. Voltage Sch 24 | Sec. Voltage Sch 25 | Sec. Voltage Sch 26 | Prim. Voltage Sch 31/35/43 | Campus Sch 40 | High Voltage Sch 46/49 | Transportation Sch 449/459 | Street & Area Lighting | Firm Resale | Transp HV 449 | Lighting 50-59 | Firm Resale Large | Firm Resale Small |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | | | | |
| 1 | DIR450.01 | Late Payment Interest Rev | | 2768118.39 | 2212375.56 | 303012.05 | 150321.51 | 50671.96 | 35510.11 | 1.02 | 1889.25 | 3328.96 | 5927.37 | 0 | 2449.88 | 2832.72 | 0 | 0 |
| 2 | CUST_1 | Ave. No. Cust. | | 1044131 | 922322 | 109002 | 8101 | 763 | 493 | 1 | 182 | 69 | 19 | 3 | 15 | 3152 | 1 | 8 |
| 3 | CUST_4 | Ave. No. Cust Incl. RES & SEC Only | | 1040234 | 922322 | 109002 | 8101 | 763 | 0 | 0 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | CUST_5 | Wtd. Ave. No. Cust. CAE - NO HV | | 15304958 | 12517041 | 1892280 | 209518 | 19733 | 95902 | 195 | 35403 | 269842 | 114421 | 8224 | 59100 | 56610 | 3940 | 2749 |
| 5 | CUST_6 | Wtd. Ave. No. Sch. Mtr Reading | | 16075226 | 11475003 | 4049437 | 406099 | 42834 | 25589 | 58 | 10396 | 4036 | 31433 | 4715 | 23575 | 0 | 1572 | 479 |
| 6 | METER | Meter Investment | | 101649191 | 57894460 | 21794507 | 7997182 | 835977 | 8756864 | 17602 | 3043684 | 496496 | 424297 | 35204 | 205305 | 0 | 18403.667 | 131229.33 |
| 7 | DIR368.03C | Line Transformers - Customer Related | | 2244856 | 0 | 0 | 0 | 0 | 969588 | 0 | 59825 | 1176246 | 0 | 0 | 0 | 0 | 0 | 19397 |
| 8 | DIR372.00 | Leased Wtr. Htrs. | | 732314 | 725911 | 6127 | 276 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | UNBILLED | Direct Assignment of Unbilled Revenue | | 6354482 | 3118061 | 888234 | 1047085 | 668299 | 407135 | 2180 | 32826 | 177079 | 122890 | -5659 | -99668 | 0 | 0 | 0 |
| 10 | PROFORMA | Proforma Revenue | | 1829319043 | 980974300 | 224604546 | 259853388 | 158401794 | 98820701 | 245245 | 12816688 | 38799981 | 31773067 | 855758 | 5580880 | 15450314 | 786677 | 355704 |
| 11 | DIR451.02 | Seasonal Svc. Chgs. | | 57 | 5 | 5 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | DIR454.04 | Equip. (Transf.) Rentals | | 2572298 | 0 | 0 | 0 | 0 | 433723 | 0 | 15778 | 72325 | 1047694 | 0 | 999455 | 0 | 0 | 3423 |
| 13 | DIR451.05 | Water Htr. Rentals | | 10218.94 | 8342.07 | 1795.87 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | DIR235.00 | Customer Deposits | | 10354938 | 8416729 | 1152132 | 413333 | 341318 | 31426 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | PROFORMA_RETAIL | Proforma Retail Revenue - No Transportation | | 1821740024 | 980974300 | 224604546 | 259853388 | 158401794 | 98820701 | 245245 | 12816688 | 38799981 | 31773067 | 0 | 0 | 15450314 | 0 | 0 |
| 16 | OH_TFMRC | Allocate Overhead Transformers | | 302025535 | 252283935 | 42311352 | 7059499 | 76232 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 294517 | 0 | 0 |
| 17 | UG_TFMRC | Allocate Underground Transformers | | 334740770 | 213687878 | 59426156 | 48345781 | 13237715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43240 | 0 | 0 |
| 18 | DIR451.06 | Acct. Svc. Chgs. Rev. | | 1248756.86 | 1149004.64 | 95817.76 | 3503.66 | 367.8 | 57.5 | 0 | 0 | 7.5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19 | DIR_RESALE | Firm Resale Allocation Only Excise Tax | | 39792.42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27351.6 | 12440.82 |
| 20 | DIR_449 | Schedule 449 / 459 Allocation Only | | 6436638 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 855758 | 5580880 | 0 | 0 | 0 |
| 21 | DIR451.07 | NSF Check Charge Revenue | | 220096 | 208608 | 10768 | 464 | 32 | 48 | 0 | 0 | 0 | 0 | 0 | 32 | 144 | 0 | 0 |
| 22 | DIR451.03 | Connect/Reconnect Revenue | | 1063535.7 | 1040368.7 | 22052 | 1004 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 0 | 0 |
| 23 | OH_SVC | Dist OH Services | | 418388 | 360703 | 53379 | 2282 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 24 | DIR_449_OATT | Transportation OATT Revenue | | 2336798.16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -6286.1 | 2343084.3 | 0 | 0 | 0 |
| 25 | PROFORMA_RETAIL_TA | Proforma State Revenue | | 1828176662 | 980974300 | 224604546 | 259853388 | 158401794 | 98820701 | 245245 | 12816688 | 38799981 | 31773067 | 855758 | 5580880 | 15450314 | 0 | 0 |
| 26 | DIR906.01 | Direct Assign A/C 908 | | 866796 | 772170 | 84676 | 6293 | 593 | 383 | 1 | 141 | 54 | 15 | 2 | 12 | 2449 | 1 | 6 |
| 27 | DIR920.01 | Direct Assign A/C 920.01 | | 259692 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 142447 | 39225 | 10526 | 63463 | 0 | 4231 | 0 |
| 28 | DIR450.02 | Direct Assign Disconnect Call - A/C 450.02 | | 323908 | 289445 | 32409 | 1586 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 442 | 0 | 0 |
| 29 | DEM_1 | Annual Kw - Top 200 Hours | | 4170502 | 2388268 | 422689 | 451855 | 274115 | 186975 | 5 | 37448 | 60605 | 65280 | 14519 | 238832 | 11240 | 17197 | 1474 |
| 30 | NCP_360 | Allocate Substation Land - 12 NCP | | 12599969 | 5496141 | 1884919 | 2287684 | 1891603 | 875177 | 637 | 118026 | 0 | 0 | 118585 | 0 | 124624 | 0 | 573 |
| 31 | NCP_361 | Allocate Substation Structures - 12 NCP | | 4038630 | 2003488 | 528202 | 604753 | 496605 | 299587 | 0 | 56288 | 0 | 0 | 17329 | 0 | 32314 | 0 | 64 |
| 32 | NCP_362 | Allocate Substation Equipment - 12 NCP | | 572847657 | 311865723 | 81957684 | 81069773 | 91487615 | 35088781 | 251204 | 8549745 | 0 | 0 | 1361347 | 0 | 3055557 | 0 | 140228 |
| 33 | DIR360.01 | Direct Assign Substation Land | | 1012963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 522557 | 469441 | 0 | 0 | 0 | 20333 | 632 |
| 34 | DIR361.01 | Direct Assign Substation Structures | | 516714.01 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 91746 | 211615 | 0 | 196543 | 0 | 14521 | 89 |
| 35 | DIR362.01 | Direct Assign Substation Equipment | | 22590134.01 | 0.01 | 0 | 0 | 0 | 465179 | 0 | 0 | 4746514 | 7375036 | 0 | 9780010 | 0 | 162281 | 61132 |
| 36 | DIR364.01 | Direct Assign OH Dist Lines | | 957726 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 783835 | 0 | 0 | 0 | 0 | 173891 | 0 |
| 37 | DIR366.01 | Direct Assign OH Dist Lines | | 14663077 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12557576 | 1546219 | 0 | 0 | 0 | 557282 | 0 |
| 38 | DIR368.03 | Line Transformers | | 2244856 | 0 | 0 | 0 | 0 | 969588 | 0 | 59825 | 1176246 | 0 | 0 | 0 | 0 | 0 | 19397 |
| 39 | OH_NCP | Allocate Overhead Lines - 12 NCP | | 10213.4 | 7045.14 | 1230.92 | 973.25 | 358.6 | 398.89 | 12.63 | 139.56 | 0 | 0 | 1.15 | 0 | 47.37 | 0 | 5.89 |
| 40 | UG_NCP | Allocate Underground Lines - 12 NCP | | 9300.48 | 6366.64 | 1051.09 | 951.34 | 439.64 | 298.24 | 3.85 | 136.13 | 0 | 0 | 1.15 | 0 | 49.77 | 0 | 2.43 |
| 41 | OH_TFMR | Allocate Overhead Transformers | | 302025535 | 252283935 | 42311352 | 7059499 | 76232 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 294517 | 0 | 0 |
| 42 | UG_TFMR | Allocate Underground Transformers | | 334740770 | 213687878 | 59426156 | 48345781 | 13237715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43240 | 0 | 0 |
| 43 | DIR108.09 | Dist Accum Depr - Subs & Lines | | -17269940.78 | 0 | 0 | 0 | 0 | -100001.98 | 0 | 0 | -8536059.6 | -3575622.182 | 0 | -4723210 | 0 | -326057.7 | -28989.305 |
| 44 | DEM_1A | 200 CP Demand Excl. Interruptible | | 4126524 | 2388268 | 422689 | 451855 | 274115 | 186975 | 5 | 0 | 60605 | 58750 | 14519 | 238832 | 11240 | 17197 | 1474 |
| 45 | DEM_12CP | 12 Monthly CP Demand | | 3772626 | 1916006 | 412716 | 489384 | 299371 | 204805 | 535 | 32355 | 64726 | 68203 | 14727 | 242349 | 7951 | 18465 | 1031 |
| 46 | DEM_12NCP2 | Dist 12 NCP Dem, Excl Dir Assn Transf (No HV, PRI & FR) | | 4328974 | 2762443 | 546563 | 621269 | 367189 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31510 | 0 | 0 |
| 47 | DEM_12NCP1 | 12 NCP Distribution Demand (No HV, LFR, Trans) | | 4660149 | 2762443 | 546563 | 621269 | 367189 | 253690 | 1958 | 73649 | 0 | 0 | 0 | 0 | 31510 | 0 | 1678 |
| 48 | DEM_2A | 200 CP Demand - NO RETAIL WHEELING & INTERRUPT | | 3855976 | 2388268 | 422689 | 451855 | 274115 | 186975 | 5 | 0 | 60605 | 58750 | 0 | 0 | 11240 | 0 | 1474 |
| 49 | ANCIL | Transportation Ancillary Exp | | 1388659.072 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -60960.4703 | 1447149.4 | 0 | 2460.19 | 0 |
| 50 | DIR565.02 | Direct Assign A/C 565.02 | | 115688.01 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12854 | 96407 | 0 | 6427 | 0 |
| 51 | DEM_3B | Top 75 CP - No Interruptibles | | 4277389 | 2496708 | 433094 | 467088 | 282773 | 190771 | 5 | 0 | 61983 | 59567 | 14590 | 239439 | 12598 | 17278 | 1495 |
| 52 | DEM_3A | Top 75 CP - No Interruptibles or Transportation | | 4006082 | 2496708 | 433094 | 467088 | 282773 | 190771 | 5 | 0 | 61983 | 59567 | 0 | 0 | 12598 | 0 | 1495 |
| 53 | ENERGY_1 | Annual kWhs | | 25203044595 | 11538414973 | 2820298304 | 3312247709 | 2259228104 | 1430742880 | 5063752 | 173708768 | 643571762 | 573051540 | 123721455 | 2.075E+09 | 85771201 | 153736746 | 7999367 |
| 54 | DIR_449_ENERGY | Schedule 449 / 459 Energy Allocation | | 2199209489 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123721455 | 2.075E+09 | 0 | 0 | 0 |
| 55 | BPAX | BPA Residential Exchange kWh | | 11281244215 | 10744798449 | 287626642 | 189481705 | 24396862 | 27949701 | 4620400 | 0 | 0 | 0 | 0 | 0 | 2170456 | 0 | 0 |
| 56 | ENERGY_2 | Energy - NO RETAIL WHEELING | | 22850098360 | 11538414973 | 2820298304 | 3312247709 | 2259228104 | 1430742880 | 5063752 | 173708768 | 643571762 | 573051540 | 0 | 0 | 85771201 | 0 | 7999367 |
| 57 | DEM_12NCP_P | 12 NCP Distribution Demand (No HV) | | 4701071 | 2762443 | 546563 | 621269 | 367189 | 253690 | 1958 | 73649 | 0 | 0 | 16669 | 0 | 31510 | 24233 | 1678 |
| 58 | DEM_12NCP_S | Dist 12 NCP Dem, Excl Dir Assn Transf (No HV, PRI & FR) | | 4328974 | 2762443 | 546563 | 621269 | 367189 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31510 | 0 | 0 |
| 59 | PC3 | | | 100.000000% | 52.270150% | 12.112854% | 14.070139% | 9.462883% | 6.036521% | 0.016855% | 0.646179% | 2.626104% | 2.354730% | 0.000000% | 0.000000% | 0.366231% | 0.000000% | 0.035355% |
| 60 | PC4 | | | 100.000000% | 47.570041% | 11.030541% | 12.808904% | 8.611124% | 5.494334% | 0.017096% | 0.585852% | 2.387876% | 2.141569% | 0.468428% | 7.839476% | 0.333451% | 0.579085% | 0.032221% |
| 61 | Line.T | Dist. Poles, lines, conductors | | 1,525,329,158 | 1,035,934,164 | 174,145,415 | 151,139,250 | 65,674,158 | 74,347,421 | Included in Svc 31 | Included in Svc 31 | 13,341,411 | 1,546,219 | 181,482 | Included in PV 449 7,743,820 | 1,273,818 | | Included in Lg Resale |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 62 PTDP.T | Prod Trans Dist Plant | 5,415,920,847 | 3,178,388,406 | 651,501,500 | 638,145,061 | 370,407,689 | 302,451,791 | Included in Svc 31 | Included in Svc 31 | 94,218,153 | 76,022,148 | 49,672,503 | Included in PV 449 | 49,613,081 | 5,500,515 | Included in Lg Resale |
| 63 PP.T | Prod Plant | 2,159,169,302 | 1,128,601,027 | 261,537,035 | 303,798,128 | 204,319,675 | 144,897,908 | Included in Svc 31 | Included in Svc 31 | 56,702,025 | 50,842,597 | 0 | Included in PV 449 | 7,907,542 | 763,365 | Included in Lg Resale |
| 64 TP.T | Trans Plant | 571,376,659 | 282,366,213 | 65,376,554 | 75,926,297 | 51,051,841 | 36,150,628 | Included in Svc 31 | Included in Svc 31 | 14,161,168 | 12,699,376 | 20,425,945 | Included in PV 449 | 1,976,456 | 2,241,982 | Included in Lg Resale |
| 65 TDP.T | Trans & Dist Plant | 3,256,751,545 | 2,049,787,379 | 389,964,464 | 334,349,933 | 166,086,013 | 157,753,883 | Included in Svc 31 | Included in Svc 31 | 37,516,129 | 25,179,551 | 49,672,503 | Included in PV 449 | 41,705,539 | 4,737,150 | Included in Lg Resale |
| 66 DP.T | Dist Plant | 2,685,374,886 | 1,767,421,166 | 324,587,910 | 258,420,636 | 115,036,173 | 121,603,055 | Included in Svc 31 | Included in Svc 31 | 23,354,961 | 12,480,175 | 20,246,558 | Included in PV 449 | 39,729,084 | 2,495,168 | Included in Lg Resale |
| 67 | Customer Accts Expenses excluding Uncollect | -4,216,355 | -1,854,265 | -544,853 | -725,988 | -429,010 | -350,252 | Included in Svc 31 | Included in Svc 31 | -109,357 | -88,297 | -57,761 | Included in PV 449 | -50,193 | -6,381 | Included in Lg Resale |
| 68 | Customer Service Expenses | 2,085,256 | 1,843,699 | 213,192 | 16,517 | 1,972 | 1,661 | Included in Svc 31 | Included in Svc 31 | 269 | 158 | 35 | Included in PV 449 | 7,534 | 19 | Included in Lg Resale |
| 69 SW.T | Total Salaries & Wages | 66,490,363 | 41,599,450 | 8,545,518 | 6,589,656 | 3,636,339 | 3,071,807 | Included in Svc 31 | Included in Svc 31 | 989,189 | 754,733 | 400,786 | Included in PV 449 | 851,142 | 49,745 | Included in Lg Resale |
| 70 SWPTD.T | Salaries & Wages P,T,D related | 34,492,559 | 20,771,145 | 4,168,849 | 3,942,925 | 2,206,155 | 1,866,751 | Included in Svc 31 | Included in Svc 31 | 547,250 | 426,532 | 184,014 | Included in PV 449 | 352,910 | 26,030 | Included in Lg Resale |
| 71 GP.T | General Plant | 282,481,059 | 165,776,892 | 33,980,710 | 33,284,071 | 19,319,550 | 15,775,139 | Included in Svc 31 | Included in Svc 31 | 4,914,186 | 3,965,128 | 2,590,795 | Included in PV 449 | 2,567,696 | 286,893 | Included in Lg Resale |
| 72 PTDGP.T | Prod/Trans/Dist/Gen'l Plant | 6,696,401,906 | 3,344,165,297 | 685,482,209 | 671,429,132 | 389,727,239 | 318,226,929 | Included in Svc 31 | Included in Svc 31 | 99,132,339 | 79,987,276 | 52,263,298 | Included in PV 449 | 52,200,777 | 5,787,408 | Included in Lg Resale |
| 73 adjptdce.t | Adj Total Prod Trans Dist & Cust Exp | 231,892,151 | 135,077,767 | 29,950,234 | 25,001,715 | 14,830,207 | 12,563,273 | Included in Svc 31 | Included in Svc 31 | 3,986,160 | 3,304,707 | 2,500,568 | Included in PV 449 | 4,413,251 | 264,269 | Included in Lg Resale |
| 74 EPIS.t | Elect Plant In Service | 5,928,416,660 | 3,476,880,770 | 713,199,926 | 699,388,718 | 408,432,243 | 331,490,662 | Included in Svc 31 | Included in Svc 31 | 103,461,978 | 83,567,345 | 53,902,316 | Included in PV 449 | 54,107,267 | 5,987,433 | Included in Lg Resale |
| 75 RB.T | Rate base | 3,305,098,647 | 1,914,774,187 | 401,581,260 | 400,140,700 | 231,818,958 | 189,563,006 | Included in Svc 31 | Included in Svc 31 | 59,201,375 | 47,224,915 | 30,809,860 | Included in PV 449 | 26,527,195 | 3,457,191 | Included in Lg Resale |
| 76 Revfact1.T | | 1,621,772,376 | 1,003,283,338 | 222,814,778 | 234,562,271 | 149,073,053 | 112,463,883 | Included in Svc 31 | Included in Svc 31 | 40,502,363 | 34,943,018 | 9,047,761 | Included in PV 449 | 13,873,961 | 1,207,930 | Included in Lg Resale |
| 77 Power.T | | 1,109,487,032 | 577,818,285 | 133,992,688 | 155,666,884 | 104,713,643 | 74,163,514 | Included in Svc 31 | Included in Svc 31 | 29,070,120 | 26,063,584 | 3,412,912 | Included in PV 449 | 4,051,566 | 533,837 | Included in Lg Resale |
| 78 SW.T alt | Total Salarys and Wages alt | 66,490,363 | 40,855,344 | 8,465,489 | 6,569,099 | 3,719,735 | 3,536,755 | Included in Svc 31 | Included in Svc 31 | 1,055,854 | 613,045 | 451,527 | Included in PV 449 | 967,877 | 55,639 | Included in Lg Resale |
| 79 SWPTD.T alt | Salaries & Wages P,T,D related alt | 34,492,558 | 19,580,573 | 4,413,734 | 4,131,278 | 2,341,628 | 2,306,402 | Included in Svc 31 | Included in Svc 31 | 493,199 | 430,993 | 196,001 | Included in PV 449 | 568,264 | 28,486 | Included in Lg Resale |
| 80 Retail RATE REV | Retail Rate Revenue | 1,838,009,306 | 984,090,380 | 225,492,780 | 260,900,473 | 159,068,093 | 112,324,775 | | | 38,977,060 | 31,895,957 | 8,667,094 | | 15,450,314 | 1,142,380 | |

Puget Sound Energy
Public Counsel Electric Class Cost of Service Study
(Allocator Percentage)

