Exhibit No.__ T (CTM-3T)
Dockets UE-111048/UG-111049
Witness: Christopher T. Mickelson

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PUGET SOUND ENERGY, INC., Respondent.	DOCKETS UE-111048 DOCKET UG-111049 (*Consolidated*)

TESTIMONY OF

CHRISTOPHER T. MICKELSON

STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Natural Gas Revenue Allocation and Rate Design

December 7, 2011

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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Christopher T. Mickelson. My business address is the Richard Hemstad Building, 1300 S. Evergreen Park Drive S.W., P.O. Box 47250, Olympia, Washington 98504. My e-mail address is cmickels@utc.wa.gov.

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

A. I am employed by the Washington Utilities and Transportation Commission ("Commission") as a Senior Regulatory Analyst in the Energy Section of the Regulatory Services Division. My employment responsibilities and relevant education and professional qualifications are described in Exhibit No. __ (CTM-1T), which presents Staff's recommended revenue requirement for the natural gas operations of Puget Sound Energy, Inc.'s ("PSE" or the "Company").

II. SCOPE AND SUMMARY OF TESTIMONY

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present Staff's recommendations for natural gas revenue allocation and rate design. This discussion responds to the proposals sponsored by Company witness Janet K. Phelps.

Q. Do you sponsor any exhibits in support of Staff's recommendations?

A. Yes, I sponsor the following exhibit in support of my testimony:

- Exhibit No.__(CTM-4), Revenue Allocation and Rate Design

Q. Please summarize your recommendation with respect to natural gas revenue allocation and rate design.

A. The Company's revenue allocation and rate design fairly presents the costs imposed on the system by the customers on each rate schedule. Therefore, I recommend the same revenue allocation and rate design as the Company, adjusted proportionally to reflect the lower Staff revenue requirement recommendation.

III. NATURAL GAS REVENUE ALLOCATION AND RATE DESIGN

Q. Have you prepared an exhibit supporting Staff's recommended natural gas revenue allocation and rate design recommendations?

A. Yes. Exhibit No.__(CTM-4) develops the Staff recommended revenue allocation and rate design for the Company's natural gas operations. Because Staff does not contest the revenue allocation and rate design parameters proposed by the Company, my exhibit uses the same models presented in Ms. Phelps's Exhibit Nos.__ (JKP-4) and (JKP-10).

Q. Please describe Exhibit No.__ (CTM-4), Revenue Allocation and Rate Design.

A. Page 1 of Exhibit No.__ (CTM-4) is the Summary of the Gas Cost of Service Study. Column (b), entitled "Total Company", reflects the proposed test year expenses without gas costs (January through December 2010). Columns (c) thru (j) indicate the allocation of expenses and plant accounts to each rate class schedule.

Page 2, column (g), entitled "Percent of Uniform Increase", shows the percentage increase being applied to each rate class schedule. Column (m), entitled "Calculated Change in Margin", shows the impact of the natural gas revenue increase and how it applies to each rate class schedule, while column (n), entitled "Percent Total (2) Increase", shows the actual percentage increase being applied related to each rate class schedule. Column (p), entitled "Over (Under) Target Spread", demonstrates by rate schedule the total difference of $15,998 between Staff's proposed rate design compared to Staff's recommended natural gas revenue requirement deficiency, due to round-off error.

Pages 3 thru 6 show the results of current and Staff proposed rates by rate schedule.

Q. If you are not recommending a change from the Company's presentation, why is it important to offer your analysis of revenue allocation and rate design in the testimony that follows below?

A. Although Staff is not recommending a change to the Company's presentation for revenue allocation and rate design, the end results are different from the Company's due to the difference between Staff and Company revenue requirement proposals.

Q. Please explain generally the concepts of revenue allocation and rate design.

A. Revenue allocation, also known as "rate spread", is the process of determining the portion of total revenues to be collected from each rate schedule. Rate design takes the total allocated revenue for each rate schedule and determines the specific charges within the schedule, such as the basic charge per month, the delivery charge per therms, and the exact cents per therms.