| Acct. No. | Account Description | Total | Residential Sch 7 | Sec. Voltage Sch 24 | Sec. Voltage Sch 25 | Sec. Voltage Sch 26 | Prim. Voltage Sch 31/35/43 | Campus Sch 40 | High Voltage Sch 46/49 | Transportation Sch 449/459 | Street & Area Lighting | Firm Resale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| DIR450.01 | Late Payment Interest Rev | 100.0000% | 79.9234% | 10.9465% | 5.4305% | 1.8306% | 1.3511% | 0.1202% | 0.2141% | 0.0885% | 0.0951% | 0.0000% |
| CUST_1 | Ave. No. Cust. | 100.0000% | 88.3339% | 10.4395% | 0.7759% | 0.0731% | 0.0647% | 0.0068% | 0.0018% | 0.0017% | 0.3019% | 0.0009% |
| CUST_4 | Ave. No. Cust Incl. RES & SEC Only | 100.0000% | 88.6649% | 10.4786% | 0.7788% | 0.0733% | 0.0000% | 0.0044% | 0.0000% | 0.0000% | 0.0000% | 0.0000% |
| CUST_5 | Wtd. Ave. No. Cust. CAE - NO HV | 100.0000% | 81.7842% | 12.3638% | 1.3690% | 0.1289% | 0.8592% | 1.8938% | 0.7476% | 0.4399% | 0.3699% | 0.0437% |
| CUST_6 | Wtd. Ave. No. Sch. Mtr Reading | 100.0000% | 71.3832% | 25.1905% | 2.5262% | 0.2665% | 0.2242% | 0.0251% | 0.1955% | 0.1760% | 0.0000% | 0.0128% |
| METER | Meter Investment | 100.0000% | 56.9552% | 21.4409% | 7.8674% | 0.8224% | 11.6264% | 0.4884% | 0.4174% | 0.2366% | 0.0000% | 0.1452% |
| DIR368.03C | Line Transformers - Customer Related | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 46.7385% | 52.3974% | 0.0000% | 0.0000% | 0.0000% | 0.8641% |
| DIR372.00 | Leased Wtr. Htrs. | 100.0000% | 99.1256% | 0.8367% | 0.0377% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% |
| UNBILLED | Direct Assignment of Unbilled Revenue | 100.0000% | 49.0375% | 13.9781% | 16.4779% | 10.4855% | 6.9579% | 2.7867% | 1.9339% | -1.6575% | 0.0000% | 0.0000% |
| PROFORMA | Proforma Revenue | 100.0000% | 53.6251% | 12.2780% | 14.2049% | 8.6591% | 6.1161% | 2.1210% | 1.7369% | 0.3519% | 0.8446% | 0.0624% |
| DIR451.02 | Seasonal Svc. Chgs. | 100.0000% | 8.7719% | 8.7719% | 82.4561% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% |
| DIR454.04 | Equip. (Transf.) Rentals | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 17.4740% | 2.6116% | 40.7283% | 38.8530% | 0.0000% | 0.1331% |
| DIR451.05 | Water Htr. Rentals | 100.0000% | 81.6334% | 17.5739% | 0.7926% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% |
| DIR235.00 | Customer Deposits | 100.0000% | 81.2823% | 11.1264% | 3.9917% | 3.2962% | 0.3035% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% |
| PROFORMA_RETAIL | Proforma Retail Revenue - No Transportation | 100.0000% | 53.8462% | 12.3291% | 14.2640% | 8.6951% | 6.1415% | 2.1298% | 1.7441% | 0.0000% | 0.8481% | 0.0000% |
| OH_TFMRC | Allocate Overhead Transformers | 100.0000% | 83.5307% | 14.0092% | 2.3374% | 0.0252% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0975% | 0.0000% |
| UG_TFMRC | Allocate Underground Transformers | 100.0000% | 63.8368% | 17.7529% | 14.4428% | 3.9546% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0129% | 0.0000% |
| DIR451.06 | Acct. Svc. Chgs. Rev. | 100.0000% | 92.0117% | 7.6730% | 0.2806% | 0.0295% | 0.0046% | 0.0006% | 0.0000% | 0.0000% | 0.0000% | 0.0000% |
| DIR_RESALE | Firm Resale Allocation Only Excise Tax | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 100.0000% |
| DIR_449 | Schedule 449 / 459 Allocation Only | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 100.0000% | 0.0000% | 0.0000% |
| DIR451.07 | NSF Check Charge Revenue | 100.0000% | 94.7805% | 4.8924% | 0.2108% | 0.0145% | 0.0218% | 0.0000% | 0.0000% | 0.0145% | 0.0654% | 0.0000% |
| DIR451.03 | Connect/Reconnect Revenue | 100.0000% | 97.8217% | 2.0735% | 0.0944% | 0.0000% | 0.0035% | 0.0000% | 0.0000% | 0.0000% | 0.0070% | 0.0000% |
| OH_SVC | Dist OH Services | 100.0000% | 86.6267% | 12.8195% | 0.5480% | 0.0058% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% |
| DIR_449_OATT | Transportation OATT Revenue | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 100.0000% | 0.0000% | 0.0000% |
| PROFORMA_RETAIL_TA | Proforma State Revenue | 100.0000% | 53.6586% | 12.2857% | 14.2138% | 8.6645% | 6.1199% | 2.1223% | 1.7380% | 0.3521% | 0.8451% | 0.0000% |
| DIR908.01 | Direct Assign A/C 908 | 100.0000% | 89.0832% | 9.7688% | 0.7260% | 0.0684% | 0.0606% | 0.0062% | 0.0017% | 0.0016% | 0.2825% | 0.0008% |
| DIR920.01 | Direct Assign A/C 920.01 | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 54.8101% | 15.0928% | 28.4691% | 0.0000% | 1.6280% |
| DIR450.02 | Direct Assign Disconnect Call - A/C 450.02 | 100.0000% | 89.3603% | 10.0056% | 0.4896% | 0.0000% | 0.0080% | 0.0000% | 0.0000% | 0.0000% | 0.1365% | 0.0000% |
| DEM_1 | Annual Kw - Top 200 Hours | 100.0000% | 57.2657% | 10.1352% | 10.8345% | 6.5727% | 5.3813% | 1.4532% | 1.5653% | 6.0748% | 0.2695% | 0.4477% |
| NCP_360 | Allocate Substation Land - 12 NCP | 100.0000% | 43.6361% | 13.3724% | 18.1563% | 15.0128% | 7.8876% | 0.0000% | 0.0000% | 0.9412% | 0.9891% | 0.0045% |
| NCP_361 | Allocate Substation Structures - 12 NCP | 100.0000% | 49.6081% | 13.0787% | 14.9742% | 12.2964% | 8.8118% | 0.0000% | 0.0000% | 0.4291% | 0.8001% | 0.0016% |
| NCP_362 | Allocate Substation Equipment - 12 NCP | 100.0000% | 54.4413% | 14.3071% | 14.1556% | 8.9880% | 7.3125% | 0.0000% | 0.0000% | 0.2376% | 0.5334% | 0.0245% |
| DIR360.01 | Direct Assign Substation Land | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 51.5870% | 46.3434% | 0.0000% | 0.0000% | 2.0697% |
| DIR361.01 | Direct Assign Substation Structures | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 17.7557% | 40.9927% | 38.4242% | 0.0000% | 2.8275% |
| DIR362.01 | Direct Assign Substation Equipment | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 2.0592% | 21.0114% | 32.6472% | 43.2933% | 0.0000% | 0.9889% |
| DIR364.01 | Direct Assign OH Dist Lines | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 81.8433% | 0.0000% | 0.0000% | 0.0000% | 18.1567% |
| DIR366.01 | Direct Assign OH Dist Lines | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 85.6408% | 10.5586% | 0.0000% | 0.0000% | 3.8006% |
| DIR368.03 | Line Transformers | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 46.7385% | 52.3974% | 0.0000% | 0.0000% | 0.0000% | 0.8641% |
| OH_NCP | Allocate Overhead Lines - 12 NCP | 100.0000% | 68.9794% | 12.0520% | 9.5291% | 3.5111% | 5.3957% | 0.0000% | 0.0000% | 0.0113% | 0.4638% | 0.0577% |
| UG_NCP | Allocate Underground Lines - 12 NCP | 100.0000% | 68.4550% | 11.3015% | 10.2289% | 4.7292% | 4.7118% | 0.0000% | 0.0000% | 0.0124% | 0.5351% | 0.0261% |
| OH_TFMR | Allocate Overhead Transformers | 100.0000% | 83.5307% | 14.0092% | 2.3374% | 0.0252% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0975% | 0.0000% |
| UG_TFMR | Allocate Underground Transformers | 100.0000% | 63.8368% | 17.7529% | 14.4428% | 3.9546% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0129% | 0.0000% |
| DIR108.09 | Dist Accum Depr - Subs & Lines | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.5784% | 49.3701% | 20.6804% | 27.3177% | 0.0000% | 2.0535% |
| DEM_1A | 200 CP Demand Excl. Interruptible | 100.0000% | 57.8760% | 10.2432% | 10.9500% | 6.6428% | 4.5312% | 1.4687% | 1.4237% | 6.1396% | 0.2724% | 0.4525% |
| DEM_12CP | 12 Monthly CP Demand | 100.0000% | 50.7871% | 10.9398% | 12.9720% | 7.9353% | 6.3005% | 1.7157% | 1.8078% | 6.8142% | 0.2108% | 0.5168% |
| DEM_12NCP2 | Dist 12 NCP Dem, Excl Dir Assn Transf (No HV, PR | 100.0000% | 63.8129% | 12.6257% | 14.3514% | 8.4821% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.7279% | 0.0000% |
| DEM_12NCP1 | 12 NCP Distribution Demand (No HV, LFR, Trans) | 100.0000% | 59.2780% | 11.7284% | 13.3315% | 7.8793% | 7.0662% | 0.0000% | 0.0000% | 0.0000% | 0.6762% | 0.0403% |
| DEM_2A | 200 CP Demand - NO RETAIL WHEELING & INTEI | 100.0000% | 61.9368% | 10.9619% | 11.7183% | 7.1088% | 4.8491% | 1.5717% | 1.5236% | 0.0000% | 0.2915% | 0.0382% |
| ANCIL | Transportation Ancillary Exp | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 99.8228% | 0.0000% | 0.1772% |
| DIR565.02 | Direct Assign A/C 565.02 | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 94.4445% | 0.0000% | 5.5555% |
| DEM_3B | Top 75 CP - No Interruptibles | 100.0000% | 58.3699% | 10.1252% | 10.9199% | 6.6109% | 4.4601% | 1.4491% | 1.3926% | 5.9389% | 0.2945% | 0.4389% |
| DEM_3A | Top 75 CP - No Interruptibles or Transportation | 100.0000% | 62.3229% | 10.8109% | 11.6595% | 7.0586% | 4.7622% | 1.5472% | 1.4869% | 0.0000% | 0.3145% | 0.0373% |
| ENERGY_1 | Annual kWhs | 100.0000% | 45.7818% | 11.1903% | 13.1423% | 8.9641% | 6.3862% | 2.5535% | 2.2737% | 8.7260% | 0.3403% | 0.6417% |
| DIR_449_ENERGY | Schedule 449 / 459 Energy Allocation | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 100.0000% | 0.0000% | 0.0000% |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BPAX | BPA Residential Exchange kWh | 100.0000% | 95.2448% | 2.5496% | 1.6796% | 0.2163% | 0.2905% | 0.0000% | 0.0000% | 0.0000% | 0.0192% | 0.0000% |
| ENERGY_2 | Energy - NO RETAIL WHEELING | 100.0000% | 50.4961% | 12.3426% | 14.4956% | 9.8872% | 7.0438% | 2.8165% | 2.5079% | 0.0000% | 0.3754% | 0.0350% |
| DEM_12NCP_P | 12 NCP Distribution Demand (No HV) | 100.0000% | 58.7620% | 11.6264% | 13.2155% | 7.8108% | 7.0047% | 0.0000% | 0.0000% | 0.3550% | 0.6703% | 0.5554% |
| DEM_12NCP_S | Dist 12 NCP Dem, Excl Dir Assn Transf (No HV, PR | 100.0000% | 63.8129% | 12.6257% | 14.3514% | 8.4821% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.7279% | 0.0000% |
| PC3 | Peak Credit 3 | 100.0000% | 52.2701% | 12.1129% | 14.0701% | 9.4629% | 6.7016% | 2.6261% | 2.3547% | 0.0000% | 0.3662% | 0.0354% |
| PC4 | Peak Credit 4 | 100.0000% | 47.6700% | 11.0305% | 12.8089% | 8.6111% | 6.0973% | 2.3879% | 2.1416% | 8.3079% | 0.3335% | 0.6113% |
| Line.T | Dist. Poles, lines, conductors | 100.0000% | 67.9155% | 11.4169% | 9.9086% | 4.3056% | 4.6742% | 0.8747% | 0.1015% | 0.0119% | 0.5077% | 0.0835% |
| PTDP.T | Prod Trans Dist Plant | 100.0000% | 58.6860% | 12.0294% | 11.7828% | 6.8392% | 5.5845% | 1.7397% | 1.4037% | 0.9172% | 0.9161% | 0.1016% |
| PP.T | Prod Plant | 100.0000% | 52.2701% | 12.1129% | 14.0701% | 9.4629% | 6.7016% | 2.6261% | 2.3547% | 0.0000% | 0.3662% | 0.0354% |
| TP.T | Trans Plant | 100.0000% | 49.4186% | 11.4419% | 13.2883% | 8.9349% | 6.3270% | 2.4784% | 2.2226% | 5.1500% | 0.3459% | 0.3924% |
| TDP.T | Trans & Dist Plant | 100.0000% | 62.9396% | 11.9740% | 10.2663% | 5.0998% | 4.8439% | 1.1519% | 0.7731% | 1.5252% | 1.2808% | 0.1455% |
| DP.T | Dist Plant | 100.0000% | 65.8166% | 12.0872% | 9.6233% | 4.2838% | 4.5283% | 0.8697% | 0.4647% | 0.7540% | 1.4795% | 0.0929% |
| | Customer Accts Expenses excluding Uncollect | 100.0000% | 43.9779% | 12.9224% | 17.2183% | 10.1749% | 8.3070% | 2.5936% | 2.0942% | 1.3699% | 1.1904% | 0.1513% |
| | Customer Service Expenses | 100.0000% | 88.4256% | 10.2238% | 0.7921% | 0.0946% | 0.0796% | 0.0129% | 0.0076% | 0.0017% | 0.3613% | 0.0009% |
| SW.T | Total Salaries & Wages | 100.0000% | 62.5646% | 12.8523% | 9.9107% | 5.4720% | 4.6199% | 1.4877% | 1.1351% | 0.6028% | 1.2801% | 0.0748% |
| SWPTD.T | Salaries & Wages P,T,D related | 100.0000% | 60.2192% | 12.0862% | 11.4312% | 6.3960% | 5.4120% | 1.5866% | 1.2366% | 0.5335% | 1.0231% | 0.0755% |
| GP.T | General Plant | 100.0000% | 58.6860% | 12.0294% | 11.7828% | 6.8392% | 5.5845% | 1.7397% | 1.4037% | 0.9172% | 0.9161% | 0.1016% |
| PTDGP.T | Prod/Trans/Dist/Gen'l Plant | 100.0000% | 58.6860% | 12.0294% | 11.7828% | 6.8392% | 5.5845% | 1.7397% | 1.4037% | 0.9172% | 0.9161% | 0.1016% |
| adjptdce.t | Adj Total Prod Trans Dist & Cust Exp | 100.0000% | 58.2503% | 12.9156% | 10.7816% | 6.3953% | 5.4177% | 1.7190% | 1.4251% | 1.0783% | 1.9031% | 0.1140% |
| EPIS.t | Elect Plant in Service | 100.0000% | 58.6477% | 12.0302% | 11.7972% | 6.8557% | 5.5916% | 1.7452% | 1.4096% | 0.9092% | 0.9127% | 0.1010% |
| RB.T | Rate base | 100.0000% | 57.9339% | 12.1504% | 12.1068% | 7.0140% | 5.7355% | 1.7912% | 1.4289% | 0.9322% | 0.8026% | 0.1046% |
| Revfac1.T | Revenue Factor 1 | 100.0000% | 55.0718% | 12.2307% | 12.6755% | 8.1828% | 6.1733% | 2.2232% | 1.9181% | 0.4966% | 0.7616% | 0.0663% |
| Power.T | Power Allocator | 100.0000% | 52.0798% | 12.0770% | 14.0305% | 9.4380% | 6.6845% | 2.6201% | 2.3492% | 0.3076% | 0.3652% | 0.0481% |
| SW.T alt | Total Salarys and Wages alt | 100.0000% | 61.4455% | 12.7319% | 9.8798% | 5.5944% | 5.3192% | 1.5880% | 1.2228% | 0.6791% | 1.4557% | 0.0837% |
| SWPTD.T alt | Salaries & Wages P,T,D related alt | 100.0000% | 56.7675% | 12.7962% | 11.9773% | 6.7888% | 6.6925% | 1.4299% | 1.2495% | 0.5682% | 1.6475% | 0.0826% |
| Retail RATE REV | Retail Rate Revenue | 100.0000% | 53.5411% | 12.2683% | 14.1947% | 8.6544% | 6.1112% | 2.1206% | 1.7354% | 0.4715% | 0.8406% | 0.0622% |

Puget Sound Energy
Public Counsel Electric Class Cost of Service Study
(Peak Credit)

| Classification | | | Total | Residential Sch 7 | Sec. Voltage Sch 24 | Sec. Voltage Sch 25 | Sec. Voltage Sch 26 | Prim. Voltage Sch 31/35/43 | Campus Sch 40 | High Voltage Sch 46/49 | Transportation Sch 449/459 | Street & Area Lighting | Firm Resale | Transp HV 449 | Lighting 50-59 | Firm Resale Large | Firm Resale Small |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Demand | 0.15 | | | | | | | | | | | | | | | | |
| Energy | 0.85 | | | | | | | | | | | | | | | | |
| **PC4** | | | | | | | | | | | | | | | | | |
| *Demand* | | | | | | | | | | | | | | | | | |
| | Dem_3B | amt | 4277389 | 2496708 | 433094 | 467088 | 282773 | 190771 | 5 | 0 | 61983 | 59567 | 14590 | 239439 | 12598 | 17278 | 1495 |
| | Dem_3B | pct | 100.0000% | 58.3699% | 10.1252% | 10.9199% | 6.6109% | 4.4600% | 0.0001% | 0.0000% | 1.4491% | 1.3926% | 0.3411% | 5.5978% | 0.2945% | 0.4039% | 0.0350% |
| | Weighted | | 0.15 | 8.755486% | 1.518779% | 1.637990% | 0.991632% | 0.668998% | 0.000018% | 0.000000% | 0.217363% | 0.208890% | 0.051164% | 0.839668% | 0.044179% | 0.060591% | ######## |
| *Energy* | | | | | | | | | | | | | | | | | |
| | Energy_1 | amt | 25,203,044,595 | 11,538,414,973 | 2,820,298,304 | 3,312,247,709 | 2,259,228,104 | 1,430,742,880 | 5,063,752 | 173,708,768 | 643,571,762 | 573,051,540 | ######### | 2,075,488,034 | 85,771,201 | 153,736,746 | 7,999,367 |
| | Energy_1 | pct | 100.0000% | 45.7818% | 11.1903% | 13.1423% | 8.9641% | 5.6769% | 0.0201% | 0.6892% | 2.5535% | 2.2737% | 0.4909% | 8.2351% | 0.3403% | 0.6100% | 0.0317% |
| | Weighted | | 85.000000% | 38.914555% | 9.511762% | 11.170914% | 7.619492% | 4.825335% | 0.017078% | 0.585852% | 2.170516% | 1.932678% | 0.417264% | 6.999808% | 0.289273% | 0.518494% | ######## |
| **Total** | | | 100.000000% | 47.670041% | 11.030541% | 12.808904% | 8.611124% | 5.494334% | 0.017096% | 0.585852% | 2.387878% | 2.141569% | 0.468428% | 7.839476% | 0.333451% | 0.579085% | ######## |
| **PC3** | | | | | | | | | | | | | | | | | |
| *Demand* | | | | | | | | | | | | | | | | | |
| | Dem_3a | amt | 4006082 | 2496708 | 433094 | 467088 | 282773 | 190771 | 5 | 0 | 61983 | 59567 | 0 | 0 | 12598 | 0 | 1495 |
| | Dem_3a | pct | 100.0000% | 62.3229% | 10.8109% | 11.6595% | 7.0586% | 4.7620% | 0.0001% | 0.0000% | 1.5472% | 1.4869% | 0.0000% | 0.0000% | 0.3145% | 0.0000% | 0.0373% |
| | Weighted | | 0.15 | 9.348441% | 1.621637% | 1.748921% | 1.058789% | 0.714305% | 0.000019% | 0.000000% | 0.232083% | 0.223037% | 0.000000% | 0.000000% | 0.047171% | 0.000000% | ######## |
| *Energy* | | | | | | | | | | | | | | | | | |
| | Energy_2 | amt | 22,850,098,360 | 11,538,414,973 | 2,820,298,304 | 3,312,247,709 | 2,259,228,104 | 1,430,742,880 | 5,063,752 | 173,708,768 | 643,571,762 | 573,051,540 | 0 | 0 | 85,771,201 | 0 | 7,999,367 |
| | Energy_2 | pct | 100.0000% | 50.4961% | 12.3426% | 14.4956% | 9.8872% | 6.2614% | 0.0222% | 0.7602% | 2.8165% | 2.5079% | 0.0000% | 0.0000% | 0.3754% | 0.0000% | 0.0350% |
| | Weighted | | 85.000000% | 42.921709% | 10.491218% | 12.321219% | 8.404095% | 5.322215% | 0.018837% | 0.646179% | 2.394020% | 2.131692% | 0.000000% | 0.000000% | 0.319060% | 0.000000% | ######## |
| **Total** | | | 100.000000% | 52.270150% | 12.112854% | 14.070139% | 9.462883% | 6.036521% | 0.018855% | 0.646179% | 2.626104% | 2.354730% | 0.000000% | 0.000000% | 0.366231% | 0.000000% | ######## |

Puget Sound Energy
Public Counsel Electric Class Cost of Service Study
(Salaries and Wages)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential Sch 7 | Sec. Voltage Sch 24 | Sec. Voltage Sch 25 | Sec. Voltage Sch 26 | Prim. Voltage Sch 31/35/43 | Campus Sch 40 | High Voltage Sch 46/49 | Transportation Sch 449/459 | Street & Area Lighting | Firm Resale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| | **Labor O & M Expenses** | | | | | | | | | | | | | |
| | Production Labor Exp | | | | | | | | | | | | | |
| S100 | Salary & Wages - Prod Related | | | | | | | | | | | | | |
| | | | 63 | 13,536,024 | 7,075,300 | 1,639,599 | 1,904,537 | 1,280,898 | 907,124 | 355,470 | 318,737 | 0 | 49,573 | 4,786 |
| | Transmission Labor Exp | | | | | | | | | | | | | |
| S101 | Salary & Wages - Trans Related | | | | | | | | | | | | | |
| | | | 64 | 591,683 | 292,401 | 67,700 | 78,625 | 52,866 | 37,436 | 14,664 | 13,151 | 30,472 | 2,047 | 2,322 |
| | Distribution Labor Expense - Operating | | | | | | | | | | | | | |
| S102 | Salary & Wages - Dist Related | | | | | | | | | | | | | |
| | | | 66 | 20,384,852 | 13,403,443 | 2,461,550 | 1,959,763 | 872,390 | 922,191 | 177,115 | 94,645 | 153,542 | 301,290 | 18,922 |
| | Customer Accounts Labor Expense | | | | | | | | | | | | | |
| S103 | Salary & Wages - Customer Accts Related | | | | | | | | | | | | | |
| | | | | 10,847,059 | 8,015,548 | 1,905,984 | 379,354 | 134,618 | 145,217 | 118,130 | 66,932 | 43,829 | 33,108 | 4,340 |
| | Customer Service & Information Labor Expense | | | | | | | | | | | | | |
| S104 | Salary & Wages - Cust Svc Related | | | | | | | | | | | | | |
| | | | | 1,460,361 | 1,289,994 | 152,454 | 11,330 | 1,067 | 945 | 97 | 27 | 25 | 4,409 | 13 |
| - | TOTAL LABOR OPERATING EXPENSES | | | | | | | | | | | | | |
| | | | | 46,799,979 | 30,076,687 | 6,227,287 | 4,333,609 | 2,341,840 | 2,012,913 | 665,477 | 493,491 | 227,868 | 390,427 | 30,383 |
| - | General Labor Expense - Maintenance | | | - | - | - | | - | - | - | - | - | - | - |
| S105 | Salary & Wages - Admin & Gen Related | | | | | | | | | | | | | |
| | | | | 19,406,793 | 11,522,763 | 2,318,231 | 2,256,047 | 1,296,499 | 1,058,894 | 323,712 | 261,242 | 172,918 | 177,124 | 19,362 |
| S106 | Salary & Wages - Sales | | | | | | | | | | | | | |
| | | | | 283,591 | - | - | | - | - | - | - | - | 283,591 | - |
| - | | | | | | | | | | | | | | |
| - | **TOTAL LABOR MAINTENANCE EXPENSES** | | | 19,690,384 | 11,522,763 | 2,318,231 | 2,256,047 | 1,296,499 | 1,058,894 | 323,712 | 261,242 | 172,918 | 460,715 | 19,362 |
| - | **TOTAL LABOR O & M EXPENSES** | | | | | | | | | | | | | |
| | | | | 66,490,363 | 41,599,450 | 8,545,518 | 6,589,656 | 3,638,339 | 3,071,807 | 989,189 | 754,733 | 400,786 | 851,142 | 49,745 |
| | **Labor O&M P/T/D** | | | 34,492,559 | 20,771,145 | 4,168,849 | 3,942,925 | 2,206,155 | 1,866,751 | 547,250 | 426,532 | 184,014 | 352,910 | 26,030 |
| 500 | Operation supervision and engineering | | 63 | 14,576 | 7,619 | 1,766 | 2,051 | 1,379 | 977 | 383 | 343 | 0 | 53 | 5 |
| 502 | Steam expenses (major only) | | 63 | 533,017 | 278,609 | 64,564 | 74,996 | 50,439 | 35,720 | 13,998 | 12,551 | 0 | 1,952 | 188 |
| 506 | Miscellaneous steam power expenses (major only) | | 63 | 43,947 | 22,971 | 5,323 | 6,183 | 4,159 | 2,945 | 1,154 | 1,035 | 0 | 161 | 16 |
| 507 | Rents | | 63 | 4,775 | 2,496 | 578 | 672 | 452 | 320 | 125 | 112 | 0 | 17 | 2 |
| 510 | Maintenance supervision and engineering (major only) | | 63 | 76,101 | 39,778 | 9,218 | 10,707 | 7,201 | 5,100 | 1,998 | 1,792 | 0 | 279 | 27 |
| 511 | Maintenance of structures (major only) | | 63 | 1,315 | 688 | 159 | 185 | 124 | 88 | 35 | 31 | 0 | 5 | 0 |
| 512 | Maintenance of boiler plant (major only) | | 63 | 35,258 | 18,429 | 4,271 | 4,961 | 3,336 | 2,363 | 926 | 830 | 0 | 129 | 12 |
| 513 | Maintenance of electric plant (major only) | | 63 | 30,040 | 15,702 | 3,639 | 4,227 | 2,843 | 2,013 | 789 | 707 | 0 | 110 | 11 |
| 514 | Maintenance of miscellaneous steam plant (major only) | | 63 | 7,640 | 3,993 | 925 | 1,075 | 723 | 512 | 201 | 180 | 0 | 28 | 3 |
| 535 | Operation supervision and engineering | | 63 | 538,937 | 281,703 | 65,281 | 75,829 | 50,999 | 36,117 | 14,163 | 12,691 | 0 | 1,974 | 191 |
| 537 | Hydraulic expenses (major only) | | 63 | 857,331 | 448,128 | 103,847 | 120,628 | 81,128 | 57,454 | 22,514 | 20,188 | 0 | 3,140 | 303 |
| 538 | Electric expenses (major only) | | 63 | 929,839 | 486,028 | 112,630 | 130,830 | 87,990 | 62,314 | 24,419 | 21,895 | 0 | 3,405 | 329 |
| 539 | Miscellaneous hydraulic power generation expenses (major on | | 63 | 831,772 | 434,768 | 100,751 | 117,031 | 78,710 | 55,742 | 21,843 | 19,586 | 0 | 3,046 | 294 |
| 540 | Rents | | 63 | 1,789 | 935 | 217 | 252 | 169 | 120 | 47 | 42 | 0 | 7 | 1 |
| 541 | Maintenance supervision and engineering (major only) | | 63 | 262,791 | 137,361 | 31,831 | 36,975 | 24,868 | 17,611 | 6,901 | 6,188 | 0 | 962 | 93 |

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential Sch 7 | Sec. Voltage Sch 24 | Sec. Voltage Sch 25 | Sec. Voltage Sch 26 | Prim. Voltage Sch 31/35/43 | Campus Sch 40 | High Voltage Sch 46/49 | Transportation Sch 449/459 | Street & Area Lighting | Firm Resale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 542 | Maintenance of structures (major only) | | 63 | 301,825 | 157,764 | 36,560 | 42,467 | 28,561 | 20,227 | 7,926 | 7,107 | 0 | 1,105 | 107 |
| 543 | Maintenance of reservoirs, dams, and waterways (major only) | | 63 | 323,889 | 169,297 | 39,232 | 45,572 | 30,649 | 21,706 | 8,506 | 7,627 | 0 | 1,186 | 115 |
| 544 | Maintenance of electric plant (major only) | | 63 | 550,533 | 287,764 | 66,685 | 77,461 | 52,096 | 36,894 | 14,458 | 12,964 | 0 | 2,016 | 195 |
| 545 | Maintenance of miscellaneous hydraulic plant (major only) | | 63 | 517,474 | 270,484 | 62,681 | 72,809 | 48,968 | 34,679 | 13,589 | 12,185 | 0 | 1,895 | 183 |
| 546 | Operation supervision and engineering | | 63 | 468,345 | 244,805 | 56,730 | 65,897 | 44,319 | 31,386 | 12,299 | 11,028 | 0 | 1,715 | 166 |
| 548 | Generation expenses (major only) | | 63 | 1,532,536 | 801,059 | 185,634 | 215,630 | 145,022 | 102,704 | 40,246 | 36,087 | 0 | 5,613 | 542 |
| 549 | Miscellaneous other power generation expenses (major only) | | 63 | 421,049 | 220,083 | 51,001 | 59,242 | 39,843 | 28,217 | 11,057 | 9,915 | 0 | 1,542 | 149 |
| 550 | Rents | | 63 | 4,095 | 2,141 | 496 | 576 | 388 | 274 | 108 | 96 | 0 | 15 | 1 |
| 551 | Maintenance supervision and engineering (major only) | | 63 | 171,801 | 89,801 | 20,810 | 24,173 | 16,257 | 11,513 | 4,512 | 4,045 | 0 | 629 | 61 |
| 552 | Maintenance of structures (major only) | | 63 | 110,425 | 57,719 | 13,376 | 15,537 | 10,449 | 7,400 | 2,900 | 2,600 | 0 | 404 | 39 |
| 553 | Maintenance of generating and electric equipment (major only) | | 63 | 844,944 | 337,113 | 78,121 | 90,745 | 61,030 | 43,221 | 16,937 | 15,187 | 0 | 2,362 | 228 |
| 554 | Maintenance of miscellaneous other power generation plant (m | | 63 | 587,247 | 306,955 | 71,132 | 82,626 | 55,570 | 39,355 | 15,422 | 13,828 | 0 | 2,151 | 208 |
| 556 | System control and load dispatching (major only) | | 63 | 746,152 | 390,015 | 90,380 | 104,985 | 70,607 | 50,004 | 19,595 | 17,570 | 0 | 2,733 | 264 |
| 557 | Other expenses | | 63 | 2,986,583 | 1,561,091 | 361,760 | 420,216 | 282,617 | 200,147 | 78,431 | 70,326 | 0 | 10,938 | 1,056 |
| 560 | Operation supervision and engineering | | 64 | 458,411 | 226,540 | 52,451 | 60,915 | 40,958 | 29,004 | 11,361 | 10,189 | 23,608 | 1,586 | 1,799 |
| 561.1 | Load Dispatching (major only) | | 64 | 53,527 | 26,452 | 6,125 | 7,113 | 4,783 | 3,387 | 1,327 | 1,190 | 2,757 | 185 | 210 |
| 561.2 | Load Dispatching (major only) | | 64 | 139,128 | 68,755 | 15,919 | 18,488 | 12,431 | 8,803 | 3,448 | 3,092 | 7,165 | 481 | 546 |
| 561.3 | Load Dispatching (major only) | | 64 | 32,926 | 16,271 | 3,767 | 4,375 | 2,942 | 2,083 | 816 | 732 | 1,696 | 114 | 129 |
| 561.6 | Load Dispatching (major only) | | 64 | 28,197 | 13,935 | 3,226 | 3,747 | 2,519 | 1,784 | 699 | 627 | 1,452 | 98 | 111 |
| 561.8 | Load Dispatching (major only) | | 64 | 57,807 | 28,567 | 6,614 | 7,682 | 5,165 | 3,657 | 1,433 | 1,285 | 2,977 | 200 | 227 |
| 562 | Station expenses (major only) | | 64 | 60,794 | 30,044 | 6,956 | 8,079 | 5,432 | 3,846 | 1,507 | 1,351 | 3,131 | 210 | 239 |
| 563 | Overhead line expenses (major only) | | 64 | 58,975 | 29,145 | 6,748 | 7,837 | 5,269 | 3,731 | 1,462 | 1,311 | 3,037 | 204 | 231 |
| 566 | Miscellaneous transmission expenses (major only) | | 64 | 298,520 | 147,524 | 34,156 | 39,668 | 26,672 | 18,887 | 7,399 | 6,635 | 15,374 | 1,033 | 1,171 |
| 569.2 | Maintenance of structures (major only) | | 64 | -17,130 | -8,466 | -1,960 | -2,276 | -1,531 | -1,084 | -425 | -381 | -882 | -59 | -67 |
| 570 | Maintenance of station equipment (major only) | | 64 | 187,426 | 92,623 | 21,445 | 24,906 | 16,746 | 11,858 | 4,645 | 4,166 | 9,652 | 648 | 735 |
| 571 | Maintenance of overhead lines (major only) | | 64 | -766,897 | -378,990 | -87,748 | -101,908 | -68,521 | -48,521 | -19,007 | -17,045 | -39,495 | -2,653 | -3,009 |
| 580 | Operation supervision and engineering | | 66 | 1,066,133 | 701,692 | 128,866 | 102,597 | 45,671 | 48,278 | 9,272 | 4,955 | 8,038 | 15,773 | 991 |
| 581 | Load dispatching (major only) | | 47 | 4,602,917 | 2,728,517 | 539,851 | 613,639 | 362,680 | 325,253 | 0 | 0 | 0 | 31,123 | 1,855 |
| 582 | Station expenses (major only) | D362.T | Acct 362 | 740,841 | 369,090 | 94,379 | 96,693 | 62,231 | 49,891 | 12,839 | 17,206 | 33,625 | 3,383 | 1,605 |
| 583 | Overhead line expenses (major only) | D364.T | Acct 364 | -1,056,182 | -727,066 | -127,032 | -100,440 | -37,008 | -56,872 | -1,758 | 0 | -119 | -4,889 | -998 |
| 584 | Underground line expenses (major only) | D366.T | Acct 366 | 291,898 | 197,040 | 32,530 | 29,443 | 13,613 | 13,562 | 3,476 | 429 | 36 | 1,540 | 229 |
| 585 | Street lighting and signal system expenses | DIR373.00 | Acct 373 | 153,514 | | | | | | | | | 153,514 | |
| 586 | Meter expenses | D370.T | Acct 370 | 1,049,781 | 597,905 | 225,083 | 82,591 | 8,634 | 122,052 | 5,128 | 4,382 | 2,484 | 0 | 1,525 |
| 587 | Customer installations expenses | D370.T | Acct 370 | 2,130,864 | 1,213,637 | 456,877 | 167,644 | 17,525 | 247,743 | 10,408 | 8,895 | 5,042 | 0 | 3,095 |
| 588 | Miscellaneous distribution expenses | | 66 | 747,200 | 491,781 | 90,316 | 71,905 | 32,009 | 33,836 | 6,498 | 3,473 | 5,634 | 11,055 | 694 |
| 590 | Maintenance supervision and engineering (major | DES2.T | Acct 591 to 597 | 33,626 | 20,511 | 3,972 | 4,239 | 2,397 | 2,219 | 21 | -2 | -26 | 285 | 12 |
| 591 | Maintenance of structures (major only) | D361.T | Acct 361 | 133 | 60 | 16 | 18 | 14 | 10 | 2 | 5 | 7 | 1 | 0 |
| 592 | Maintenance of station equipment (major only) | D362.T | Acct 362 | 2,414,674 | 1,202,840 | 307,573 | 315,116 | 202,806 | 162,590 | 41,841 | 56,074 | 109,581 | 11,024 | 5,231 |
| 593 | Maintenance of overhead lines (major only) | D364.T | Acct 364 | 5,580,366 | 3,841,471 | 671,178 | 530,680 | 195,532 | 300,485 | 9,291 | 0 | 627 | 25,829 | 5,273 |
| 594 | Maintenance of underground lines (major only) | D366.T | Acct 366 | 2,097,099 | 1,415,607 | 233,707 | 211,528 | 97,797 | 97,437 | 24,973 | 3,079 | 256 | 11,066 | 1,649 |
| 595 | Maintenance of line transformers | D368.T | Acct 368 | 108,444 | 76,319 | 17,699 | 10,936 | 2,759 | 320 | 358 | 0 | 0 | 46 | 6 |
| 596 | Maintenance of street lighting and signal systems | DIR373.00 | Dir | 256,893 | | | | | | | | | 256,893 | |
| 597 | Maintenance of meters | D370.T | Acct 370 | 146,548 | 83,467 | 31,421 | 11,530 | 1,205 | 17,038 | 716 | 612 | 347 | 0 | 213 |
| 901C | Supervision (major only) | CAES1.T | Accts 902-905 | 215,014 | 112,388 | 26,044 | 30,253 | 20,347 | 14,409 | 5,646 | 5,063 | 0 | 787 | 76 |
| 902C | Meter reading expenses | | 5 | 160,508 | 114,575 | 40,433 | 4,055 | 428 | 360 | 40 | 314 | 282 | 0 | 20 |
| 902E | Meter reading expenses | | 5 | 2,647 | 1,889 | 667 | 67 | 7 | 6 | 1 | 5 | 5 | 0 | 0 |
| 903C | Customer records and collection expenses | | 4 | 8,663,139 | 7,085,081 | 1,071,096 | 118,594 | 11,170 | 74,434 | 164,061 | 64,766 | 38,108 | 32,043 | 3,786 |
| 903E | Customer records and collection expenses | | 4 | 1,750,101 | 1,431,307 | 216,380 | 23,958 | 2,256 | 15,037 | 33,143 | 13,084 | 7,698 | 6,473 | 765 |
| 905C | Miscellaneous customer accounts expenses (major only) | | 2 | 55,550 | 49,158 | 5,810 | 432 | 41 | 36 | 4 | 1 | 1 | 168 | 0 |
| 908C | Customer assistance expenses (major only) | | 59 | 697,301 | 364,480 | 84,463 | 98,111 | 65,985 | 46,730 | 18,312 | 16,420 | 0 | 2,554 | 247 |
| 908E | Customer assistance expenses (major only) | | 59 | 390,963 | 204,357 | 47,357 | 55,009 | 36,998 | 26,201 | 10,267 | 9,206 | 0 | 1,432 | 138 |
| 909C | Informational and instructional advertising expenses (major or | | 2 | 372,098 | 328,688 | 38,845 | 2,887 | 272 | 241 | 25 | 7 | 6 | 1,123 | 3 |
| 912C | Demonstrating and selling expenses (major only) | | 2 | 36 | 31 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 912E | Demonstrating and selling expenses (major only) | | 2 | 165,400 | 146,104 | 17,267 | 1,283 | 121 | 107 | 11 | 3 | 3 | 499 | 1 |
| 913E | Advertising expenses (major only) | | 2 | 10,349 | 9,142 | 1,080 | 80 | 8 | 7 | 1 | 0 | 0 | 31 | 0 |
| 916E | Miscellaneous sales expenses (major only) | | 2 | 107,806 | 95,230 | 11,254 | 836 | 79 | 70 | 7 | 2 | 2 | 325 | 1 |
| 920C | Administrative and general salaries | | 73 | 13,331,883 | 7,765,856 | 1,721,891 | 1,437,392 | 852,614 | 722,284 | 229,171 | 189,993 | 143,762 | 253,725 | 15,193 |
| 920E | Administrative and general salaries | | 73 | 4,328,139 | 2,521,152 | 559,005 | 466,643 | 276,798 | 234,487 | 74,399 | 61,681 | 46,672 | 82,371 | 4,932 |
| 924C | Property insurance | | 72 | 240,038 | 140,869 | 28,875 | 28,283 | 16,417 | 13,405 | 4,176 | 3,389 | 2,202 | 2,199 | 244 |
| 924E | Property insurance | | 72 | 261,892 | 153,694 | 31,504 | 30,858 | 17,911 | 14,625 | 4,556 | 3,676 | 2,402 | 2,399 | 266 |
| 925C | Injuries and damages | | 65 | 238,234 | 149,944 | 28,526 | 24,458 | 12,149 | 11,540 | 2,744 | 1,842 | 3,634 | 3,051 | 347 |
| 925E | Injuries and damages | | 65 | 240,607 | 151,437 | 28,810 | 24,701 | 12,271 | 11,655 | 2,772 | 1,860 | 3,670 | 3,081 | 350 |
| 930.2C | Miscellaneous general expenses | | 73 | 33,685 | 19,622 | 4,351 | 3,632 | 2,154 | 1,825 | 579 | 480 | 363 | 641 | 38 |
| 935C | Maintenance of general plant | | 71 | 697,612 | 409,401 | 83,918 | 82,198 | 47,711 | 38,958 | 12,136 | 9,792 | 6,398 | 6,391 | 709 |
| 935E | Maintenance of general plant | | 71 | 34,701 | 20,365 | 4,174 | 4,089 | 2,373 | 1,938 | 604 | 487 | 318 | 318 | 35 |

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential Sch 7 | Sec. Voltage Sch 24 | Sec. Voltage Sch 25 | Sec. Voltage Sch 26 | Prim. Voltage Sch 31/35/43 | Campus Sch 40 | High Voltage Sch 46/49 | Transportation Sch 449/459 | Street & Area Lighting | Firm Resale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Salarys and Wages alt | | | | 66,490,363 | 40,855,344 | 8,465,489 | 8,569,099 | 3,719,735 | 3,536,755 | 1,055,864 | 813,045 | 451,527 | 967,877 | 55,639 |
| Salaries & Wages P,T,D related alt | | | | 34,492,558 | 19,580,573 | 4,413,734 | 4,131,278 | 2,341,628 | 2,308,402 | 493,199 | 430,993 | 196,001 | 568,264 | 28,486 |

Exhibit No.__(GAW-7)

## PUGET SOUND ENERGY ELECTRIC OPERATIONS
## PSE AND PUBLIC COUNSEL REVENUE DISTRIBUTION PROPOSALS

| Customer Class | (1) Current Revenue | (2) Rate of Return PSE | (3) Rate of Return Public Counsel | (4) Proposed Revenue Increase PSE | (5) Proposed Revenue Increase Public Counsel | (6) Proposed Revenue Increase (%) PSE | (7) Proposed Revenue Increase (%) Public Counsel | (8) Public Counsel Pct of Sys Avg Pct |
|---|---|---|---|---|---|---|---|---|
| Residential - Sch. 7 | $984,090,383 | 2.87% | 4.74% | $115,972,986 | $101,002,871 | 11.78% | 10.26% | 108% |
| Secondary Voltage: | | | | | | | | |
| Demand <= 50 kW - Sch. 24 | 225,492,780 | 5.77% | 5.30% | 21,259,081 | 21,444,363 | 9.43% | 9.51% | 100% |
| Demand > 50 kW but <= 350 kW - Sch. 25/29 | 260,900,473 | 12.62% | 7.94% | 12,298,629 | 18,602,204 | 4.71% | 7.13% | 75% |
| Demand > 350 kW - Sch. 26 | 159,068,092 | 11.33% | 6.72% | 7,498,336 | 12,852,702 | 4.71% | 8.08% | 85% |
| Primary Voltage: | | | | | | | | |
| General Service/Irrigation - Sch. 31/35 | 99,475,260 | 6.96% | 4.83% | 9,378,361 | 9,460,097 | 9.43% | 9.51% | 100% |
| Interruptible Total Elec. Schools - Sch. 43 | 12,849,516 | 6.96% | 4.83% | 1,211,431 | 1,221,989 | 9.43% | 9.51% | 100% |
| Campus Rate - Sch. 40 | 38,977,016 | 5.73% | 3.35% | 1,947,000 | 4,264,090 | 5.00% | 10.94% | 115% |
| Total High Voltage - Sch. 46/49 | 31,895,958 | 4.11% | 2.45% | 3,007,097 | 3,792,429 | 9.43% | 11.89% | 125% |
| Schedule 449 - 459 | 8,667,087 | 6.06% | 5.82% | 817,118 | 824,240 | 9.43% | 9.51% | 100% |
| Lighting - Sch. 50-59 | 15,450,314 | 8.69% | 7.46% | 1,092,472 | 1,101,607 | 7.07% | 7.13% | 75% |
| Firm Resale - Sch. 005 | 1,142,381 | 2.34% | 4.05% | 336,605 | 252,526 | 29.47% | 22.11% | |
| Total | $1,838,009,260 | 5.31% | 5.31% | $174,819,116 | $174,819,118 | 9.51% | 9.51% | 100% |

**Puget Sound Energy**
**Electric Residential Customer Costs**
**(Cost of Equity @ PSE Proposed)**

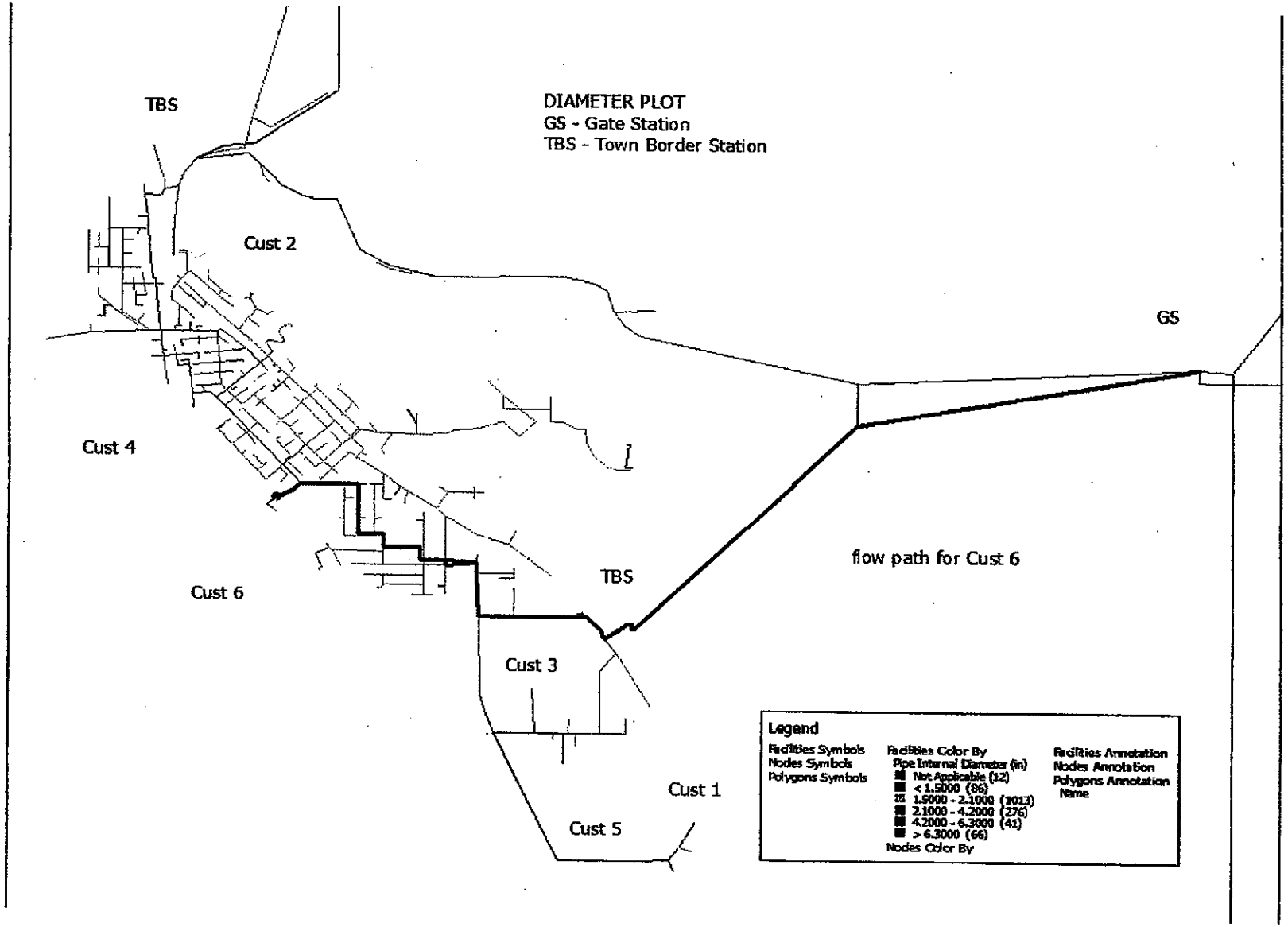
| | Residential | | | | |
|---|---|---|---|---|---|
| **Gross Plant** | | | | | |
| Meters | $73,742,332 | | | | |
| Total Gross Plant | $73,742,332 | | | | |
| **Depreciation Reserve** | | | | | |
| Meters | -$27,129,698 | | | | |
| Total Depreciation Reserve | -$27,129,698 | | | | |
| **Total Net Plant** | $46,612,634 | | | | |
| **Total Rate Base** | $46,612,634 | | | | |
| **Operation & Maintenance Expenses** | | | | | |
| Dist Oper - Meters | $898,321 | | | | |
| Dist Oper - Cust Installations - Meters | $1,740,635 | | | | |
| Meter Reading | $11,481,990 | | | | |
| Records & Collections | $13,681,729 | | | | |
| Dist Maint - Meters | $123,635 | | | | |
| Total O & M Expenses | $27,926,311 | | | | |
| **Depreciation Expense** | | | | | |
| Meters | $1,710,822 | Rate Per PSB Depreciation Study | | | 2.32% |
| Total Depreciation Expense | $1,710,822 | | | | |
| **Revenue Requirement** | | | Cost of Capital | | |
| | | | PCT | Cost | WGHT Cost |
| Interest | $1,742,362 | Debt | 54.97% | 6.80% | 3.74% |
| Equity return | $2,266,578 | Preferred | 0.03% | 8.61% | 0.00% |
| Income Tax | $1,220,465 | Common | 45.00% | 10.80% | 4.86% |
| Revenue For Return | 5,229,405 | Total | 100.00% | | 8.60% |
| O & M Expenses | $27,926,311 | | | | |
| Depreciation Expense | $1,710,822 | | | | |
| Total Customer Revenue Requirement Before Gross up | $34,866,537 | | | | |
| Gross Up for Uncollect., WUTC Fee, and Excise Tax | 0.956050 | Per Witness Story | | | |
| Total Customer Revenue Requirement | $36,469,366 | | | | |
| Number of Bills | 11,067,864 | | | | |
| Monthly Cost | $3.30 | | | | |