Q. What is the philosophy behind allocating revenues to the rate schedules?

A. The basic philosophy is to charge customers for the costs they impose on the total system. The premise of cost causation is present in many aspects of determining rates in a price-regulated industry. A precise calculation of the costs to be recovered by the customers on each rate schedule is possible, given any one set of allocation assumptions. However, the Commission has often stated that factors in addition to cost weigh in the rate spread decision, including the appearance of fairness, perceptions of equity, economic conditions in the service territory, and stability.

A. Revenue Allocation

Q. Please explain the purpose of a "cost of service" analysis and its derivation of "parity ratios"?

A. A cost of service analysis shows the rate of return provided by each rate schedule, based on a given set of cost allocation factors. The Company's costs and plant

balances, or rate base, are sorted into the basic functions of doing business such as supply, storage, transmission, and distribution. Then, the expenses and rate base are further classified as customer-related, commodity-related, or demand-related. Customer-related costs are those that vary as customers are added or subtracted to the system. Commodity-related costs vary by total consumption. Demand-related costs vary by the size of the peak demand to meet the demands of customers on each rate schedule.

If an increase in overall revenues is necessary to provide the utility with a fair return on rate base, then each schedule may require a different percentage increase to achieve an equal rate of return across all schedules. "Parity" is accomplished if all schedules provide the same rate of return on the rate base allocated to them.

Ideally, each class's parity ratio should equal 1.00, meaning that the customers on each schedule are paying enough to recover fully the costs allocated to each schedule. A parity ratio of less than 1.00 indicates that the customers on that schedule are not paying enough to recover the costs allocated to that schedule. Therefore, those customers should get a greater than average rate increase. Conversely, schedules with a parity ratio greater than 1.00 are contributing more than necessary to recover the costs allocated to them. Those customers deserve a less than average rate increase, or even a rate decrease, to bring their rates in line with the costs allocated to them.

Q. Is it possible to achieve a parity ratio of 1.00 for every rate schedule?

A. It is arithmetically possible with a given set of assumptions. But it is not so easy to do in practice. The assumptions and results of the cost of service study are a subject of debate between the various parties. Each advocate can, and does, present a different cost of service study. The "art" in revenue allocation is determining how much of the average rate increase is fairly apportioned to each schedule.

Q. Does Staff accept the Company's method to allocate plant and expenses to the current rate schedules?

A. Yes. PSE's cost of service study reasonably functionalizes, classifies and allocates capital investments and operating expenses to each rate schedule with the goal of identifying all costs required to serve each particular customer class in a fair and equitable manner. The Company proposes a fair allocation of revenue increases among the schedules based on the cost of service study. This slightly improves each schedule's movement towards parity.

Q. Please identify the most significant driver in the Company's cost of service study.

A. Gas distribution mains are the biggest driver, representing over 48 percent of total rate base. This is a large number and small movements in its allocation can make big differences to certain customer groups. The ultimate use of the cost of service study is to judge the ratio of each schedule's return on allocated rate base to the average return from all schedules. A fairly broad range of deviation from the average is

acceptable, thereby allowing for fairness and reason. The allocation of the total revenue requirement will be based on those principles of fairness and reason, not just a rigid arithmetical application of cost of service results.

Q. On what basis did PSE allocate gas distribution mains in the present case?

A. PSE classifies distribution mains as a demand-related cost, but allocates them on a combination of peak demand and average demand. PSE defines "peak demand" as the demand for gas on the coldest day imaginable, which for PSE's service area is a day with 52 heating degree days, or an average temperature of 13 degrees. On this day it is also assumed that all customers on interruptible schedules are off the system. PSE designs its system to meet this extreme demand and calls it the system "design day." Average demand is the total consumption for the year divided by the days in the year. The ratio of average demand to system design day demand is 33 percent. Therefore, PSE's proposal allocates the cost of distribution mains 33 percent on average demand and 67 percent on peak demand.

Q. What is PSE's next step in allocating the cost of distribution mains to the rate schedules?

A. The two-thirds of the cost related to demand is allocated among the schedules based on each schedule's demand on the design day peak. This peak assumes all interruptible schedules are curtailed at that time. The remaining one-third of the cost of distribution mains is divided among the schedules on annual throughput, but with allocations differing by the diameter of the mains. Mains of four inches or greater

are allocated to all classes on annual throughput. Mains smaller than two inches are allocated on annual throughput for all classes except industrial Schedules 85, 85T, 87, 87T, and special contracts. Medium sized mains of two to three inches are split one-third to all classes on annual throughput and two-thirds to all classes except interruptible Schedules 87, 87T, and special contracts. An illustration of the allocation of mains is presented in Exhibit No.__ (JKP-9).