**Puget Sound Energy**
**Electric Residential Customer Costs**
**(Cost of Equity @ Public Counsel Proposed)**

| | Residential | | | | |
|---|---|---|---|---|---|
| **Gross Plant** | | | | | |
| Meters | $73,742,332 | | | | |
| Total Gross Plant | $73,742,332 | | | | |
| **Depreciation Reserve** | | | | | |
| Meters | -$27,129,698 | | | | |
| Total Depreciation Reserve | -$27,129,698 | | | | |
| **Total Net Plant** | $46,612,634 | | | | |
| **Total Rate Base** | $46,612,634 | | | | |
| **Operation & Maintenance Expenses** | | | | | |
| Dist Oper - Meters | $898,321 | | | | |
| Dist Oper - Cust Installations - Meters | $1,740,635 | | | | |
| Meter Reading | $11,481,990 | | | | |
| Records & Collections | $13,681,729 | | | | |
| Dist Maint - Meters | $123,635 | | | | |
| Total O & M Expenses | $27,926,311 | | | | |
| **Depreciation Expense** | | | | | |
| Meters | $1,710,822 | Rate Per PSE Depreciation Study | | 2.32% | |
| Total Depreciation Expense | $1,710,822 | | | | |
| **Revenue Requirement** | | | Cost of Capital | | |
| | | | PCT | Cost | WGHT Cost |
| Interest | $1,742,362 | Debt | 54.97% | 6.80% | 3.74% |
| Equity return | $1,941,455 | Preferred | 0.03% | 8.61% | 0.00% |
| Income Tax | $1,045,399 | Common | 45.00% | 9.25% | 4.16% |
| Revenue For Return | 4,729,215 | Total | 100.00% | | 7.90% |
| O & M Expenses | $27,926,311 | | | | |
| Depreciation Expense | $1,710,822 | | | | |
| Total Customer Revenue Requirement Before Gross up | $34,366,348 | | | | |
| Gross Up for Uncollect., WUTC Fee, and Excise Tax | 0.956050 | Per Witness Story | | | |
| Total Customer Revenue Requirement | $35,946,183 | | | | |
| Number of Bills | 11,067,864 | | | | |
| Monthly Cost | $3.25 | | | | |

Example of Flow Analysis
Map 2

Exhibit No. __(GAW-9)




Source: PSE response to PC No. 625

Dockets UE-072300 & UG-072301
Exhibit No. ___(GAW-9)
Page 1 of 1

**Puget Sound Energy**
**Public Counsel Gas Class Cost of Service Study**
**(Summary)**

| Account Description | | Total | Residential (16,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible (87) | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Revenue @ Current Rates | | $339,752,293 | $231,328,530 | $66,832,859 | $13,774,048 | $6,672,319 | $3,575,636 | $5,819,417 | $3,931,144 | $29,651 | $7,788,789 |
| TOTAL O & M EXPENSES | | $108,932,397 | $78,480,123 | $21,008,107 | $2,467,477 | $1,727,756 | $632,048 | $2,231,025 | $1,397,902 | $53,849 | $934,109 |
| TOTAL DEPRECIATION EXPENSES | | $99,429,849 | $58,771,377 | $21,371,757 | $3,017,365 | $1,719,684 | $605,064 | $3,150,320 | $1,699,605 | $51,452 | $9,043,226 |
| TOTAL TAXES OTHER THAN INCOME | | $28,153,873 | $17,685,595 | $6,655,591 | $954,979 | $548,733 | $195,152 | $977,936 | $530,963 | $5,467 | $599,457 |
| Total Expense Before Income Taxes | | $236,516,118 | $154,937,095 | $49,035,455 | $6,439,821 | $3,996,172 | $1,432,265 | $6,359,281 | $3,628,470 | $110,767 | $10,576,793 |
| Earnings Before Interest & Taxes | | $103,236,175 | $76,391,436 | $17,797,405 | $7,334,226 | $2,676,147 | $2,143,271 | -$539,864 | $302,675 | -$81,116 | -$2,788,004 |
| Interest @ Weighted Cost of Debt | 3.74% | $50,439,847 | $32,581,144 | $11,177,452 | $1,739,511 | $982,517 | $353,476 | $1,805,972 | $961,198 | $16,779 | $821,798 |
| Earnings Before Tax | | $52,796,328 | $43,810,291 | $6,619,953 | $5,594,715 | $1,693,630 | $1,789,795 | -$2,345,836 | -$658,523 | -$97,895 | -$3,609,802 |
| Income Taxes @ efective Income Tax Rate | 42.61% | $22,497,545 | $18,668,420 | $2,820,891 | $2,384,017 | $721,689 | $762,667 | -$999,607 | -$280,609 | -$41,715 | -$1,538,207 |
| Operating Income @ Current Rates | | $80,738,630 | $57,723,016 | $14,976,513 | $4,950,209 | $1,954,459 | $1,380,604 | $459,743 | $583,284 | -$39,401 | -$1,249,797 |
| Rate Base | | $1,349,395,041 | $871,629,028 | $299,025,444 | $46,536,370 | $26,284,857 | $9,456,389 | $48,314,384 | $25,714,496 | $448,881 | $21,985,190 |
| **RoR** | | **5.98%** | **6.62%** | **5.01%** | **10.64%** | **7.44%** | **14.60%** | **0.95%** | **2.27%** | **-8.78%** | **-5.68%** |
| **Indexed RoR** | | **100%** | **111%** | **84%** | **178%** | **124%** | **244%** | **16%** | **38%** | **-147%** | **-95%** |
| Required Income @ 8.60% | | $116,047,974 | $74,960,096 | $25,716,188 | $4,002,128 | $2,260,498 | $813,249 | $4,155,037 | $2,211,447 | $38,604 | $1,890,726 |
| Income Deficiency | | $35,309,344 | $17,237,081 | $10,739,675 | -$948,081 | $306,039 | -$567,355 | $3,695,294 | $1,628,163 | $78,005 | $3,140,524 |
| Conversion Factor | | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 |
| Additional Revenue Required | | $56,770,930 | $27,714,055 | $17,267,421 | -$1,524,340 | $492,055 | -$912,202 | $5,941,354 | $2,617,786 | $125,418 | $5,049,384 |
| PC Proposed Revenue Increase | | $56,770,930 | $36,493,148 | $13,914,794 | $1,168,693 | $948,869 | $0 | $1,383,297 | $865,122 | $7,388 | $1,989,015 |
| Difference from Required Rev. Increase @ 8.60% ROR | | $0 | $8,779,093 | -$3,352,627 | $2,693,033 | $456,814 | $912,202 | -$4,558,057 | -$1,752,664 | -$118,030 | -$3,060,369 |
| Conversion Factor | | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 | 0.6219617 |
| Income Difference from Required | | $0 | $5,460,260 | -$2,085,206 | $1,674,963 | $284,121 | $567,355 | -$2,834,937 | -$1,090,090 | -$73,410 | -$1,903,432 |
| Operating Income @ PC Proposed Rates | | $116,047,974 | $80,420,356 | $23,630,982 | $5,677,091 | $2,544,619 | $1,380,604 | $1,320,100 | $1,121,357 | -$34,806 | -$12,706 |
| **ROR @ PC Proposed Rates** | | **8.60%** | **9.23%** | **7.90%** | **12.20%** | **9.68%** | **14.60%** | **2.73%** | **4.36%** | **-7.75%** | **-0.06%** |
| **Indexed ROR @ PC Proposed Rates** | | **100%** | **107%** | **92%** | **142%** | **113%** | **170%** | **32%** | **51%** | **-90%** | **-1%** |
| **Indexed ROR @ Current Rates** | | **100%** | **111%** | **84%** | **178%** | **124%** | **244%** | **16%** | **38%** | **-147%** | **-95%** |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Rate Base)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential (16,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plant-In-Service | | | | | | | | | | | | | |
| | Intangible Plant | | | | | | | | | | | | |
| 301 | Organization | PLT | 63 | $158,692 | $100,411 | $37,250 | $5,317 | $2,943 | $1,059 | $5,480 | $2,914 | $6 | $3,311 |
| 302 | Franchise and Consents | PLT | 63 | $93,331 | $59,054 | $21,906 | $3,127 | $1,731 | $623 | $3,223 | $1,714 | $3 | $1,947 |
| 303 | Misc. Intangible | OML | 66 | $103,398,316 | $73,823,688 | $20,126,296 | $2,505,119 | $1,687,399 | $672,497 | $2,213,282 | $1,332,924 | $65,479 | $971,631 |
| | *Sub-total* | | | $103,650,338 | $73,983,153 | $20,185,454 | $2,513,564 | $1,692,074 | $674,179 | $2,221,984 | $1,337,552 | $65,488 | $976,889 |
| | Production and Gathering Plant | | | | | | | | | | | | |
| 304 | Land and Land Rights | PRODPT | 52 | $153,211 | $107,494 | $38,524 | $6,565 | $212 | $302 | $110 | $0 | $4 | $0 |
| 305 | Structures and Improvements | PRODPT | 52 | $470,201 | $329,896 | $118,229 | $20,148 | $652 | $926 | $338 | $0 | $13 | $0 |
| 311 | Liquefied Petroleum Gas Equipment | PDAYXT | 45 | $6,218,505 | $4,362,938 | $1,563,598 | $266,459 | $8,622 | $12,243 | $4,474 | $0 | $173 | $0 |
| 320 | Other Equipment | PDAYXT | 45 | $68,857 | $48,310 | $17,313 | $2,950 | $95 | $136 | $50 | $0 | $2 | $0 |
| | *Sub-total* | | | $6,910,774 | $4,848,637 | $1,737,663 | $296,122 | $9,582 | $13,606 | $4,972 | $0 | $192 | $0 |
| | Natural Gas Underground Storage | | | | | | | | | | | | |
| | JP Storage Balancing - DIR | COM1 | 34 | $5,371,157 | $2,639,317 | $1,010,374 | $338,861 | $311,879 | $84,028 | $674,223 | $311,876 | $599 | $0 |
| 350 | Land and Land Rights | SEAS3_DEM | 47 | $365,517 | $253,259 | $81,288 | $12,720 | $3,396 | $6,886 | $7,968 | $0 | $0 | $0 |
| 351 | Structures and Improvements | SEAS3_DEM | 47 | $569,201 | $394,387 | $126,586 | $19,808 | $5,288 | $10,723 | $12,408 | $0 | $0 | $0 |
| 352 | Wells | SEAS3_DEM | 47 | $9,428,691 | $6,532,944 | $2,096,678 | $328,109 | $87,590 | $177,631 | $205,539 | $0 | $0 | $0 |
| 353 | Lines | SEAS3_DEM | 47 | $1,290,979 | $894,493 | $287,105 | $44,925 | $11,993 | $24,321 | $28,142 | $0 | $0 | $0 |
| 354 | Compressor Equipment | SEAS3_DEM | 47 | $5,952,236 | $4,124,181 | $1,323,738 | $207,132 | $55,295 | $112,137 | $129,755 | $0 | $0 | $0 |
| 355 | Measuring and Regulating Equipment | SEAS3_DEM | 47 | $268,488 | $186,029 | $59,710 | $9,343 | $2,494 | $5,056 | $5,853 | $0 | $0 | $0 |
| 356 | Purification Equipment | SEAS3_DEM | 47 | $788,118 | $546,071 | $175,272 | $27,426 | $7,321 | $14,848 | $17,180 | $0 | $0 | $0 |
| 357 | Other Equipment | SEAS3_DEM | 47 | $379,965 | $263,270 | $84,502 | $13,222 | $3,530 | $7,156 | $8,283 | $0 | $0 | $0 |
| | *Sub-total* | | | $24,414,352 | $15,833,951 | $5,246,453 | $1,001,545 | $488,785 | $442,791 | $1,089,352 | $311,876 | $599 | $0 |
| | Natural Gas Local Storage | | | | | | | | | | | | |
| 360 | Land & Land Rights | SEAS3_DEM | 47 | $1,704,569 | $1,181,061 | $379,085 | $59,317 | $15,835 | $32,113 | $37,158 | $0 | $0 | $0 |
| 361 | Structures & improvement | SEAS3_DEM | 47 | $3,973,839 | $2,753,390 | $883,755 | $138,285 | $36,916 | $74,865 | $86,627 | $0 | $0 | $0 |
| 362 | Gas Holders | SEAS3_DEM | 47 | $3,334,728 | $2,310,564 | $741,621 | $116,045 | $30,979 | $62,824 | $72,695 | $0 | $0 | $0 |
| 363 | Purification Equipment | SEAS3_DEM | 47 | $3,967,556 | $2,749,037 | $882,358 | $138,067 | $36,857 | $74,747 | $86,490 | $0 | $0 | $0 |
| 364 | Terminating & Processing | SEAS3_DEM | 47 | $1,089,858 | $755,140 | $242,377 | $37,926 | $10,124 | $20,532 | $23,758 | $0 | $0 | $0 |
| | *Sub-total* | | | $14,070,550 | $9,749,192 | $3,129,196 | $489,640 | $130,711 | $265,081 | $306,729 | $0 | $0 | $0 |
| | Transmission Plant | | | | | | | | | | | | |
| 365 | Land and Land Rights | PAVG | 42 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 366 | Structures and Improvements | PAVG | 42 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 367 | Mains | PAVG | 42 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 369 | M&R Station Equipment | PAVG | 42 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 372 | Easements | PAVG | 42 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | *Sub-total* | | | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | Distribution Plant | | | | | | | | | | | | |
| 373 | Easements | DISTPT | 53 | $7,334,283 | $4,732,461 | $1,760,106 | $250,700 | $140,568 | $48,645 | $261,184 | $140,340 | $277 | $0 |
| 374 | Land and Land Rights | DISTPT | 53 | $3,326,019 | $2,146,121 | $798,189 | $113,690 | $63,746 | $22,060 | $118,444 | $63,643 | $126 | $0 |
| 375 | Structures and Improvements | DISTPT | 53 | $8,067,108 | $5,218,223 | $1,940,771 | $276,434 | $154,997 | $53,638 | $287,993 | $154,745 | $306 | $0 |
| 376 | Mains | PA_MAINS | 43 | $1,034,541,312 | $615,131,677 | $226,170,982 | $53,632,285 | $32,035,772 | $8,520,893 | $64,940,319 | $34,041,189 | $68,194 | $0 |
| 378 | Meas. & Reg. Station Equip.- Gen. | PAVG | 42 | $56,506,957 | $33,598,600 | $12,353,443 | $2,929,423 | $1,749,914 | $455,299 | $3,547,131 | $1,859,461 | $3,686 | $0 |
| 380 | Services | SERV | 7 | $565,691,244 | $388,991,269 | $171,589,143 | $3,862,161 | $0 | $1,146,909 | $0 | $0 | $1,761 | $0 |
| 380 | Services - DIR | DIR380 | 8 | $2,483,353 | $0 | $0 | $0 | $1,250,387 | $21,395 | $409,673 | $801,898 | $0 | $0 |
| 381 | Meters | MTRS_CUS | 4 | $54,327,287 | $41,601,625 | $12,184,889 | $398,388 | $42,249 | $98,763 | $0 | $1,372 | $0 | $0 |
| 382 | Meter Installations | MTRS_INST | 5 | $153,230,540 | $141,416,119 | $11,602,752 | $156,724 | $16,859 | $37,464 | $0 | $623 | $0 | $0 |
| 383 | House Regulators | MTRS_CUS | 4 | $12,454,845 | $9,537,413 | $2,793,456 | $91,333 | $9,686 | $22,642 | $0 | $314 | $0 | $0 |
| 384 | House Regulators Installations | MTRS_CUS | 4 | $33,548,458 | $25,690,051 | $7,524,476 | $246,015 | $26,090 | $60,989 | $0 | $847 | $0 | $0 |
| 385 | Indust. Meas. & Reg. Station Equip. | MTRS_385 | 6 | $34,078,629 | $185,909 | $22,971,515 | $5,227,911 | $2,180,546 | $2,537,711 | $429,780 | $545,258 | $0 | $0 |
| 386 | Rental Property on Customers Premise | DIR386 | 10 | $43,013,666 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $43,013,666 |
| 387 | Other Equipment | DISTPT | 53 | $6,729,480 | $4,342,211 | $1,614,963 | $230,027 | $128,977 | $44,634 | $239,646 | $128,767 | $255 | $0 |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Rate Base)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential (16,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 388 | ARO | DISTPT | 53 | $6,385,682 | $4,120,375 | $1,532,458 | $218,275 | $122,387 | $42,364 | $227,403 | $122,189 | $242 | $0 |
| | *Sub-total* | | | $2,021,638,873 | $1,276,712,056 | $474,837,143 | $67,633,366 | $37,922,178 | $13,123,397 | $70,461,574 | $37,860,647 | $74,847 | $43,013,666 |
| | **General Plant** | | | | | | | | | | | | |
| 389 | Land and Land Rights | PLTXR | 76 | $674,480 | $435,590 | $161,603 | $23,134 | $12,847 | $4,614 | $23,947 | $12,721 | $25 | $0 |
| 390 | Structures and Improvements | PLTXR | 76 | $32,963,934 | $21,301,532 | $7,902,854 | $1,131,296 | $628,241 | $225,619 | $1,171,091 | $622,069 | $1,233 | $0 |
| 391 | Office Furniture and Equipment | OML | 66 | $46,058,871 | $32,884,827 | $8,965,276 | $1,115,907 | $751,654 | $299,565 | $985,908 | $593,752 | $29,168 | $432,814 |
| 392 | Transportation Equipment | OML | 66 | $625,235 | $446,401 | $121,701 | $15,148 | $10,203 | $4,066 | $13,383 | $8,050 | $396 | $5,875 |
| 392 | CNG Equipment - DIR | DIRCNG | 49 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 392 | CNG Equipment - Other | SEAS3_DEM | 47 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 393 | Stores Equipment | PLTXR | 76 | $257,624 | $166,378 | $61,726 | $8,836 | $4,907 | $1,762 | $9,147 | $4,859 | $10 | $0 |
| 394 | Tools, Shop, and Garage Equipment | OML | 66 | $6,872,321 | $4,906,657 | $1,337,685 | $166,502 | $112,152 | $44,697 | $147,105 | $88,592 | $4,352 | $64,579 |
| 394 | CNG Equipment - DIR | DIRCNG | 27 | $354,005 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $354,005 | $0 |
| 394 | CNG Equipment - Other | SEAS3_DEM | 47 | $744,365 | $515,755 | $165,542 | $25,903 | $6,915 | $14,023 | $16,227 | $0 | $0 | $0 |
| 395 | Laboratory Equipment | PLTXR | 76 | $1,478,578 | $954,886 | $354,263 | $50,713 | $28,162 | $10,114 | $52,497 | $27,886 | $55 | $0 |
| 396 | Power Operated Equipment | PLTXR | 76 | $611,269 | $394,767 | $146,458 | $20,966 | $11,643 | $4,181 | $21,703 | $11,528 | $23 | $0 |
| 397 | Communication Equipment | OML | 66 | $20,923,231 | $14,936,639 | $4,072,669 | $506,925 | $341,455 | $135,084 | $447,870 | $269,725 | $13,250 | $196,615 |
| 398 | Misc. Equipment | OML | 66 | $469,642 | $335,312 | $91,415 | $11,378 | $7,654 | $3,055 | $10,053 | $6,054 | $297 | $4,413 |
| 399 | Other Intangible Property | OML | 66 | $4,216 | $3,010 | $821 | $102 | $69 | $27 | $90 | $54 | $3 | $40 |
| | *Sub-total* | | | $112,057,771 | $77,283,756 | $23,382,013 | $3,076,810 | $1,915,911 | $747,808 | $2,899,021 | $1,645,300 | $402,816 | $704,336 |
| | **Other Assets** | | | | | | | | | | | | |
| 114 | Plant Acquisition Adjustment | DISTPT | 53 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | *Sub-total* | | | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| **TOTAL PLANT-IN-SERVICE** | | | | $2,282,742,658 | $1,458,410,745 | $528,516,924 | $75,011,046 | $42,159,241 | $15,266,862 | $76,983,632 | $41,155,375 | $543,943 | $44,694,890 |
| **Accumulated Reserve** | | | | | | | | | | | | | |
| | **Intangible Plant** | | | | | | | | | | | | |
| 301 | Organization | PLT | 63 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 302 | Franchise and Consents | PLT | 63 | -$14,692 | -$9,296 | -$3,449 | -$492 | -$273 | -$98 | -$507 | -$270 | -$1 | -$307 |
| 303 | Misc. Intangible | OML | 66 | -$67,103,016 | -$47,909,795 | -$13,061,482 | -$1,625,762 | -$1,095,082 | -$436,435 | -$1,436,367 | -$865,036 | -$42,494 | -$630,365 |
| | *Sub-total* | | | -$67,117,709 | -$47,919,092 | -$13,064,930 | -$1,626,254 | -$1,095,354 | -$436,533 | -$1,436,874 | -$865,305 | -$42,495 | -$630,671 |
| | **Production and Gathering Plant** | | | | | | | | | | | | |
| 304 | Land and Land Rights | PRODPT | 52 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 305 | Structures and Improvements | PRODPT | 52 | -$413,934 | -$290,418 | -$104,081 | -$17,737 | -$574 | -$815 | -$298 | $0 | -$12 | $0 |
| 311 | Liquefied Petroleum Gas Equipment | PDAYXT | 45 | -$4,858,331 | -$3,408,632 | -$1,221,592 | -$208,176 | -$6,735 | -$9,565 | -$3,495 | $0 | -$135 | $0 |
| 320 | Other Equipment | PDAYXT | 45 | -$67,561 | -$47,401 | -$16,988 | -$2,895 | -$94 | -$133 | -$49 | $0 | -$2 | $0 |
| | *Sub-total* | | | -$5,339,826 | -$3,746,452 | -$1,342,660 | -$228,808 | -$7,404 | -$10,513 | -$3,841 | $0 | -$148 | $0 |
| | **Storage** | | | | | | | | | | | | |
| | JP Storage Balancing - DIR | COM1 | 34 | -$3,014,074 | -$1,481,077 | -$566,981 | -$190,155 | -$175,014 | -$47,153 | -$378,347 | -$175,012 | -$336 | $0 |
| 350 | Land and Land Rights | SEAS3_DEM | 47 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 351 | Structures and Improvements | SEAS3_DEM | 47 | -$448,765 | -$310,940 | -$99,802 | -$15,617 | -$4,169 | -$8,454 | -$9,783 | $0 | $0 | $0 |
| 352 | Wells | SEAS3_DEM | 47 | -$6,206,253 | -$4,300,184 | -$1,380,229 | -$215,971 | -$57,654 | -$116,922 | -$135,292 | $0 | $0 | $0 |
| 353 | Lines | SEAS3_DEM | 47 | -$675,677 | -$468,163 | -$150,266 | -$23,513 | -$6,277 | -$12,729 | -$14,729 | $0 | $0 | $0 |
| 354 | Compressor Equipment | SEAS3_DEM | 47 | -$2,569,612 | -$1,780,431 | -$571,465 | -$89,420 | -$23,871 | -$48,410 | -$56,016 | $0 | $0 | $0 |
| 355 | Measuring and Regulating Equipment | SEAS3_DEM | 47 | -$45,153 | -$31,286 | -$10,042 | -$1,571 | -$419 | -$851 | -$984 | $0 | $0 | $0 |
| 356 | Purification Equipment | SEAS3_DEM | 47 | -$449,667 | -$311,565 | -$100,003 | -$15,648 | -$4,177 | -$8,471 | -$9,802 | $0 | $0 | $0 |
| 357 | Other Equipment | SEAS3_DEM | 47 | -$291,134 | -$201,721 | -$64,746 | -$10,131 | -$2,705 | -$5,485 | -$6,347 | $0 | $0 | $0 |
| | *Sub-total* | | | -$13,700,336 | -$8,885,366 | -$2,943,534 | -$562,026 | -$274,286 | -$248,476 | -$611,300 | -$175,012 | -$336 | $0 |
| | **Natural Gas Local Storage** | | | | | | | | | | | | |
| 360 | Land & Land Rights | SEAS3_DEM | 47 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 361 | Structures & Improvement | SEAS3_DEM | 47 | -$330,001 | -$228,651 | -$73,390 | -$11,484 | -$3,066 | -$6,217 | -$7,194 | $0 | $0 | $0 |
| 362 | Gas Holders | SEAS3_DEM | 47 | -$168,661 | -$116,862 | -$37,509 | -$5,869 | -$1,567 | -$3,177 | -$3,677 | $0 | $0 | $0 |
| 363 | Purification Equipment | SEAS3_DEM | 47 | -$446,009 | -$309,030 | -$99,189 | -$15,521 | -$4,143 | -$8,403 | -$9,723 | $0 | $0 | $0 |
| 364 | Terminating & Processing | SEAS3_DEM | 47 | -$215,142 | -$149,067 | -$47,846 | -$7,487 | -$1,999 | -$4,053 | -$4,690 | $0 | $0 | $0 |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Rate Base)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential (16,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Sub-total* | | | -$1,159,813 | -$803,610 | -$257,935 | -$40,360 | -$10,774 | -$21,850 | -$25,283 | $0 | $0 | $0 |
| | **Transmission Plant** | | | | | | | | | | | | |
| 365 | Land and Land Rights | TRANPT | | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 366 | Structures and Improvements | PAVG | 42 | -$62 | -$37 | -$14 | -$3 | -$2 | -$1 | -$4 | -$2 | $0 | $0 |
| 367 | Mains | PAVG | 42 | -$3,715 | -$2,209 | -$812 | -$193 | -$115 | -$31 | -$233 | -$122 | $0 | $0 |
| 369 | M&R Station Equipment | PAVG | 42 | -$23,470 | -$13,955 | -$5,131 | -$1,217 | -$727 | -$193 | -$1,473 | -$772 | -$2 | $0 |
| 372 | Easements | PAVG | 42 | -$989 | -$588 | -$216 | -$51 | -$31 | -$8 | -$62 | -$33 | $0 | $0 |
| | *Sub-total* | | | -$28,237 | -$16,789 | -$6,173 | -$1,464 | -$874 | -$233 | -$1,773 | -$929 | -$2 | $0 |
| | **Distribution Plant** | | | | | | | | | | | | |
| 373 | Easements | DISTPT | 53 | -$251,447 | -$162,247 | -$60,343 | -$8,595 | -$4,819 | -$1,668 | -$8,954 | -$4,811 | -$10 | $0 |
| 374 | Land and Land Rights | DISTPT | 53 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 375 | Structures and Improvements | DISTPT | 53 | -$2,949,557 | -$1,903,205 | -$707,845 | -$100,822 | -$56,531 | -$19,563 | -$105,038 | -$56,439 | -$112 | $0 |
| 376 | Mains | PA_MAINS | 43 | -$290,807,116 | -$172,912,059 | -$63,576,128 | -$15,075,908 | -$9,005,180 | -$2,395,203 | -$18,254,570 | -$9,568,898 | -$19,169 | $0 |
| 376 | Mains - DIR | | | $0 | | | | | | | | | |
| 376 | Mains - Small Diameter | | | $0 | | | | | | | | | |
| 376 | Mains - Small Diameter - DIR | | | $0 | | | | | | | | | |
| 378 | Meas. & Reg. Station Equip.- Gen. | PAVG | 42 | -$13,107,844 | -$7,793,823 | -$2,865,612 | -$679,534 | -$405,925 | -$107,985 | -$822,823 | -$431,337 | -$855 | $0 |
| 380 | Services | SERV | 7 | -$247,712,363 | -$170,366,757 | -$75,151,008 | -$1,691,513 | $0 | -$502,313 | $0 | $0 | -$771 | $0 |
| 380 | Services - DIR | DIR380 | 8 | -$1,070,966 | $0 | $0 | $0 | -$539,240 | -$9,227 | -$176,675 | -$345,825 | $0 | $0 |
| 381 | Meters | MTRS_CUS | 4 | -$16,109,596 | -$13,867,592 | -$4,061,742 | -$132,800 | -$14,084 | -$32,922 | $0 | -$457 | $0 | $0 |
| 382 | Meter Installations | MTRS_INST | 5 | -$21,761,039 | -$20,083,214 | -$1,647,765 | -$22,257 | -$2,394 | -$5,320 | $0 | -$88 | $0 | $0 |
| 383 | House Regulators | MTRS_CUS | 4 | -$4,663,100 | -$3,570,812 | -$1,046,871 | -$34,195 | -$3,626 | -$8,477 | $0 | -$118 | $0 | $0 |
| 384 | House Regulators Installations | MTRS_CUS | 4 | -$5,922,336 | -$4,535,084 | -$1,328,301 | -$43,429 | -$4,606 | -$10,766 | $0 | -$150 | $0 | $0 |
| 385 | Indust. Meas. & Reg. Station Equip. | MTRS_385 | 6 | -$9,695,849 | -$52,894 | -$6,535,719 | -$1,487,414 | -$620,396 | -$722,014 | -$122,278 | -$155,133 | $0 | $0 |
| 386 | Rental Property on Customers Premise | DIR386 | 10 | -$18,950,642 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | -$18,950,642 |
| 387 | Other Equipment | DISTPT | 53 | -$2,736,685 | -$1,765,839 | -$656,754 | -$93,545 | -$52,451 | -$16,151 | -$97,456 | -$52,366 | -$104 | $0 |
| 388 | ARO | DISTPT | 53 | -$2,943,270 | -$1,899,151 | -$706,336 | -$100,507 | -$56,410 | -$19,521 | -$104,814 | -$56,319 | -$111 | $0 |
| | *Sub-total* | | | -$640,681,790 | -$398,912,679 | -$158,343,424 | -$19,470,620 | -$10,765,662 | -$3,653,081 | -$19,692,609 | -$10,671,941 | -$21,132 | -$18,950,642 |
| | **General Plant** | | | | | | | | | | | | |
| 389 | Land and Land Rights | PLTXR | 76 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 390 | Structures and Improvements | PLTXR | 76 | -$7,148,650 | -$4,616,708 | -$1,712,796 | -$245,187 | -$136,159 | -$48,899 | -$253,812 | -$134,822 | -$267 | $0 |
| 391 | Office Furniture and Equipment | OML | 66 | -$21,788,666 | -$15,556,537 | -$4,241,125 | -$527,893 | -$355,578 | -$141,712 | -$466,395 | -$280,881 | -$13,798 | -$204,747 |
| 392 | Transportation Equipment | OML | 66 | -$327,660 | -$233,941 | -$63,778 | -$7,938 | -$5,347 | -$2,131 | -$7,014 | -$4,224 | -$207 | -$3,079 |
| 392 | CNG Equipment - DIR | DIRCNG | 49 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 392 | CNG Equipment - Other | SEAS3_DEM | 47 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 393 | Stores Equipment | PLTXR | 76 | -$238,559 | -$154,065 | -$57,158 | -$8,182 | -$4,544 | -$1,632 | -$8,470 | -$4,499 | -$9 | $0 |
| 394 | Tools, Shop, and Garage Equipment | OML | 66 | -$3,868,002 | -$2,761,652 | -$752,900 | -$93,713 | -$63,124 | -$25,157 | -$82,795 | -$49,863 | -$2,449 | -$36,347 |
| 394 | CNG Equipment - DIR | DIRCNG | 49 | -$16,070 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | -$16,070 | $0 |
| 394 | CNG Equipment - Other | SEAS3_DEM | 47 | -$33,790 | -$23,412 | -$7,515 | -$1,176 | -$314 | -$637 | -$737 | $0 | $0 | $0 |
| 395 | Laboratory Equipment | PLTXR | 76 | -$81,362 | -$52,545 | -$19,494 | -$2,791 | -$1,550 | -$557 | -$2,889 | -$1,534 | -$3 | $0 |
| 396 | Power Operated Equipment | PLTXR | 76 | -$651,993 | -$421,067 | -$156,216 | -$22,362 | -$12,418 | -$4,460 | -$23,149 | -$12,296 | -$24 | $0 |
| 397 | Communication Equipment | OML | 66 | -$7,192,611 | -$5,135,336 | -$1,400,029 | -$174,261 | -$117,379 | -$46,760 | -$153,961 | -$92,721 | -$4,555 | -$67,589 |
| 398 | Misc. Equipment | OML | 66 | -$242,734 | -$173,306 | -$47,248 | -$5,881 | -$3,961 | -$1,579 | -$5,196 | -$3,129 | -$154 | -$2,281 |
| 399 | Other Intangible Plant | OML | 66 | -$4,033 | -$2,879 | -$785 | -$98 | -$66 | -$26 | -$86 | -$52 | -$3 | -$38 |
| | *Sub-total* | | | -$41,594,130 | -$29,131,448 | -$8,459,042 | -$1,089,483 | -$700,440 | -$273,570 | -$1,004,504 | -$584,022 | -$37,540 | -$314,081 |
| | **Other Assets** | | | | | | | | | | | | |
| 108 | Retirement Work in Progress | DISTPT | 53 | $8,047,672 | $5,192,777 | $1,931,307 | $275,086 | $154,241 | $53,377 | $286,589 | $153,991 | $304 | $0 |
| 230 | Asset Retirment Obligations | DISTPT | 53 | -$7,144,135 | -$4,609,768 | -$1,714,474 | -$244,201 | -$136,924 | -$47,364 | -$254,412 | -$136,702 | -$270 | $0 |
| 253 | Landlord Incentives | DISTPT | 53 | -$4,504,983 | -$2,906,850 | -$1,081,121 | -$153,989 | -$86,342 | -$29,880 | -$160,429 | -$86,202 | -$170 | $0 |
| 101 | Plant in Service | DISTPT | 53 | -$4,216 | -$2,720 | -$1,012 | -$144 | -$81 | -$28 | -$150 | -$81 | $0 | $0 |
| | *Sub-total* | | | -$3,605,662 | -$2,326,561 | -$865,299 | -$123,249 | -$69,106 | -$23,915 | -$128,403 | -$68,994 | -$136 | $0 |
| | **TOTAL ACCUMULATED RESERVE** | | | -$773,227,502 | -$491,741,996 | -$185,282,997 | -$23,142,263 | -$12,923,901 | -$4,868,170 | -$22,904,587 | -$12,366,204 | -$101,789 | -$19,895,695 |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Rate Base)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential (16,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rate Base Adjustments and Working Capital | | | | | | | | | | | | | |
| | Other Rate Base | | | | | | | | | | | | |
| n/a | Customer Advances for Construction | DIR252 | 9 | -$24,086,431 | -$11,763,813 | -$12,322,618 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| n/a | Gas Stored Underground - Non current | SEAS3_DEM | 47 | $5,771,153 | $3,998,712 | $1,283,466 | $200,830 | $53,612 | $108,725 | $125,807 | $0 | $0 | $0 |
| n/a | CIAC - Accum. Def. FIT. | DIR252 | 9 | $2,648,375 | $1,293,466 | $1,354,909 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| n/a | Liberalized Depr.Tot. Accum. Def. FIT | NETPLT | 77 | -$181,534,908 | -$115,562,838 | -$41,590,839 | -$6,332,620 | -$3,537,593 | -$1,251,020 | -$6,625,304 | -$3,515,917 | -$6,952 | -$3,111,825 |
| n/a | Allowance for Working Capital | OM | 78 | $37,081,696 | $26,994,752 | $7,066,600 | $799,377 | $533,497 | $199,992 | $734,836 | $441,243 | $13,679 | $297,720 |
| | *Total Other Rate Base* | | | -$160,120,115 | -$95,039,720 | -$44,208,462 | -$5,332,413 | -$2,950,484 | -$942,303 | -$5,764,661 | -$3,074,674 | $6,728 | -$2,814,105 |
| TOTAL RATE BASE | | | | $1,349,395,041 | $871,629,028 | $299,025,444 | $46,536,370 | $26,284,857 | $9,456,389 | $48,314,384 | $25,714,496 | $448,881 | $21,985,190 |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Expenses)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential (18,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible (87) | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| O & M Expenses | | | | | | | | | | | | | |
| | **Production Expense** | | | | | | | | | | | | |
| 710 | Oper.Supervision and Engineering | PROD_OML | | $0 | | | | | | | | | |
| 717 | LPG Expenses | PDAYXT | 45 | $344 | $241 | $86 | $15 | $0 | $1 | $0 | $0 | $0 | $0 |
| 735 | Misc.Production Expenses | PDAYXT | 45 | $13,007 | $9,126 | $3,271 | $557 | $18 | $26 | $9 | $0 | $0 | $0 |
| 741 | Main.Structures and Improvements | PDAYXT | 45 | $97,123 | $68,142 | $24,421 | $4,162 | $135 | $191 | $70 | $0 | $3 | $0 |
| 742 | Maintenance of Production Equipment | PDAYXT | 45 | $102,018 | $71,576 | $25,652 | $4,371 | $141 | $201 | $73 | $0 | $3 | $0 |
| | *Sub-total* | | | $212,492 | $149,085 | $53,429 | $9,105 | $295 | $418 | $153 | $0 | $6 | $0 |
| | **Other Gas Supply Expenses** | | | | | | | | | | | | |
| 804 | Natural Gas Purchases - City Gate | GAS | | $0 | | | | | | | | | |
| 805 | Other Gas Purchases | GAS | | $0 | | | | | | | | | |
| 805 | Purchased Gas Cost Adjustment | GAS | | $0 | | | | | | | | | |
| 807 | Oper.of Purch.Gas Measuring Sta. | COM1 | 34 | $398,282 | $195,710 | $74,921 | $25,127 | $23,126 | $6,231 | $49,995 | $23,126 | $44 | $0 |
| 807 | Purch.Gas Calculation Exp. | COM1XT_CO | 35 | $406,923 | $248,332 | $95,066 | $31,696 | $7,230 | $7,906 | $16,636 | $0 | $56 | $0 |
| 808 | Gas Withdrawn From Storage | GAS | | $0 | | | | | | | | | |
| 808 | Gas Delivered to Storage | GAS | | $0 | | | | | | | | | |
| 812 | Gas Used for Other Utility Operations | COM1 | 34 | -$205,569 | -$101,014 | -$38,670 | -$12,969 | -$11,936 | -$3,218 | -$25,804 | -$11,936 | -$23 | $0 |
| 813 | Other Gas Supply Expenses | COM1XT_CO | 35 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | *Sub-total* | | | $599,636 | $343,029 | $131,317 | $43,855 | $18,420 | $10,921 | $40,827 | $11,190 | $78 | $0 |
| | **Underground Storage Expenses** | | | | | | | | | | | | |
| | JP Storage Balancing - DIR | COM1 | 34 | $137,069 | $67,354 | $25,784 | $8,648 | $7,959 | $2,144 | $17,206 | $7,959 | $15 | $0 |
| 814 | Operation Supv & Eng | STOR_OML | 79 | $69,461 | $48,128 | $15,448 | $2,417 | $645 | $1,309 | $1,514 | $0 | $0 | $0 |
| 815 | Oper Map & Records | STORPT | 54 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 816 | Oper Wells Expense | STORPT | 54 | $8,756 | $6,067 | $1,947 | $305 | $81 | $165 | $191 | $0 | $0 | $0 |
| 817 | Oper Lines Expense | STORPT | 54 | $638 | $442 | $142 | $22 | $6 | $12 | $14 | $0 | $0 | $0 |
| 818 | Oper Compressor Sta Exp | STORPT | 54 | $103,125 | $71,453 | $22,934 | $3,589 | $958 | $1,943 | $2,248 | $0 | $0 | $0 |
| 819 | Oper Compressor Sta Fuel | STORPT | 54 | $15,110 | $10,469 | $3,360 | $526 | $140 | $285 | $329 | $0 | $0 | $0 |
| 820 | Oper Meas & Reg Sta Exp | STORPT | 54 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 821 | Oper Purification Exp | STORPT | 54 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 823 | Storage Gas Losses | STORPT | 54 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 824 | Oper Other Expenses | STORPT | 54 | $13,632 | $9,445 | $3,032 | $474 | $127 | $257 | $297 | $0 | $0 | $0 |
| 825 | Oper Storage Well Royalty | STORPT | 54 | $30,455 | $21,102 | $6,773 | $1,060 | $283 | $574 | $664 | $0 | $0 | $0 |
| 826 | Oper Other Storage Rents | STORPT | 54 | -$2,442 | -$1,692 | -$543 | -$85 | -$23 | -$46 | -$53 | $0 | $0 | $0 |
| 830 | Maint Supv & Engineering | STORPT | 54 | $65,249 | $45,210 | $14,511 | $2,271 | $606 | $1,229 | $1,422 | $0 | $0 | $0 |
| 831 | Maint Structures | STORPT | 54 | $1,968 | $1,364 | $438 | $69 | $18 | $37 | $43 | $0 | $0 | $0 |
| 832 | Maint Reservoirs & Wells | STORPT | 54 | $3,400 | $2,356 | $756 | $118 | $32 | $64 | $74 | $0 | $0 | $0 |
| 833 | Maint Of Lines | STORPT | 54 | $6,448 | $4,468 | $1,434 | $224 | $60 | $121 | $141 | $0 | $0 | $0 |
| 834 | Maint Compressor Sta Equip | STORPT | 54 | $159,505 | $110,518 | $35,473 | $5,551 | $1,482 | $3,005 | $3,477 | $0 | $0 | $0 |
| 835 | Maint M&R Sta Equip | STORPT | 54 | $2,588 | $1,793 | $576 | $90 | $24 | $49 | $56 | $0 | $0 | $0 |
| 836 | Maint Purification Equip | STORPT | 54 | $545 | $377 | $121 | $19 | $5 | $10 | $12 | $0 | $0 | $0 |
| 837 | Maint Other Equipment | STORPT | 54 | $7,535 | $5,221 | $1,676 | $262 | $70 | $142 | $164 | $0 | $0 | $0 |
| | *Sub-total* | | | $623,042 | $404,075 | $133,861 | $25,559 | $12,474 | $11,300 | $27,800 | $7,959 | $15 | $0 |
| | **Natural Gas Local Storage Expenses** | | | | | | | | | | | | |
| 841 | Operating Labor & Expenses | LNGPLT | 55 | $216,007 | $149,667 | $48,038 | $7,517 | $2,007 | $4,069 | $4,709 | $0 | $0 | $0 |
| 843 | Maint Struc & Impro | LNGPLT | 55 | $27,012 | $18,716 | $6,007 | $940 | $251 | $509 | $589 | $0 | $0 | $0 |
| 843 | Maintenance of Gas Holders | LNGPLT | 55 | $30,361 | $21,036 | $6,752 | $1,057 | $282 | $572 | $662 | $0 | $0 | $0 |
| 844 | Maintenance of Vaporizing Equipment | LNGPLT | 55 | $18,319 | $12,693 | $4,074 | $637 | $170 | $345 | $399 | $0 | $0 | $0 |
| 844 | Maint Measur & Reg | LNGPLT | 55 | $14,164 | $9,814 | $3,150 | $493 | $132 | $267 | $309 | $0 | $0 | $0 |
| 844 | Other Gas Maintenance | LNGPLT | 55 | $24,463 | $16,950 | $5,440 | $851 | $227 | $461 | $533 | $0 | $0 | $0 |
| | *Sub-total* | | | $330,327 | $228,877 | $73,462 | $11,495 | $3,069 | $6,223 | $7,201 | $0 | $0 | $0 |
| | **Transmission** | | | | | | | | | | | | |
| 850 | Oper Supervision & Engineering | PAVG | 42 | $6,661 | $3,861 | $1,456 | $345 | $206 | $55 | $418 | $219 | $0 | $0 |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Expenses)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential (16,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible (87) | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 856 | Oper Mains Expenses | PAVG | 42 | $203,391 | $120,935 | $44,465 | $10,544 | $6,299 | $1,675 | $12,768 | $6,693 | $13 | $0 |
| 857 | Oper Meas & Reg Sta Exp | PAVG | 42 | $98,459 | $58,543 | $21,525 | $5,104 | $3,049 | $811 | $6,181 | $3,240 | $6 | $0 |
| 862 | Maint Structures & Improvements | PAVG | 42 | $107,447 | $63,887 | $23,490 | $5,570 | $3,327 | $885 | $6,745 | $3,536 | $7 | $0 |
| 863 | Maint Mains | PAVG | 42 | $119,464 | $71,032 | $26,117 | $6,193 | $3,700 | $984 | $7,499 | $3,931 | $8 | $0 |
| 864 | Maint Supv & Eng | PAVG | 42 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 865 | Maint Structures | PAVG | 42 | $11,353 | $6,750 | $2,482 | $589 | $352 | $93 | $713 | $374 | $1 | $0 |
| 867 | Maint Other Equipment | PAVG | 42 | $46,851 | $27,857 | $10,242 | $2,429 | $1,451 | $386 | $2,941 | $1,542 | $3 | $0 |
| | *Sub-total* | | | $593,625 | $352,965 | $129,777 | $30,775 | $18,383 | $4,888 | $37,264 | $19,534 | $39 | $0 |
| | **Distribution** | | | | | | | | | | | | |
| 870 | Oper Supv & Engineering | DIST_OML | 70 | $1,094,696 | $736,382 | $257,498 | $32,166 | $18,188 | $8,521 | $26,418 | $15,370 | $55 | $0 |
| 871 | Oper Load Dispatching | COM1 | 34 | $164,312 | $80,741 | $30,809 | $10,368 | $9,541 | $2,571 | $20,626 | $9,541 | $18 | $0 |
| 874 | Oper Mains & Services Exp | DMAINS_SEF | 58 | $13,788,211 | $8,639,038 | $3,422,155 | $494,657 | $286,380 | $83,362 | $562,243 | $299,775 | $602 | $0 |
| 875 | Oper Meas & Reg Sta Gen | PAVG | 42 | $1,929,304 | $1,147,149 | $421,781 | $100,019 | $59,747 | $15,887 | $121,109 | $63,487 | $126 | $0 |
| 876 | Oper Meas & Reg Sta Indus | INDUSMR | 57 | $135,356 | $738 | $91,240 | $20,765 | $8,661 | $10,079 | $1,707 | $2,166 | $0 | $0 |
| 878 | Oper Meter & House Reg | MRHREG | 58 | $6,006,899 | $4,599,839 | $1,347,268 | $44,049 | $4,671 | $10,920 | $0 | $152 | $0 | $0 |
| 879 | Oper Customer Install Exp | CUSINSTL | 59 | $5,069,031 | $4,535,126 | $519,097 | $10,930 | $1,166 | $2,672 | $0 | $40 | $0 | $0 |
| 880 | Oper Other Expense | DISTOM | 69 | $2,293,002 | $1,608,271 | $493,624 | $57,618 | $31,329 | $10,621 | $59,725 | $31,751 | $63 | $0 |
| 881 | Oper Rents Expense | DIR386 | 10 | $198,260 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $198,260 |
| 887 | Maint Mains | DMAINS | 60 | $4,099,979 | $2,437,821 | $896,336 | $212,549 | $126,961 | $33,769 | $257,364 | $134,908 | $270 | $0 |
| 889 | Maint Meas & Reg Sta Gen | PAVG | 42 | $77,538 | $46,103 | $16,951 | $4,020 | $2,401 | $638 | $4,867 | $2,562 | $5 | $0 |
| 890 | Maint Meas & Reg Sta Ind | INDUSMR | 57 | $201,941 | $1,102 | $136,123 | $30,979 | $12,921 | $15,038 | $2,547 | $3,231 | $0 | $0 |
| 892 | Maint Services | DSERV | 61 | $4,884,020 | $3,344,352 | $1,475,237 | $33,205 | $10,750 | $10,044 | $3,522 | $6,894 | $15 | $0 |
| 893 | Maint Meters & House Reg | MRHREG | 58 | $503,721 | $385,729 | $112,978 | $3,694 | $392 | $916 | $0 | $13 | $0 | $0 |
| 894 | Maint Other Equipment | DMAINT | 62 | $741,427 | $471,788 | $200,222 | $21,592 | $11,646 | $4,585 | $20,367 | $11,204 | $22 | $0 |
| | Direct Assign to Sales | | 11 | $1,217,081 | $18,987 | $900,667 | $151,511 | $51,158 | $80,867 | $13,178 | $0 | $713 | $0 |
| | Direct Assignment to Transport | | 12 | $115,162 | $0 | $0 | $1,427 | $57,146 | $0 | $10,877 | $45,713 | $0 | $0 |
| | *Sub-total* | | | $42,519,841 | $28,053,167 | $10,322,085 | $1,229,546 | $693,057 | $290,490 | $1,104,550 | $626,797 | $1,890 | $198,260 |
| | **Customer Accounts Expense** | | | | | | | | | | | | |
| 901 | Supervision - Customer Accounting | CUSTACC | 71 | $150,341 | $131,393 | $13,599 | $1,029 | $1,716 | $333 | $1,134 | $1,109 | $28 | $0 |
| 902 | Meter Reading Expense SALES | | 18 | $11,427,635 | $10,208,788 | $1,095,527 | $66,201 | $22,907 | $27,790 | $6,088 | $0 | $337 | $0 |
| 902 | Meter Reading Expense TRANSPORT | | 19 | $54,046 | $0 | $0 | $675 | $26,640 | $0 | $5,058 | $21,672 | $0 | $0 |
| 903 | Cust. Records & Collection Exp. | OTH903 | 20 | $10,600,566 | $9,792,521 | $782,024 | $19,889 | $148 | $5,940 | $0 | $0 | $44 | $0 |
| 904 | Uncollectible Accounts | DIR904 | 21 | $938,024 | $695,043 | $242,981 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 904 | Uncollectible Accounts - Gas Cost Rel | GASREV | | $0 | | | | | | | | | |
| 904 | Uncollectible Accounts - Rate Inc Rel | DIR904 | 21 | | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 905 | Misc. Customer Accounts Expense | CUSTACC | 71 | -$2,360 | -$2,063 | -$213 | -$16 | -$27 | -$5 | -$18 | -$17 | $0 | $0 |
| 903 | Direct Assign to Sales | | 13 | $426,745 | $2,650 | $192,909 | $69,134 | $47,995 | $16,924 | $93,301 | $0 | $3,832 | $0 |
| 903 | Direct Assignment to Transport | | 14 | $379,731 | $0 | $0 | $786 | $163,600 | $0 | $68,213 | $147,133 | $0 | $0 |
| | *Sub-total* | | | $23,974,729 | $20,828,333 | $2,326,827 | $157,697 | $262,979 | $50,981 | $173,774 | $169,896 | $4,241 | $0 |
| | **Customer Service & Information Expenses** | | | | | | | | | | | | |
| 908 | Customer Assistance Expense - DIR Sales | | 15 | $536,937 | $0 | $152,225 | $4,445 | $1,576 | $3,106 | $129 | $0 | $9,819 | $365,637 |
| 908 | Customer Assistance Expenses - DIR Transport | | 16 | $662 | $0 | $0 | $13 | $186 | $0 | $103 | $360 | $0 | $0 |
| 908 | Customer Assistance Expenses | OTH908 | 22 | $106,824 | $98,679 | $7,884 | $201 | $0 | $60 | $0 | $0 | $0 | $0 |
| 909 | Information, Instructional Advertising | CUSTXT | 2 | $429,138 | $396,390 | $31,669 | $809 | $19 | $240 | $10 | $0 | $2 | $0 |
| 910 | Misc. Cust. Serv. & Infor. Expenses | CSI | | $0 | | | | | | | | | |
| 908 | Conservation Amortization | CUSTXT | 2 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | *Sub-total* | | | $1,073,561 | $495,069 | $191,778 | $5,468 | $1,781 | $3,406 | $242 | $360 | $9,821 | $365,637 |
| | **Sales Expense** | | | | | | | | | | | | |
| 912 | Demonstrating and Selling -DIR | DIR_CNG | 27 | $9,819 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $9,819 | $0 |