Q. The issue of using a "design day" for determining the peak demand has been controversial in past cost of service studies. Does Staff accept PSE's system design day peak method for allocating demand-related plant and expenses?

A. Yes. The peak demand allocation method based on a design day has been adopted by this Commission in prior rate cases.[1] Staff does not oppose the peak demand allocation method proposed by PSE in this case, but reserves the right to offer alternatives in the future.

Q. Ms. Phelps depicts each schedule's current rate of return on rate base in Exhibit No.__ (JKP-4). Do you accept this as a fair representation of the class contributions to the overall rate of return?

A. Yes. Staff's revenue requirement adjustments revise the absolute numbers, but the relative proportion of each schedule's contribution to the total remains approximately the same.

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[1] *WUTC v. Puget Sound Energy, Inc.*, Dockets UE-060266/UG-060267, Order 08, ¶¶ 131-133 (January 5, 2007).

Q. What percentages of the average percent increase to revenues does PSE propose for each rate schedule?

A. PSE proposes no increase to the water rental tariff and Limited Interruptible Schedule 86; an increase of 50 percent of the average for large volume Schedules 41/41T and interruptible Schedules 85/85T; an increase of 150 percent of the average for non-exclusive interruptible and transportation Schedules 87/87T; and special contracts receive increases based on the contract. The balance of the required revenue increase is proposed as an equal percent increase to the rest of the schedules; namely, residential Schedules 16, 23 and 53, and commercial and industrial Schedules 31/31T and 61. Exhibit No.__ (JKP-10).

Q. How are the parity ratios affected by these percentage increases?

A. Schedules receiving average increases maintain ratios within five percent of theoretical parity. Schedules with less than average increases or no increase improve, but remain above parity by 115 percent to 151 percent. Exhibit No.__ (JKP-4).

Q. Please explain how the Company's proposed rate spread effects parity ratios between customer groups.

A. Page 1, line 36 of Exhibit No.__ (JKP-4) presents parity ratios that show each rate schedule's relative contribution to the overall revenue to cost ratio. Residential

Schedules 16, 23, and 53 all show a parity ratio of 0.98, which equals its current revenue to cost ratio of 0.91 divided by the total Company ratio of 0.93.

Q. Please summarize Staff's position on revenue allocation.

A. Staff accepts the revenue allocation ratios proposed by the Company, adjusted to reflect Staff's "Adjusted Results of Operations" within the model. A demonstration of the adjustments within the model is presented in Exhibit No.__ (CTM-4).

B. Rate Design

Q. Turning to rate design, please describe PSE's proposal for its natural gas rate schedules.

A. With minor exceptions, PSE proposes an equal percent increase to all elements of rates for all schedules, as described in Ms. Phelps's direct testimony, Exhibit No. __ (JPK-1T).

Q. What is the impact of PSE's equal percent increase on all rate components?

A. The effect of an equal percentage change to each rate component is to maintain the ratio of revenues collected by each component.

Q. What is PSE's request for recovery of customer allocated costs?

A. PSE requests that the Residential Schedule 23 monthly customer charge be increased to $10.80 from the current $10.00, and that the General Service Schedule 31 monthly

customer charge be increased to $34.91 from the current $32.32. Exhibit No.__ (JKP-10).

Q. What is Staff's gas rate design given the lower Staff revenue requirement recommendation?

A. Staff accepts the Company's equal percentage increase to all components of rates in this case. An equal percentage increase bring each rate class even closer to parity without causing rate shock and yields a reasonable compensation for the service rendered.

Staff's rate design slightly increases the Residential Schedule 23 monthly customer charge from $10.00 to $10.04 and the General Service Schedule 31 monthly customer charge from $32.32 to $32.44. Exhibit No.__ (CTM-4), page 3 and page 4a.

Q. Does this conclude your testimony?

A. Yes.