Puget Sound Energy
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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 912 | Demonstrating and Selling | CUSTXT | 2 | $262,281 | $242,266 | $19,356 | $494 | $11 | $147 | $6 | $0 | $1 | $0 |
| 913 | Advertising Expenses | CUSTXT | 2 | $35,235 | $32,546 | $2,600 | $66 | $2 | $20 | $1 | $0 | $0 | $0 |
| | *Sub-total* | | | $307,335 | $274,812 | $21,956 | $561 | $13 | $167 | $7 | $0 | $9,820 | $0 |
| | Administrative & General Expenses | | | | | | | | | | | | |
| 920 | A & G Salaries - DIR Sales | | 23 | $474,177 | $6,790 | $323,744 | $61,185 | $27,767 | $27,140 | $24,990 | $0 | $2,561 | $0 |
| 920 | A & G Salaries - DIR Transport | | 24 | $237,169 | $0 | $0 | $2,089 | $112,191 | $0 | $29,468 | $93,421 | $0 | $0 |
| 921 | A & G Salaries - DIR Sales Admin | | 2 | $708,260 | $654,212 | $52,268 | $1,335 | $31 | $397 | $16 | $0 | $3 | $0 |
| 921 | A & G Salaries - DIR Rental | DIR386 | 10 | $53,386 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $53,386 |
| 920 | A & G Salaries | OM | 78 | $7,554,934 | $5,499,845 | $1,439,732 | $162,863 | $108,693 | $40,746 | $149,714 | $89,898 | $2,787 | $60,657 |
| 921 | Office Supplies and Expenses | OM | 78 | $6,376,540 | $4,641,997 | $1,215,167 | $137,460 | $91,740 | $34,390 | $126,362 | $75,876 | $2,352 | $51,196 |
| 922 | Admin Expenses Transferred | OM | 78 | -$54,454 | -$39,641 | -$10,377 | -$1,174 | -$783 | -$294 | -$1,079 | -$648 | -$20 | -$437 |
| 923 | Outside Services Employed | OM | 78 | $2,900,270 | $2,111,340 | $552,700 | $62,522 | $41,726 | $15,642 | $57,474 | $34,511 | $1,070 | $23,286 |
| 924 | Property Insurance | PLT | 63 | $1,209,483 | $765,293 | $283,905 | $40,527 | $22,433 | $8,073 | $41,763 | $22,211 | $44 | $25,234 |
| 925 | Injuries & Damages | OML | 66 | $2,235,728 | $1,596,251 | $435,180 | $54,167 | $36,486 | $14,541 | $47,857 | $28,821 | $1,416 | $21,009 |
| 926 | Emp Pension & Benefits | OML | 66 | $9,841,983 | $7,098,315 | $1,935,189 | $240,873 | $162,247 | $64,662 | $212,812 | $128,164 | $6,296 | $93,424 |
| 928 | Regulatory Commission Expense | STREV | 33 | $1,317,613 | $917,247 | $284,544 | $55,547 | $26,529 | $14,334 | $23,481 | $15,815 | $117 | $0 |
| 928 | Regulatory Commission Expense - Gas Cost R | GASREV | 30 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 928 | Reg. Comm. Expense - Rate Inc Rel | STREV | 33 | | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 930 | Gen Advertising Exp | OM | 78 | $4,066 | $2,960 | $775 | $88 | $59 | $22 | $81 | $48 | $2 | $33 |
| 930 | Misc. General Expenses | OM | 78 | $1,378,123 | $1,003,247 | $262,627 | $29,708 | $19,827 | $7,433 | $27,310 | $16,399 | $508 | $11,065 |
| 931 | Rents | OM | 78 | $2,276,797 | $1,657,464 | $433,886 | $49,081 | $32,756 | $12,279 | $45,119 | $27,092 | $840 | $18,280 |
| 932 | Maint Of General Plant- DIR | DIR_CNG | 27 | $2,482 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $2,482 | $0 |
| 932 | Maint Of General Plant- Gas | GENPLT | 64 | $2,081,251 | $1,435,392 | $434,275 | $57,146 | $35,584 | $13,889 | $53,844 | $30,558 | $7,482 | $13,082 |
| | *Sub-total* | | | $38,697,809 | $27,350,711 | $7,623,613 | $953,417 | $717,286 | $253,254 | $839,209 | $562,165 | $27,939 | $370,213 |
| | TOTAL O & M EXPENSES | | | $108,932,397 | $78,480,123 | $21,008,107 | $2,467,477 | $1,727,756 | $632,048 | $2,231,025 | $1,397,902 | $53,849 | $934,109 |
| | Depreciation Expense | | | | | | | | | | | | |
| 403 | Production Depreciation Expense | PRODPT | 52 | $61,340 | $43,036 | $15,423 | $2,628 | $85 | $121 | $44 | $0 | $2 | $0 |
| 403 | JP Balancing Depreciation Expense | COM1 | 34 | $197,623 | $97,109 | $37,175 | $12,468 | $11,475 | $3,092 | $24,807 | $11,475 | $22 | $0 |
| 403 | Storage Depreciation Expense | STORPT | 54 | $675,402 | $467,972 | $150,205 | $23,503 | $6,274 | $12,724 | $14,723 | $0 | $0 | $0 |
| 403 | Transmission Depreciation Expense | PAVG | 42 | -$170,306 | -$101,263 | -$37,232 | -$8,829 | -$5,274 | -$1,402 | -$10,691 | -$5,604 | -$11 | $0 |
| 403 | Distribution Depreciation Expense | DISTPT | 53 | $66,425,986 | $42,851,506 | $15,941,132 | $2,270,573 | $1,273,115 | $440,576 | $2,365,521 | $1,271,050 | $2,513 | $0 |
| 403 | Rental Depreciation Expense | DIR386 | 10 | $8,694,520 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $8,694,520 |
| 403 | General Depreciation Expense | GENPLT | 64 | $10,009,666 | $6,903,444 | $2,088,620 | $274,839 | $171,141 | $66,799 | $258,958 | $146,968 | $35,982 | $62,915 |
| 403 | CNG Equipment - DIR | DIRCNG | 49 | $13,516 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $13,516 | $0 |
| 403 | CNG Equipment - Other | SEAS3_DEM | 47 | $28,420 | $19,692 | $6,320 | $989 | $264 | $535 | $620 | $0 | $0 | $0 |
| 403 | Depr. Expense - FAS 143 | DMAINS | 60 | $614,403 | $365,320 | $134,321 | $31,852 | $19,026 | $5,060 | $38,567 | $20,217 | $40 | $0 |
| 404 | Amort. Ltd - Term Plant | PLT | 63 | $13,783,889 | $8,721,669 | $3,235,525 | $461,868 | $255,661 | $92,002 | $475,952 | $253,129 | $502 | $287,581 |
| 407 | Amortization of Property Losses | PLT | 63 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 407 | Regulatory Debits | SGTREV | 32 | $1,015,558 | $650,196 | $227,303 | $66,476 | $18,275 | $16,543 | $32,857 | $3,785 | $121 | $0 |
| 407 | Regulatory Credits | SGTREV | 32 | -$1,939,081 | -$1,241,471 | -$434,007 | -$126,927 | -$34,895 | -$31,587 | -$62,736 | -$7,227 | -$231 | $0 |
| 411 | Accretion Exp - FAS143 | DMAINS | 60 | $303,738 | $180,601 | $66,403 | $15,746 | $9,406 | $2,502 | $19,066 | $9,994 | $20 | $0 |
| 414 | Gains/Losses Property Sales | GENPLT | 64 | -$284,823 | -$196,436 | -$59,431 | -$7,820 | -$4,870 | -$1,901 | -$7,369 | -$4,182 | -$1,024 | -$1,790 |
| | TOTAL DEPRECIATION EXPENSES | | | $99,429,849 | $58,771,377 | $21,371,757 | $3,017,365 | $1,719,684 | $605,064 | $3,150,320 | $1,699,605 | $51,452 | $9,043,226 |
| | Taxes (other than income) | | | | | | | | | | | | |
| 408 | Taxes other than Income Taxes - DIR Sales | | 25 | $161,089 | $2,257 | $107,555 | $20,323 | $9,221 | $9,027 | $8,254 | $0 | $4,452 | $0 |
| 408 | Taxes other than Income Taxes - DIR Transport | | 26 | $48,562 | $0 | $0 | $318 | $22,365 | $0 | $6,938 | $18,941 | $0 | $0 |
| 408 | Other Taxes - DIR Sales Procurement | | 2 | $44,807 | $41,388 | $3,307 | $84 | $2 | $25 | $1 | $0 | $0 | $0 |
| 408 | Other Taxes - DIR Rental | DIR386 | 10 | $17,746 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $17,746 |
| 408 | Taxes Other than Income Taxes | PLT | 63 | $27,881,669 | $17,641,950 | $6,544,729 | $934,253 | $517,144 | $186,100 | $962,743 | $512,022 | $1,015 | $581,711 |
| 408 | Other Taxes - Rate Inc Rel | PLT | 63 | | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Expenses)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential (16,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible (87) | Transport & Contracts | CNG Service (60) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 408 | Other Taxes - Gas Cost Rel | GASREV | 30 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | TOTAL TAXES OTHER THAN INCOME | | | $28,153,873 | $17,685,595 | $6,655,591 | $954,979 | $548,733 | $195,152 | $977,936 | $530,963 | $5,467 | $599,457 |
| TOTAL EXPENSES | | | | $236,516,118 | $154,937,095 | $49,035,455 | $6,439,821 | $3,996,172 | $1,432,265 | $6,359,281 | $3,628,470 | $110,767 | $10,576,793 |
| INCOME TAXES & ITC | | | | | | | | | | | | | |
| | DIT, utility operating income | BASE | 65 | $45,507,283 | | Class Tax Amounts calculated and Not Allocated | | | | | | | |
| | Provision for DIT - credit | BASE | 65 | -$40,948,243 | | Class Tax Amounts calculated and Not Allocated | | | | | | | |
| | ITC adjustments | BASE | 65 | -$450,709 | | Class Tax Amounts calculated and Not Allocated | | | | | | | |
| | FIT Current | BASE | 65 | $18,389,214 | | Class Tax Amounts calculated and Not Allocated | | | | | | | |
| | FIT Current - Rate Incr. Rel. | BASE | 65 | | | | | | | | | | |
| | TOTAL INCOME TAXES & ITC | | | $22,497,545 | | | | | | | | | |

Puget Sound Energy
Public Counsel Electric Class Cost of Service Study
(Revenue)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential (16,23,53) | Comm. & Indust (31,35,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible (87) | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 412 | Lease Inc Everett Delta to NWP - Gas | PA_MAINS | 43 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 480,481 | Gas Revenues | GASREV | 30 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 480,481 | Res., Comm. & Indus. Sales | SALESREV | 29 | $313,114,919 | $226,714,023 | $65,386,783 | $13,626,378 | $1,791,780 | $3,542,875 | $2,024,148 | $0 | $28,932 | $0 |
| 489 | Rev From Transp. of Gas To Others | TRANSREV | 31 | $12,556,941 | $0 | $0 | $103,087 | $4,765,304 | $0 | $3,779,628 | $3,908,922 | $0 | $0 |
| | Other Operating Revenue | OTHREV | 28 | $8,291,644 | $4,614,507 | $1,446,076 | $44,583 | $115,235 | $32,661 | $15,641 | $22,222 | $719 | $0 |
| | Rental Revenue | DIR388 | 10 | $7,788,789 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $7,788,789 |
| TOTAL REVENUE | | | | $339,752,293 | $231,328,530 | $66,832,859 | $13,774,048 | $6,672,319 | $3,575,536 | $5,819,417 | $3,931,144 | $29,651 | $7,788,789 |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Allocator Amounts)

| | Name | Description | Total | Residential (16,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible (87) | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CUST | Average Customers | 717,603 | 662,728 | 52,948 | 1,354 | 107 | 402 | 27 | 34 | 3 | |
| 2 | CUSTXT | Customers (excl. transport) | 717,480 | 662,728 | 52,948 | 1,352 | 31 | 402 | 16 | 0 | 3 | |
| 3 | DIR_CUSTXT | Customers (excl. transport) | 717,480 | 662,728 | 52,948 | 1,352 | 31 | 402 | 16 | 0 | 3 | 0 |
| 4 | MTRS_CUS | Customer Meters - Acc 381 | 125,159,053 | 96,841,709 | 28,071,513 | 917,806 | 97,334 | 227,531 | 0 | 3,160 | 0 | 0 |
| 5 | MTRS_INST | Meters Installation - Acc 382 | 29,036,398 | 26,797,626 | 2,198,662 | 29,698 | 3,195 | 7,099 | 0 | 118 | 0 | 0 |
| 6 | MTRS_385 | Regulators - Acc 385 | 39,281,466 | 214,292 | 26,478,612 | 6,026,064 | 2,513,453 | 2,925,147 | 495,395 | 628,503 | 0 | 0 |
| 7 | SERV | Services | 963,603 | 662,728 | 292,338 | 6,580 | 0 | 1,954 | 0 | 0 | 3 | 0 |
| 8 | DIR380 | Distr. Plant - Services | 2,483,352 | 0 | 0 | 0 | 1,250,386 | 21,395 | 409,673 | 601,898 | 0 | 0 |
| 9 | DIR252 | Cust. Advances in Aid of Construction | 1 | 0.4884 | 0.5116 | | | | | | | |
| 10 | DIR386 | Rental Property | 1 | | | | | | | | | 1 |
| 11 | DIR_DSALES | Direct Distr. Assignment to Sales | 1,217,082 | 18,987 | 900,668 | 151,511 | 51,158 | 80,867 | 13,178 | 0 | 713 | 0 |
| 12 | DIR_DTRNSP | Direct Distr. Assignment to Transport | 115,162 | 0 | 0 | 1,427 | 57,146 | 0 | 10,877 | 45,713 | 0 | 0 |
| 13 | DIR_CASALES | Direct Cust. Acct. Assignment to Sales | 426,745 | 2,650 | 192,909 | 69,134 | 47,995 | 16,924 | 93,301 | | 3,832 | 0 |
| 14 | DIR_CATRNSP | Direct Cust. Acct. Assignment to Transport | 379,732 | 0 | 0 | 786 | 163,600 | 0 | 68,213 | 147,133 | | |
| 15 | DIR_CSISALES | Direct Cust. Service Assignment to Sales | 536,939 | 0 | 152,226 | 4,445 | 1,576 | 3,106 | 129 | 0 | 9,819 | 365,638 |
| 16 | DIR_CSITRNSP | Direct Cust. Service Assignment to Transport | 662 | 0 | 0 | 13 | 186 | 0 | 103 | 360 | 0 | 0 |
| 17 | TRANSCUS | Transport Customers | 123 | 0 | 0 | 2 | 76 | 0 | 11 | 34 | 0 | 0 |
| 18 | SALES_902 | Sales Meter Reading Costs | 11,259,543 | 10,058,624 | 1,079,413 | 65,227 | 22,570 | 27,381 | 5,996 | 0 | 332 | 0 |
| 19 | TRANS_902 | Transport Meter Reading Costs | 53,252 | 0 | 0 | 665 | 26,249 | 0 | 4,984 | 21,354 | 0 | 0 |
| 20 | OTH903 | Customer Allocator for 903 Net of Direct | 717,414 | 662,728 | 52,925 | 1,346 | 10 | 402 | 0 | 0 | 3 | 0 |
| 21 | DIR904 | Uncollectibles | 910,815,776 | 674,882,702 | 235,933,074 | | | | | | | |
| 22 | OTH908 | Other Customer Assistance Expense | 717,433 | 662,728 | 52,948 | 1,352 | 0 | 402 | 0 | 0 | 3 | 0 |
| 23 | DIR920_SALES | Acct. 920 Direct Assignment to Sales | 474,177 | 6,790 | 323,744 | 61,185 | 27,767 | 27,140 | 24,990 | 0 | 2,561 | 0 |
| 24 | DIR920_TRNSPT | Acct. 920 Direct Assignment to Transport | 237,169 | 0 | 0 | 2,089 | 112,191 | 0 | 29,468 | 93,421 | | |
| 25 | DIR408_SALES | Acct. 408 Direct Assignment to Sales | 161,067 | 2,257 | 107,540 | 20,320 | 9,220 | 9,026 | 8,253 | 0 | 4,451 | 0 |
| 26 | DIR408_TRNSPT | Acct. 408 Direct Assignment to Transport | 48,562 | 0 | 0 | 318 | 22,365 | 0 | 6,938 | 18,941 | 0 | 0 |
| 27 | DIR_CNG | Direct Assignment to CNG | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 28 | OTHREV | Other Operating Revenue | 8,040,088 | 5,896,876 | 1,847,940 | 56,972 | 147,259 | 41,737 | 19,987 | 28,398 | 919 | 0 |
| 29 | SALESREV | Sales Margin | 313,114,919 | 226,714,023 | 65,386,783 | 13,626,378 | 1,791,780 | 3,542,875 | 2,024,148 | 0 | 28,932 | 0 |
| 30 | GASREV | Gas Cost Recovery Revenue | 728,442,505 | 448,168,679 | 170,546,291 | 55,270,173 | 12,412,192 | 13,628,513 | 28,300,674 | 19,677 | 96,406 | |
| 31 | TRANSREV | Revenue from Transportation for Others | 12,556,941 | 0 | 0 | 103,087 | 4,765,304 | 0 | 3,779,628 | 3,908,922 | 0 | |
| 32 | SGTREV | Sales, Gas & Transportation Revenue | 1,054,114,365 | 674,882,702 | 235,933,074 | 68,999,638 | 18,969,276 | 17,171,388 | 34,104,450 | 3,928,499 | 125,338 | 0 |
| 33 | STREV | Sales & Transportation Revenue | 325,671,860 | 226,714,023 | 65,386,783 | 13,729,465 | 6,557,084 | 3,542,875 | 5,803,776 | 3,908,922 | 28,932 | 0 |
| 34 | COM1 | Weather Normalized Volumes | 1,084,208,168 | 532,765,816 | 203,951,509 | 68,401,668 | 62,955,045 | 16,961,705 | 136,096,989 | 62,954,572 | 120,864 | 0 |
| 35 | COM1XT_COM | Weather Normalized Volumes (excl. Transportation) | 873,001,720 | 532,765,816 | 203,951,509 | 68,000,772 | 15,510,556 | 16,961,705 | 35,690,498 | 0 | 120,864 | 0 |
| 36 | SEAS3_COM | Seasonal 3 | 1.0000 | 0.6929 | 0.2224 | 0.0348 | 0.0093 | 0.0188 | 0.0218 | 0.0000 | 0.0000 | 0.0000 |
| 37 | COM1GS | Weather Normalized Volumes | 1,084,208,168 | 532,765,816 | 203,951,509 | 68,401,668 | 62,955,045 | 16,961,705 | 136,096,989 | 62,954,572 | 120,864 | 0 |
| 38 | PDAYXT_COM | Peak Day (excl. transport) | 6,277,490 | 4,404,322 | 1,578,429 | 268,986 | 8,704 | 12,359 | 4,516 | 0 | 174 | 0 |
| 39 | TF1_COM | TF-1 Allocator (Annual, Winter & Peak Day Sales) | 1.0000 | 0.6478 | 0.2369 | 0.0618 | 0.0120 | 0.0145 | 0.0270 | 0.0000 | 0.0001 | 0.0000 |
| 40 | SEAS2_COM | Seasonal 2 | 565,646,449 | 362,090,856 | 129,849,293 | 35,258,164 | 8,316,124 | 10,870,291 | 19,223,944 | 0 | 37,777 | 0 |
| 41 | JPTF2_COM | TF-2 Allocator (Seasonal Sales & Peak Day x Transport) | 1.0000 | 0.6944 | 0.2489 | 0.0451 | 0.0030 | 0.0040 | 0.0046 | 0.0000 | 0.0000 | 0.0000 |
| 42 | PAVG | Peak and Average | 1.0000 | 0.5946 | 0.2186 | 0.0518 | 0.0310 | 0.0082 | 0.0628 | 0.0329 | 0.0001 | 0.0000 |
| 43 | PA_MAINS | Peak and Average for Mains | 1,033,284,953 | 614,384,654 | 225,896,317 | 53,567,153 | 31,996,868 | 8,510,545 | 64,861,455 | 33,999,849 | 66,112 | 0 |
| 44 | PDAY | Peak Day (Design Day) | 6,451,760 | 4,404,322 | 1,578,429 | 272,553 | 50,606 | 12,359 | 59,530 | 73,786 | 174 | 0 |
| 45 | PDAYXT | Peak Day (excl. transport) | 6,277,490 | 4,404,322 | 1,578,429 | 268,986 | 8,704 | 12,359 | 4,516 | 0 | 174 | 0 |
| 46 | SEAS2_DEM | Seasonal 2 | 565,646,449 | 362,090,856 | 129,849,293 | 35,258,164 | 8,316,124 | 10,870,291 | 19,223,944 | 0 | 37,777 | 0 |
| 47 | SEAS3_DEM | Seasonal 3 | 1.0000 | 0.6929 | 0.2224 | 0.0348 | 0.0093 | 0.0188 | 0.0218 | 0.0000 | 0.0000 | 0.0000 |
| 48 | JPTF2_DEM | TF-2 Allocator (Seas.Sales & Peak Day x Transport) | 1.0000 | 0.6944 | 0.2489 | 0.0451 | 0.0030 | 0.0040 | 0.0046 | 0.0000 | 0.0000 | 0.0000 |
| 49 | DIRCNG | Direct Rate 50 (CNG) | 1 | | | | | | | | 1 | |
| 50 | COM1XT_DEM | Weather Normalized Volumes x Transport | 873,001,720 | 532,765,816 | 203,951,509 | 68,000,772 | 15,510,556 | 16,961,705 | 35,690,498 | 0 | 120,864 | 0 |
| 51 | TF1_DEM | TF-1 Allocator (Annual, Winter & Peak Day Sales) | 1 | 0.6478 | 0.2369 | 0.0618 | 0.0120 | 0.0145 | 0.0270 | 0.0000 | 0.0001 | 0.0000 |
| 52 | PRODPT | Plant Accounts 311 and 320 | 6,287,362 | 4,411,248 | 1,580,911 | 269,409 | 8,718 | 12,378 | 4,523 | 0 | 175 | 0 |
| 53 | DISTPT | Plant Accounts 376 - 385 | 1,946,762,636 | 1,256,152,665 | 467,190,656 | 66,544,240 | 37,311,502 | 12,912,066 | 69,326,904 | 37,250,952 | 73,642 | 0 |
| 54 | STORPT | Storage Plant | 19,043,195 | 13,194,634 | 4,235,079 | 662,683 | 176,906 | 358,763 | 415,129 | 0 | 0 | 0 |
| 55 | LNGPLT | LNG Plant | 14,070,550 | 9,749,192 | 3,129,196 | 489,640 | 130,711 | 265,081 | 306,729 | 0 | 0 | 0 |
| 56 | DMAINS_SERV | Distribution Mains & Services Plant (Accounts 376 & 380) | 1,602,615,909 | 1,004,122,946 | 397,760,125 | 57,494,446 | 33,286,159 | 9,689,198 | 65,349,993 | 34,843,087 | 69,955 | 0 |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Allocator Amounts)

| | Name | Description | Total | Residential (16,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible (87) | Transport & Contracts | GNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57 | INDUSMR | Industrial Measurement & Regulation (Acct. 385) | 34,078,629 | 185,909 | 22,971,515 | 5,227,911 | 2,180,546 | 2,537,711 | 429,780 | 545,258 | 0 | 0 |
| 58 | MRHREG | Meters & House Regulators (Accts. 381 & 383) | 66,782,132 | 51,139,039 | 14,978,345 | 489,721 | 51,936 | 121,405 | 0 | 1,686 | 0 | 0 |
| 59 | CUSINSTL | Customer Installation (Accts. 382 & 384) | 166,779,008 | 167,106,171 | 19,127,227 | 402,739 | 42,949 | 98,453 | 0 | 1,470 | 0 | 0 |
| 60 | DMAINS | Mains Plant (Account 376) | 1,034,541,312 | 615,131,677 | 226,170,982 | 53,632,285 | 32,035,772 | 8,520,893 | 64,940,319 | 34,041,189 | 68,194 | 0 |
| 61 | DSERV | Distribution Service Plant (Account 380) | 568,074,597 | 388,991,269 | 171,589,143 | 3,862,161 | 1,250,387 | 1,168,304 | 409,673 | 801,898 | 1,761 | 0 |
| 62 | DMAINT | Distr. O&M Maintenance (Accounts 887 - 893) | 9,767,199 | 6,216,107 | 2,637,625 | 284,447 | 153,425 | 60,406 | 268,300 | 147,598 | 290 | 0 |
| 63 | PLT | Plant - Prod., Stor.(x JP Bal.), Trans., Distr. | 2,061,663,392 | 1,304,504,519 | 483,939,082 | 69,081,811 | 38,239,377 | 13,760,847 | 71,188,404 | 37,860,647 | 75,039 | 43,013,666 |
| 64 | GENPLT | General Plant | 112,057,771 | 77,283,756 | 23,382,013 | 3,076,810 | 1,915,911 | 747,808 | 2,899,021 | 1,645,300 | 402,816 | 704,336 |
| 65 | BASE | Rate Base | 1,349,395,041 | 871,629,028 | 299,025,444 | 46,536,370 | 26,284,857 | 9,456,389 | 48,314,384 | 25,714,496 | 448,881 | 21,985,190 |
| 66 | OML | O&M Labor Expense (excluding JP Balancing Exp.) | 26,985,527 | 19,266,959 | 5,252,684 | 653,801 | 440,388 | 175,512 | 577,636 | 347,875 | 17,089 | 253,582 |
| 67 | PROD_OML | Production O&M Labor Exp. (Accounts 717 - 742) | 93,229 | 65,410 | 23,442 | 3,995 | 129 | 184 | 67 | 0 | 3 | 0 |
| 68 | STOR_OML | Underground Storage O&M Labor (Excluding JP Bal.) | 305,642 | 211,773 | 67,973 | 10,636 | 2,839 | 5,758 | 6,663 | 0 | 0 | 0 |
| 69 | DISTOM | Distribution O&M Operating Exp. (Accounts 871 - 879) | 27,093,114 | 19,002,631 | 5,832,450 | 680,786 | 370,165 | 125,490 | 705,684 | 375,160 | 746 | 0 |
| 70 | DIST_OML | Distribution O&M Labor Exp. (Accounts 871 - 894) | 17,509,271 | 11,779,245 | 4,118,928 | 514,525 | 290,938 | 136,295 | 422,590 | 246,867 | 882 | 0 |
| 71 | CUSTACC | Customer Account Expense (Accounts 902 - 904) | 23,039,064 | 20,135,352 | 2,084,060 | 157,713 | 263,006 | 50,985 | 173,792 | 169,914 | 4,241 | 0 |
| 72 | MR_EXP | Meter Reading Expenses | 11,481,681 | 10,208,788 | 1,095,527 | 66,876 | 49,547 | 27,790 | 11,144 | 21,672 | 337 | 0 |
| 73 | EXP903 | Customer Collection & Record Expenses (Account 903) | 11,407,042 | 9,795,171 | 974,933 | 89,809 | 211,742 | 22,864 | 161,514 | 147,133 | 3,876 | 0 |
| 74 | CSI | Customer Service & Information Expense (Accounts 908 & 909) | 1,073,561 | 495,068 | 191,778 | 5,468 | 1,781 | 3,406 | 242 | 360 | 9,821 | 365,637 |
| 75 | EXP912 | Demonstrating & Selling Expenses (Account 912) | 272,100 | 242,266 | 19,356 | 494 | 11 | 147 | 6 | 0 | 9,820 | 0 |
| 76 | PLTXR | Plant excluding Rentals | 2,024,020,883 | 1,307,143,836 | 484,949,456 | 69,420,673 | 38,551,256 | 13,844,875 | 71,862,627 | 38,172,523 | 75,638 | 0 |
| 77 | NETPLT | Net Plant - Prod., Stor. (x JP Bal.), Trans., Distr. | 1,403,767,464 | 893,620,699 | 321,612,337 | 48,968,689 | 27,355,391 | 9,673,847 | 51,231,943 | 27,187,776 | 53,757 | 24,063,024 |
| 78 | OM | O&M Expenses Excluding Gas & A&G | 70,234,588 | 51,129,412 | 13,384,494 | 1,514,061 | 1,010,470 | 378,794 | 1,391,816 | 835,736 | 25,910 | 563,896 |
| 79 | STOR_OML | Underground Storage O&M Labor (Excluding JP Bal.) | 305,642 | 211,773 | 67,973 | 10,636 | 2,839 | 5,758 | 6,663 | 0 | 0 | 0 |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Allocator Percents)

| | Name | Description | Total | Residential (16,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible (87) | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CUST | Average Customers | 100.0000% | 92.3530% | 7.3785% | 0.1887% | 0.0149% | 0.0560% | 0.0038% | 0.0047% | 0.0004% | 0.0000% |
| 2 | CUSTXT | Customers (excl. transport) | 100.0000% | 92.3688% | 7.3797% | 0.1884% | 0.0043% | 0.0560% | 0.0022% | 0.0000% | 0.0004% | 0.0000% |
| 3 | DIR_CUSTXT | Customers (excl. transport) | 100.0000% | 92.3688% | 7.3797% | 0.1884% | 0.0043% | 0.0560% | 0.0022% | 0.0000% | 0.0004% | 0.0000% |
| 4 | MTRS_CUS | Customer Meters - Acc 381 | 100.0000% | 76.5759% | 22.4287% | 0.7333% | 0.0778% | 0.1818% | 0.0000% | 0.0025% | 0.0000% | 0.0000% |
| 5 | MTRS_INST | Meters Installation - Acc 382 | 100.0000% | 92.2898% | 7.5721% | 0.1023% | 0.0110% | 0.0244% | 0.0000% | 0.0004% | 0.0000% | 0.0000% |
| 6 | MTRS_385 | Regulators - Acc 385 | 100.0000% | 0.5455% | 67.4074% | 15.3407% | 6.3986% | 7.4466% | 1.2611% | 1.6000% | 0.0000% | 0.0000% |
| 7 | SERV | Services | 100.0000% | 68.7760% | 30.3380% | 0.6829% | 0.0000% | 0.2028% | 0.0000% | 0.0000% | 0.0003% | 0.0000% |
| 8 | DIR380 | Distr. Plant - Services | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 50.3507% | 0.8815% | 16.4968% | 32.2910% | 0.0000% | 0.0000% |
| 9 | DIR252 | Cust. Advances in Aid of Construction | 100.0000% | 48.8400% | 51.1600% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% |
| 10 | DIR386 | Rental Property | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 100.0000% |
| 11 | DIR_DSALES | Direct Distr. Assignment to Sales | 100.0000% | 1.5800% | 74.0022% | 12.4487% | 4.2033% | 6.6443% | 1.0828% | 0.0000% | 0.0586% | 0.0000% |
| 12 | DIR_DTRNSP | Direct Distr. Assignment to Transport | 100.0000% | 0.0000% | 0.0000% | 1.2387% | 49.6220% | 0.0000% | 9.4448% | 39.6945% | 0.0000% | 0.0000% |
| 13 | DIR_CASALES | Direct Cust. Acct. Assignment to Sales | 100.0000% | 0.6210% | 45.2047% | 16.2003% | 11.2468% | 3.9658% | 21.8634% | 0.0000% | 0.8980% | 0.0000% |
| 14 | DIR_CATRNSP | Direct Cust. Acct. Assignment to Transport | 100.0000% | 0.0000% | 0.0000% | 0.2070% | 43.0830% | 0.0000% | 17.9635% | 38.7465% | 0.0000% | 0.0000% |
| 15 | DIR_CSISALES | Direct Cust. Service Assignment to Sales | 100.0000% | 0.0000% | 28.3507% | 0.8278% | 0.2935% | 0.5785% | 0.0240% | 0.0000% | 1.8287% | 68.0967% |
| 16 | DIR_CSITRNSP | Direct Cust. Service Assignment to Transport | 100.0000% | 0.0000% | 0.0000% | 1.9637% | 28.0967% | 0.0000% | 15.5589% | 54.3807% | 0.0000% | 0.0000% |
| 17 | TRANSCUS | Transport Customers | 100.0000% | 0.0000% | 0.0000% | 1.6260% | 61.7886% | 0.0000% | 8.8431% | 27.6423% | 0.0000% | 0.0000% |
| 18 | SALES_902 | Sales Meter Reading Costs | 100.0000% | 89.3342% | 9.5867% | 0.5793% | 0.2005% | 0.2432% | 0.0533% | 0.0000% | 0.0029% | 0.0000% |
| 19 | TRANS_902 | Transport Meter Reading Costs | 100.0000% | 0.0000% | 0.0000% | 1.2488% | 49.2920% | 0.0000% | 9.3593% | 40.0999% | 0.0000% | 0.0000% |
| 20 | OTH903 | Customer Allocator for 903 Net of Direct | 100.0000% | 92.3773% | 7.3772% | 0.1876% | 0.0014% | 0.0560% | 0.0000% | 0.0000% | 0.0004% | 0.0000% |
| 21 | DIR904 | Uncollectibles | 100.0000% | 74.0965% | 25.9035% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% |
| 22 | OTH908 | Other Customer Assistance Expense | 100.0000% | 92.3749% | 7.3802% | 0.1884% | 0.0000% | 0.0560% | 0.0000% | 0.0000% | 0.0004% | 0.0000% |
| 23 | DIR920_SALES | Acct. 920 Direct Assignment to Sales | 100.0000% | 1.4320% | 68.2749% | 12.9034% | 5.8558% | 5.7236% | 5.2702% | 0.0000% | 0.5401% | 0.0000% |
| 24 | DIR920_TRNSPT | Acct. 920 Direct Assignment to Transport | 100.0000% | 0.0000% | 0.0000% | 0.8808% | 47.3042% | 0.0000% | 12.4249% | 39.3901% | 0.0000% | 0.0000% |
| 25 | DIR408_SALES | Acct. 408 Direct Assignment to Sales | 100.0000% | 1.4013% | 66.7672% | 12.6159% | 5.7243% | 5.6039% | 5.1240% | 0.0000% | 2.7634% | 0.0000% |
| 26 | DIR408_TRNSPT | Acct. 408 Direct Assignment to Transport | 100.0000% | 0.0000% | 0.0000% | 0.6548% | 46.0545% | 0.0000% | 14.2869% | 39.0037% | 0.0000% | 0.0000% |
| 27 | DIR_CNG | Direct Assignment to CNG | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 100.0000% | 0.0000% |
| 28 | OTHREV | Other Operating Revenue | 100.0000% | 73.3434% | 22.9841% | 0.7086% | 1.8316% | 0.5191% | 0.2486% | 0.3532% | 0.0114% | 0.0000% |
| 29 | SALESREV | Sales Margin | 100.0000% | 72.4060% | 20.8827% | 4.3519% | 0.5722% | 1.1315% | 0.6465% | 0.0000% | 0.0092% | 0.0000% |
| 30 | GASREV | Gas Cost Recovery Revenue | 100.0000% | 61.5242% | 23.4125% | 7.5874% | 1.7039% | 1.8709% | 3.8851% | 0.0027% | 0.0132% | 0.0000% |
| 31 | TRANSREV | Revenue from Transportation for Others | 100.0000% | 0.0000% | 0.0000% | 0.8210% | 37.9496% | 0.0000% | 30.0999% | 31.1296% | 0.0000% | 0.0000% |
| 32 | SGTREV | Sales, Gas & Transportation Revenue | 100.0000% | 64.0237% | 22.3821% | 6.5457% | 1.7995% | 1.6290% | 3.2354% | 0.3727% | 0.0119% | 0.0000% |
| 33 | STREV | Sales & Transportation Revenue | 100.0000% | 69.6143% | 20.0775% | 4.2157% | 2.0134% | 1.0879% | 1.7821% | 1.2003% | 0.0089% | 0.0000% |
| 34 | COM1 | Weather Normalized Volumes | 100.0000% | 49.1387% | 18.8111% | 6.3089% | 5.8065% | 1.5644% | 12.5527% | 5.8065% | 0.0111% | 0.0000% |
| 35 | COM1XT_COM | Weather Normalized Volumes (excl. Transportation) | 100.0000% | 61.0269% | 23.3621% | 7.7893% | 1.7767% | 1.9429% | 4.0883% | 0.0000% | 0.0138% | 0.0000% |
| 36 | SEAS3_COM | Seasonal 3 | 100.0000% | 69.2878% | 22.2393% | 3.4799% | 0.9290% | 1.8839% | 2.1799% | 0.0000% | 0.0000% | 0.0000% |
| 37 | COM1GS | Weather Normalized Volumes | 100.0000% | 49.1387% | 18.8111% | 6.3089% | 5.8065% | 1.5644% | 12.5527% | 5.8065% | 0.0111% | 0.0000% |
| 38 | PDAYXT_COM | Peak Day (excl. transport) | 100.0000% | 70.1606% | 25.1443% | 4.2849% | 0.1387% | 0.1969% | 0.0719% | 0.0000% | 0.0028% | 0.0000% |
| 39 | TF1_COM | TF-1 Allocator (Annual, Winter & Peak Day Sales) | 100.0000% | 64.7766% | 23.6849% | 6.1809% | 1.1989% | 1.4534% | 2.6972% | 0.0000% | 0.0080% | 0.0000% |
| 40 | SEAS2_COM | Seasonal 2 | 100.0000% | 64.0136% | 22.9559% | 6.2333% | 1.4702% | 1.9217% | 3.3986% | 0.0000% | 0.0067% | 0.0000% |
| 41 | JPTF2_COM | TF-2 Allocator (Seasonal Sales & Peak Day x Transport) | 100.0000% | 69.4352% | 24.8860% | 4.5148% | 0.2958% | 0.4004% | 0.4645% | 0.0000% | 0.0033% | 0.0000% |
| 42 | PAVG | Peak and Average | 100.0000% | 59.4592% | 21.8618% | 5.1842% | 3.0968% | 0.8234% | 6.2773% | 3.2907% | 0.0065% | 0.0000% |
| 43 | PA_MAINS | Peak and Average for Mains | 100.0000% | 59.4594% | 21.8620% | 5.1842% | 3.0966% | 0.8236% | 6.2772% | 3.2905% | 0.0068% | 0.0000% |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Allocator Percents)

| | Name | Description | Total | Residential (16,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible (87) | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 44 | PDAY | Peak Day (Design Day) | 100.0000% | 68.2654% | 24.4651% | 4.2245% | 0.7844% | 0.1916% | 0.9227% | 1.1437% | 0.0027% | 0.0000% |
| 45 | PDAYXT | Peak Day (excl. transport) | 100.0000% | 70.1606% | 25.1443% | 4.2849% | 0.1387% | 0.1969% | 0.0719% | 0.0000% | 0.0028% | 0.0000% |
| 46 | SEAS2_DEM | Seasonal 2 | 100.0000% | 64.0136% | 22.9559% | 6.2333% | 1.4702% | 1.9217% | 3.3986% | 0.0000% | 0.0067% | 0.0000% |
| 47 | SEAS3_DEM | Seasonal 3 | 100.0000% | 69.2879% | 22.2393% | 3.4799% | 0.9290% | 1.8839% | 2.1799% | 0.0000% | 0.0000% | 0.0000% |
| 48 | JPTF2_DEM | TF-2 Allocator (Seas.Sales & Peak Day x Transport) | 100.0000% | 69.4352% | 24.8860% | 4.5148% | 0.2958% | 0.4004% | 0.4645% | 0.0000% | 0.0033% | 0.0000% |
| 49 | DIRCNG | Direct Rate 50 (CNG) | 100.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 0.0000% | 100.0000% | 0.0000% |
| 50 | COM1XT_DEM | Weather Normalized Volumes x Transport | 100.0000% | 61.0269% | 23.3621% | 7.7893% | 1.7767% | 1.9429% | 4.0883% | 0.0000% | 0.0138% | 0.0000% |
| 51 | TF1_DEM | TF-1 Allocator (Annual, Winter & Peak Day Sales) | 100.0000% | 64.7766% | 23.6849% | 6.1809% | 1.1989% | 1.4534% | 2.6972% | 0.0000% | 0.0080% | 0.0000% |
| 52 | PRODPT | Plant Accounts 311 and 320 | 100.0000% | 70.1606% | 25.1443% | 4.2849% | 0.1387% | 0.1969% | 0.0719% | 0.0000% | 0.0028% | 0.0000% |
| 53 | DISTPT | Plant Accounts 376 - 385 | 100.0000% | 64.5252% | 23.9983% | 3.4182% | 1.9166% | 0.6633% | 3.5611% | 1.9135% | 0.0038% | 0.0000% |
| 54 | STORPT | Storage Plant | 100.0000% | 69.2879% | 22.2393% | 3.4799% | 0.9290% | 1.8839% | 2.1799% | 0.0000% | 0.0000% | 0.0000% |
| 55 | LNGPLT | LNG Plant | 100.0000% | 69.2879% | 22.2393% | 3.4799% | 0.9290% | 1.8839% | 2.1799% | 0.0000% | 0.0000% | 0.0000% |
| 56 | DMAINS_SERV | Distribution Mains & Services Plant (Accounts 376 & 38 | 100.0000% | 62.6552% | 24.8194% | 3.5875% | 2.0770% | 0.6046% | 4.0777% | 2.1741% | 0.0044% | 0.0000% |
| 57 | INDUSMR | Industrial Measurement & Regulation (Acct. 385) | 100.0000% | 0.5455% | 67.4074% | 15.3407% | 6.3986% | 7.4466% | 1.2611% | 1.6000% | 0.0000% | 0.0000% |
| 58 | MRHREG | Meters & House Regulators (Accts. 381 & 383) | 100.0000% | 76.5759% | 22.4287% | 0.7333% | 0.0776% | 0.1818% | 0.0000% | 0.0025% | 0.0000% | 0.0000% |
| 59 | CUSINSTL | Customer Installation (Accts. 382 & 384) | 100.0000% | 89.4673% | 10.2406% | 0.2156% | 0.0230% | 0.0527% | 0.0000% | 0.0008% | 0.0000% | 0.0000% |
| 60 | DMAINS | Mains Plant (Account 376) | 100.0000% | 59.4594% | 21.8620% | 5.1842% | 3.0966% | 0.8236% | 6.2772% | 3.2905% | 0.0066% | 0.0000% |
| 61 | DSERV | Distribution Service Plant (Account 380) | 100.0000% | 68.4754% | 30.2054% | 0.6799% | 0.2201% | 0.2057% | 0.0721% | 0.1412% | 0.0003% | 0.0000% |
| 62 | DMAINT | Distr. O&M Maintenance (Accounts 887 - 893) | 100.0000% | 63.6324% | 27.0049% | 2.9123% | 1.5708% | 0.6185% | 2.7470% | 1.5112% | 0.0030% | 0.0000% |
| 63 | PLT | Plant - Prod., Stor.(x JP Bal.), Trans., Distr. | 100.0000% | 63.2744% | 23.4732% | 3.3508% | 1.8548% | 0.6675% | 3.4530% | 1.8364% | 0.0036% | 2.0864% |
| 64 | GENPLT | General Plant | 100.0000% | 68.9678% | 20.8660% | 2.7457% | 1.7098% | 0.6673% | 2.5871% | 1.4683% | 0.3595% | 0.6285% |
| 65 | BASE | Rate Base | 100.0000% | 64.5941% | 22.1600% | 3.4487% | 1.9479% | 0.7008% | 3.5804% | 1.9056% | 0.0333% | 1.6293% |
| 66 | OML | O&M Labor Expense (excluding JP Balancing Exp.) | 100.0000% | 71.3974% | 19.4648% | 2.4228% | 1.6319% | 0.6504% | 2.1405% | 1.2891% | 0.0633% | 0.9397% |
| 67 | PROD_OML | Production O&M Labor Exp. (Accounts 717 - 742) | 100.0000% | 70.1606% | 25.1443% | 4.2849% | 0.1387% | 0.1969% | 0.0719% | 0.0000% | 0.0028% | 0.0000% |
| 68 | STOR_OML | Undergroung Storage O&M Labor (Excluding JP Bal.) | 100.0000% | 69.2879% | 22.2393% | 3.4799% | 0.9290% | 1.8839% | 2.1799% | 0.0000% | 0.0000% | 0.0000% |
| 69 | DISTOM | Distribution O&M Operating Exp. (Accounts 871 - 879) | 100.0000% | 70.1382% | 21.5274% | 2.5128% | 1.3683% | 0.4632% | 2.6047% | 1.3847% | 0.0028% | 0.0000% |
| 70 | DIST_OML | Distribution O&M Labor Exp. (Accounts 871 - 894) | 100.0000% | 67.2743% | 23.5243% | 2.9386% | 1.6516% | 0.7784% | 2.4135% | 1.4042% | 0.0050% | 0.0000% |
| 71 | CUSTACC | Customer Account Expense (Accounts 902 - 904) | 100.0000% | 87.3966% | 9.0458% | 0.6845% | 1.1416% | 0.2213% | 0.7543% | 0.7375% | 0.0184% | 0.0000% |
| 72 | MR_EXP | Meter Reading Expenses | 100.0000% | 88.9137% | 9.5415% | 0.5826% | 0.4316% | 0.2420% | 0.0971% | 0.1888% | 0.0029% | 0.0000% |
| 73 | EXP903 | Customer Collection & Record Expenses (Account 903) | 100.0000% | 85.8695% | 8.5468% | 0.7873% | 1.8562% | 0.2004% | 1.4159% | 1.2898% | 0.0340% | 0.0000% |
| 74 | CSI | Customer Service & Information Expense (Accounts 90 | 100.0000% | 46.1146% | 17.8638% | 0.5093% | 0.1659% | 0.3173% | 0.0225% | 0.0335% | 0.9148% | 34.0583% |
| 75 | EXP912 | Demonstrating & Selling Expenses (Account 912) | 100.0000% | 89.0356% | 7.1134% | 0.1816% | 0.0042% | 0.0540% | 0.0021% | 0.0000% | 3.6090% | 0.0000% |
| 76 | PLTXR | Plant excluding Rentals | 100.0000% | 64.5815% | 23.9597% | 3.4298% | 1.9047% | 0.6840% | 3.5505% | 1.8860% | 0.0037% | 0.0000% |
| 77 | NETPLT | Net Plant - Prod., Stor. (x JP Bal.), Trans., Distr. | 100.0000% | 63.6587% | 22.9107% | 3.4884% | 1.9487% | 0.6891% | 3.6496% | 1.9368% | 0.0038% | 1.7142% |
| 78 | OM | O&M Expenses Excluding Gas & A&G | 100.0000% | 72.7981% | 19.0568% | 2.1557% | 1.4387% | 0.5393% | 1.9817% | 1.1899% | 0.0368% | 0.8029% |
| 79 | STOR_OML | Undergroung Storage O&M Labor (Excluding JP Bal.) | 100.0000% | 69.2879% | 22.2393% | 3.4799% | 0.9290% | 1.8839% | 2.1799% | 0.0000% | 0.0000% | 0.0000% |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Salaries & Wages)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential (16,23,53) | Comm. & Indust (31,35,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible (87) | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Labor O & M Expenses | | | | | | | | | | | | | |
| | Production Expense - Labor | | | | | | | | | | | | |
| 710 | Oper. Supervision and Engineering | PROD_OML | 67 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 717 | LPG Expenses | PDAYXT | 45 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 735 | Misc. Production Expenses | PDAYXT | 45 | $1,959 | $1,374 | $493 | $84 | $3 | $4 | $1 | $0 | $0 | $0 |
| 741 | Maint. Structures and Improvements | PDAYXT | 45 | $35,564 | $24,952 | $8,942 | $1,524 | $49 | $70 | $26 | $0 | $1 | $0 |
| 742 | Maint. Production Equipment | PDAYXT | 45 | $55,706 | $39,084 | $14,007 | $2,387 | $77 | $110 | $40 | $0 | $2 | $0 |
| | *Sub-total* | | | $93,229 | $65,410 | $23,442 | $3,995 | $129 | $184 | $67 | $0 | $3 | $0 |
| 0 | Other Gas Supply Expenses | | | | | | | | | | | | |
| 807 | Purchased Gas Expense | COM1 | 34 | $131,374 | $64,555 | $24,713 | $8,288 | $7,628 | $2,065 | $16,491 | $7,628 | $15 | $0 |
| 807 | Purchased Gas Expense | COM1XT_COI | 35 | $372,009 | $227,026 | $86,909 | $28,977 | $6,609 | $7,228 | $15,209 | $0 | $52 | $0 |
| | *Sub-total* | | | $503,383 | $291,581 | $111,622 | $37,265 | $14,238 | $9,283 | $31,700 | $7,628 | $66 | $0 |
| | Natural Gas Underground Storage - Labor | | | | | | | | | | | | |
| 0 | JP Storage Balancing - DIR | COM1 | 34 | $100,054 | $49,165 | $18,821 | $6,312 | $5,810 | $1,565 | $12,559 | $5,810 | $11 | $0 |
| 814 | Operation Supv & Eng | STOR_OML | 68 | $49,095 | $34,017 | $10,918 | $1,708 | $456 | $925 | $1,070 | $0 | $0 | $0 |
| 818 | Oper Compressor Sta Exp | STORPT | 54 | $75,385 | $52,233 | $16,765 | $2,623 | $700 | $1,420 | $1,643 | $0 | $0 | $0 |
| 841 | Operating Labor & Expenses | STORPT | 54 | $89,705 | $62,155 | $19,950 | $3,122 | $833 | $1,690 | $1,956 | $0 | $0 | $0 |
| 830 | Maint Supv & Engineering | STORPT | 54 | $49,535 | $34,322 | $11,016 | $1,724 | $460 | $933 | $1,080 | $0 | $0 | $0 |
| 834 | Maint Compressor Sta Equip | STORPT | 54 | $88,886 | $61,587 | $19,768 | $3,093 | $826 | $1,675 | $1,938 | $0 | $0 | $0 |
| 835 | Maint M&R Sta Equip | STORPT | 54 | $2,132 | $1,477 | $474 | $74 | $20 | $40 | $46 | $0 | $0 | $0 |
| | *Sub-total* | | | $454,791 | $294,955 | $97,712 | $18,657 | $9,105 | $8,248 | $20,292 | $5,810 | $11 | $0 |
| | Natural Gas Local Storage - Labor | | | | | | | | | | | | |
| 843 | Maint Struc & Impro | LNGPLT | 55 | $8,929 | $6,187 | $1,986 | $311 | $83 | $168 | $195 | $0 | $0 | $0 |
| 843 | Maintenance of Gas Holders | LNGPLT | 55 | $8,929 | $6,187 | $1,986 | $311 | $83 | $168 | $195 | $0 | $0 | $0 |
| 844 | Maintenance of Vaporizing Equipment | LNGPLT | 55 | $8,929 | $6,187 | $1,986 | $311 | $83 | $168 | $195 | $0 | $0 | $0 |
| 844 | Maint Measur & Reg | LNGPLT | 55 | $8,929 | $6,187 | $1,986 | $311 | $83 | $168 | $195 | $0 | $0 | $0 |
| 844 | Other Gas Maintenance | LNGPLT | 55 | $8,929 | $6,187 | $1,986 | $311 | $83 | $168 | $195 | $0 | $0 | $0 |
| | *Sub-total* | | | $44,645 | $30,934 | $9,929 | $1,554 | $415 | $841 | $973 | $0 | $0 | $0 |
| | Transmission - Labor | | | | | | | | | | | | |
| 856 | Oper Mains Expenses | PAVG | 42 | $91,073 | $54,151 | $19,910 | $4,721 | $2,820 | $750 | $5,717 | $2,997 | $6 | $0 |
| 857 | Oper Meas & Reg Sta Exp | PAVG | 42 | $67,854 | $40,345 | $14,834 | $3,518 | $2,101 | $559 | $4,259 | $2,233 | $4 | $0 |
| 862 | Maint Structures & Improvements | PAVG | 42 | $33,804 | $20,100 | $7,390 | $1,752 | $1,047 | $278 | $2,122 | $1,112 | $2 | $0 |
| 863 | Maint Supv & Eng | PAVG | 42 | $34,265 | $20,374 | $7,491 | $1,776 | $1,061 | $282 | $2,151 | $1,128 | $2 | $0 |
| 865 | Maint Structures | PAVG | 42 | $7,865 | $4,676 | $1,719 | $408 | $244 | $65 | $494 | $259 | $1 | $0 |
| 867 | Maint Other Equipment | PAVG | 42 | $25,309 | $15,049 | $5,533 | $1,312 | $784 | $208 | $1,589 | $833 | $2 | $0 |
| | *Sub-total* | | | $260,170 | $154,695 | $56,878 | $13,488 | $8,057 | $2,142 | $16,332 | $8,561 | $17 | $0 |
| | Distribution - Labor | | | | | | | | | | | | |
| 870 | Oper Supv & Engineering | DIST_OML | 70 | $542,210 | $364,768 | $127,551 | $15,933 | $9,009 | $4,221 | $13,086 | $7,614 | $27 | $0 |
| 871 | Oper Load Dispatching | COM1 | 34 | $140,260 | $68,922 | $26,384 | $8,849 | $8,144 | $2,194 | $17,606 | $8,144 | $18 | $0 |
| 874 | Oper Mains & Services Exp | DMAINS_SER | 56 | $4,903,063 | $3,072,026 | $1,216,912 | $175,899 | $101,836 | $29,643 | $199,933 | $106,599 | $214 | $0 |
| 875 | Oper Meas & Reg Sta Gen | PAVG | 42 | $1,164,132 | $692,184 | $254,500 | $60,351 | $36,051 | $9,586 | $73,076 | $38,308 | $76 | $0 |
| 876 | Oper Meas & Reg Sta Indus | INDUSMR | 57 | $82,668 | $451 | $55,724 | $12,682 | $5,290 | $6,156 | $1,043 | $1,323 | $0 | $0 |
| 878 | Oper Meter & House Reg | MRHREG | 58 | $3,358,910 | $2,572,117 | $753,359 | $24,631 | $2,612 | $6,106 | $0 | $85 | $0 | $0 |
| 879 | Oper Customer Install Exp | CUSINSTL | 59 | $3,658,765 | $3,273,399 | $374,678 | $7,889 | $841 | $1,929 | $0 | $29 | $0 | $0 |
| 880 | Oper Other Expense | DISTOM | 69 | $485,905 | $340,805 | $104,603 | $12,210 | $6,639 | $2,251 | $12,566 | $6,728 | $13 | $0 |
| 887 | Maint Mains | DMAINS | 60 | $1,376,023 | $818,175 | $300,828 | $71,335 | $42,610 | $11,333 | $86,376 | $45,278 | $91 | $0 |
| 889 | Maint Meas & Reg Sta Gen | PAVG | 42 | $19,736 | $11,735 | $4,315 | $1,023 | $611 | $163 | $1,239 | $649 | $1 | $0 |
| 890 | Maint Meas & Reg Sta Ind | INDUSMR | 57 | $143,352 | $782 | $96,630 | $21,991 | $9,172 | $10,675 | $1,808 | $2,294 | $0 | $0 |

Puget Sound Energy
Public Counsel Gas Class Cost of Service Study
(Salaries & Wages)

| Acct. No. | Account Description | Allocator | Alloc | Total | Residential (16,23,53) | Comm. & Indust (31,36,51,61) | Large Volume (41) | Interruptible (85) | Limited Interruptible (86) | Non-Exclusive Interruptible (87) | Transport & Contracts | CNG Service (50) | Rentals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 892 | Maint Services | DSERV | 61 | $463,573 | $317,433 | $140,024 | $3,152 | $1,020 | $953 | $334 | $654 | $1 | $0 |
| 893 | Maint Meters & House Reg | MRHREG | 58 | $378,685 | $289,982 | $84,934 | $2,777 | $294 | $688 | $0 | $10 | $0 | $0 |
| 894 | Maint Other Equipment | DMAINT | 62 | $485,785 | $309,117 | $131,186 | $14,147 | $7,631 | $3,004 | $13,344 | $7,341 | $14 | $0 |
| | Direct Assign to Sales | | 11 | $776,804 | $12,118 | $574,852 | $96,702 | $32,652 | $51,613 | $8,411 | $0 | $455 | $0 |
| | Direct Assignment to Transport | | 12 | $71,610 | $0 | $0 | $887 | $35,534 | $0 | $6,763 | $28,425 | $0 | $0 |
| | *Sub-total* | | | $18,051,481 | $12,144,014 | $4,246,479 | $530,459 | $299,948 | $140,516 | $435,676 | $253,480 | $909 | $0 |
| | **Customer Accounts Expense - Labor** | | | | | | | | | | | | |
| 901 | Supervision - Customer Accounting | CUSTACC | 71 | $114,258 | $99,858 | $10,336 | $782 | $1,304 | $253 | $862 | $843 | $21 | $0 |
| 902 | Meter Reading Expenses | MR_EXP | 72 | $469,260 | $417,236 | $44,775 | $2,733 | $2,025 | $1,136 | $455 | $886 | $14 | $0 |
| 903 | Cust. Records & Coll. Exp. | EXP903 | 73 | $5,892,897 | $5,060,202 | $503,652 | $46,395 | $109,386 | $11,812 | $83,438 | $76,009 | $2,003 | $0 |
| 905 | Misc. Customer Accounts Expense | CUSTACC | 71 | $29,527 | $25,806 | $2,671 | $202 | $337 | $85 | $223 | $218 | $5 | $0 |
| | *Sub-total* | | | $6,505,942 | $5,603,102 | $561,433 | $50,113 | $113,053 | $13,266 | $84,978 | $77,955 | $2,043 | $0 |
| | **Customer Service & Information Expenses - Labor** | | | | | | | | | | | | |
| 908 | Customer Assistance Expenses | CSI | 74 | $744,553 | $343,348 | $133,005 | $3,792 | $1,235 | $2,362 | $168 | $250 | $6,811 | $253,582 |
| 909 | Information, Instructional Advertising | CUSTXT | 2 | $226,801 | $209,493 | $16,737 | $427 | $10 | $127 | $5 | $0 | $1 | $0 |
| | *Sub-total* | | | $971,354 | $552,841 | $149,742 | $4,220 | $1,245 | $2,489 | $173 | $250 | $6,812 | $253,582 |
| | **Sales Expense - Labor** | | | | | | | | | | | | |
| 912 | Demonstrating and Selling | EXP912 | 75 | $200,586 | $178,593 | $14,269 | $364 | $8 | $108 | $4 | $0 | $7,239 | $0 |
| | *Sub-total* | | | $200,586 | $178,593 | $14,269 | $364 | $8 | $108 | $4 | $0 | $7,239 | $0 |
| | TOTAL LABOR O & M EXPENSES | | | $27,085,581 | $19,316,124 | $5,271,506 | $660,114 | $446,198 | $177,078 | $590,195 | $353,684 | $17,100 | $253,582 |

Exhibit No.__(GAW-11)

## PUGET SOUND ENERGY NATURAL GAS OPERATIONS
## PSE AND PUBLIC COUNSEL REVENUE DISTRIBUTION PROPOSALS

| Customer Class | (1) Current Revenue | (2) Rate of Return PSE | (3) Rate of Return Public Counsel | (4) Proposed Revenue Increase PSE | (5) Proposed Revenue Increase Public Counsel | (6) Proposed Revenue Increase (%) PSE | (7) Proposed Revenue Increase (%) Public Counsel | (8) Public Counsel Pct of Sys Avg Pct |
|---|---|---|---|---|---|---|---|---|
| Residential | 226,714,023 | 6.18% | 6.56% | 38,682,592 | $36,493,752 | 17.06% | 16.10% | 95% |
| Comm & Ind (31, 36, 51, 61) | 65,386,783 | 4.08% | 4.96% | 16,178,327 | 13,914,794 | 24.74% | 21.28% | 125% |
| Large Volume (41) | 13,729,465 | 15.96% | 11.09% | 127 | 1,168,693 | 0.00% | 8.51% | 50% |
| Interuptible (85) | 6,557,084 | 19.77% | 7.97% | -146 | 948,869 | 0.00% | 14.47% | 85% |
| Limited Interupt (86) | 3,542,875 | 21.97% | 15.22% | -302,266 | 0 | -8.53% | 0.00% | 0% |
| Non-Exclusive Interuptible (87) | 5,803,776 | 4.97% | 1.26% | 1,242,877 | 1,383,297 | 21.41% | 23.83% | 140% |
| Transportation 1/ | 2,319,556 | 10.24% | 2.60% | 558,839 | 513,364 | 24.09% | 22.13% | 130% |
| Special Contracts 1/ | 1,589,366 | | | 0 | 351,758 | 0.00% | 22.13% | 130% |
| CNG | 28,932 | -14.23% | -8.79% | 5,074 | 7,388 | 17.54% | 25.54% | 150% |
| Rentals | 7,788,789 | -9.92% | -5.68% | 404,902 | 1,989,015 | 5.20% | 25.54% | 150% |
| Total Company | 333,460,649 | 5.98% | 5.98% | 56,770,326 2/ | $56,770,930 | 17.02% | 17.02% | 100% |

1/ Transportation and Sepecial Contracts are combined for CCOSS purposes.
2/ PSE's total increase does do exactly equal the requested overall increase due to the application of billing units and proposed rates which require rounding.

# Puget Sound Energy
## Natural Gas Residential Customer Costs
## (Cost of Equity @ PSE Proposed)

| | Residential |
|---|---|
| **Gross Plant** | |
| Meters | $41,601,625 |
| Meter Installations | $141,416,119 |
| House Regulators | $9,537,413 |
| House Regulator Installations | $25,690,051 |
| Total Gross Plant | $218,245,210 |
| **Depreciation Reserve** | |
| Meters | -$13,867,592 |
| Meter Installations | -$20,083,214 |
| House Regulators | -$3,570,812 |
| House Regulator Installations | -$4,535,084 |
| Total Depreciation Reserve | -$42,056,701 |
| **Total Net Plant** | $176,188,508 |
| **Total Rate Base** | $176,188,508 |
| **Operation & Maintenance Expenses** | |
| Oper Meter & House Reg | $4,599,839 |
| Oper Customer Install Exp | $4,535,126 |
| Maint Services | $3,344,352 |
| Maint Meters & House Reg | $385,729 |
| Meter Reading Expense | $10,208,788 |
| Cust. Records & Collection Exp. | $9,792,521 |
| Total O & M Expenses | $32,866,355 |
| **Depreciation Expense** | |
| Meters | $1,135,724 |
| Meter Installations | $3,153,579 |
| House Regulators | $229,852 |
| House Regulator Installations | $716,752 |
| Total Depreciation Expense | $5,235,908 |

| | | |
|---|---|---|
| Rate Per PSC Depreciation Study | 2.73% |
| Rate Per PSC Depreciation Study | 2.23% |
| Rate Per PSC Depreciation Study | 2.41% |
| Rate Per PSC Depreciation Study | 2.79% |

**Revenue Requirement**

| | |
|---|---|
| Interest | $6,585,856 |
| Equity return | $8,567,312 |
| Income Tax | $4,613,168 |
| Revenue For Return | $19,766,337 |
| O & M Expenses | $32,866,355 |
| Depreciation Expense | $5,235,908 |
| Total Customer Revenue Requirement Before Gross Up | $57,868,600 |
| Gross Up for Uncollectibles, WUTC Fees, and Excise Te | 0.95686 |
| Total Customer Revenue Requirement | $60,477,603 |
| Number of Bills | 8,081,247 |
| Monthly Cost | $7.48 |

Per Witness Karzmar

| Cost of Capital | | | |
|---|---|---|---|
| | PCT | Cost | WGHT Cost |
| Debt | 54.97% | 6.80% | 3.74% |
| Preferred | 0.03% | 8.61% | 0.00% |
| Common | 45.00% | 10.80% | 4.86% |
| Total | 100.00% | | 8.60% |

**Puget Sound Energy**
**Natural Gas Residential Customer Costs**
**(Cost of Equity @ Public Counsel Proposed)**

| | Residential | | | |
|---|---|---|---|---|
| **Gross Plant** | | | | |
| Meters | $41,601,625 | | | |
| Meter Installations | $141,416,119 | | | |
| House Regulators | $9,537,413 | | | |
| House Regulator Installations | $25,690,051 | | | |
| Total Gross Plant | $218,245,210 | | | |
| **Depreciation Reserve** | | | | |
| Meters | -$13,867,592 | | | |
| Meter Installations | -$20,083,214 | | | |
| House Regulators | -$3,570,812 | | | |
| House Regulator Installations | -$4,535,084 | | | |
| Total Depreciation Reserve | -$42,056,701 | | | |
| **Total Net Plant** | $176,188,508 | | | |
| **Total Rate Base** | $176,188,508 | | | |
| **Operation & Maintenance Expenses** | | | | |
| Oper Meter & House Reg | $4,599,839 | | | |
| Oper Customer Install Exp | $4,535,126 | | | |
| Maint Services | $3,344,352 | | | |
| Maint Meters & House Reg | $385,729 | | | |
| Meter Reading Expense | $10,208,788 | | | |
| Cust. Records & Collection Exp. | $9,792,521 | | | |
| Total O & M Expenses | $32,866,355 | | | |
| **Depreciation Expense** | | | | |
| Meters | $1,135,724 | Rate Per PSC Depreciation Study | 2.73% | |
| Meter Installations | $3,153,579 | Rate Per PSC Depreciation Study | 2.23% | |
| House Regulators | $229,852 | Rate Per PSC Depreciation Study | 2.41% | |
| House Regulator Installations | $716,752 | Rate Per PSC Depreciation Study | 2.79% | |
| Total Depreciation Expense | $5,235,908 | | | |

**Revenue Requirement**

| | | Cost of Capital | | | |
|---|---|---|---|---|---|
| | | | PCT | Cost | WGHT Cost |
| Interest | $6,585,856 | Debt | 54.97% | 6.80% | 3.74% |
| Equity return | $7,338,398 | Preferred | 0.03% | 8.61% | 0.00% |
| Income Tax | $3,951,445 | Common | 45.00% | 9.25% | 4.16% |
| Revenue For Return | $17,875,698 | Total | 100.00% | | 7.90% |
| O & M Expenses | $32,866,355 | | | | |
| Depreciation Expense | $5,235,908 | | | | |
| Total Customer Revenue Requirement Before Gross Up | $55,977,961 | | | | |
| Gross Up for Uncollectibles, WUTC Fees, and Excise T | 0.95686 | Per Witness Karzmar | | | |
| Total Customer Revenue Requirement | $58,501,726 | | | | |
| Number of Bills | 8,081,247 | | | | |
| Monthly Cost | $7.24 | | | | |

**Puget Sound Energy**
**Natural Gas Residential Customer Costs**
**(No Rate Base)**

| | Residential | |
|---|---|---|
| **Operation & Maintenance Expenses** | | |
| Oper Meter & House Reg | $4,599,839 | |
| Oper Customer Install Exp | $4,535,126 | |
| Maint Services | $3,344,352 | |
| Maint Meters & House Reg | $385,729 | |
| Meter Reading Expense | $10,208,788 | |
| Cust. Records & Collection Exp. | $9,792,521 | |
| Total O & M Expenses | $32,866,355 | |
| Total Customer Revenue Requirement Before Gross Up | $32,866,355 | |
| Gross Up for Uncollectibles, WUTC Fees, and Excise Ta | 0.95686 | Per Witness Karzmar |
| Total Customer Revenue Requirement | $34,348,133 | |
| Number of Bills | 8,081,247 | |
| Monthly Cost | $4.25 | |

**Puget Sound Energy**
**Natural Gas Residential Customer Costs**
**(O&M + Depreciation Based)**

| | Residential | | |
|---|---|---|---|
| **Operation & Maintenance Expenses** | | | |
| Oper Meter & House Reg | $4,599,839 | | |
| Oper Customer Install Exp | $4,535,126 | | |
| Maint Services | $3,344,352 | | |
| Maint Meters & House Reg | $385,729 | | |
| Meter Reading Expense | $10,208,788 | | |
| Cust. Records & Collection Exp. | $9,792,521 | | |
| Total O & M Expenses | $32,866,355 | | |
| **Depreciation Expense** | | | |
| Services | $17,815,800 | Rate Per Depreciation Study | 4.58% |
| Meters | $1,135,724 | Rate Per PSC Depreciation Study | 2.73% |
| Meter Installations | $3,153,579 | Rate Per PSC Depreciation Study | 2.23% |
| House Regulators | $229,852 | Rate Per PSC Depreciation Study | 2.41% |
| House Regulator Installations | $716,752 | Rate Per PSC Depreciation Study | 2.79% |
| Total Depreciation Expense | $23,051,708 | | |
| **Revenue Requirement** | | | |
| O & M Expenses | $32,866,355 | | |
| Depreciation Expense | $23,051,708 | | |
| Total Customer Revenue Requirement Before Gross Up | $55,918,063 | | |
| Gross Up for Uncollectibles, WUTC Fees, and Excise Tax | 0.95686 | Per Witness Karzmar | |
| Total Customer Revenue Requirement | $58,439,127 | | |
| Number of Bills | 8,081,247 | | |
| Monthly Cost | $7.23 | | |