CROSS EXAMINATION EXHIBIT NO. _____
DOCKET NO. UE-060266/UG-060267
2006 PSE RATE CASE
WITNESS: RON AMEN

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PUGET SOUND ENERGY, INC., Respondent.	Docket No. UE-060266 Docket No. UG-060267

CROSS EXAMINATION EXHIBIT
ON BEHALF OF SEATTLE STEAM COMPANY

Date: September 13, 2006

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Docket Nos. UE-060266 & UG-060267
Puget Sound Energy, Inc.'s
2006 General Rate Case

WUTC STAFF DATA REQUEST NO. 374

<u>WUTC STAFF DATA REQUEST NO. 374:</u>

Reference: Amen Rebuttal, page 8, line 19

Please explain and provide an example of how the current rate design "promote[s] inefficient use of the gas utility's system."

<u>Response:</u>

Customers who use the gas system during peak periods are more expensive to serve than off-peak users. It costs less to serve off-peak users because PSE does not have to build additional capacity into its gas distribution facilities to deliver the gas; i.e., the existing system is more fully, or more efficiently, utilized. Therefore, a customer with a high load factor (i.e., the customer's maximum daily demand is low relative to its average daily load) is more beneficial to the efficient utilization of the gas system than one whose load factor is low.

When a large portion of the gas utility's capacity-related cost of its gas distribution system is recovered from the customer classes on the basis of throughput, the customer with the efficient usage characteristics (high load factor) is penalized because that customer pays a relatively higher share of capacity-related costs than does a low load factor customer, and conversely, the low load factor customer benefits from this subsidy. Therefore, the recovery of a large portion of the capacity-related costs via volumetric charges will

» discourage efficient use of the gas system (low maximum demand relative to average use), and

» reward inefficient use of the system (high maximum demand relative to average use).

The following example illustrates this concept: suppose two customers have equal monthly consumption levels but different peak day demands. Customer A uses an average of 180 therms per month and has a peak demand of 10 therms, thus has a relatively high load factor (60%) and is using the gas utility system relatively efficiently. Customer B also uses an average of 180 therms per month but has a much lower load factor (30%), with a peak demand of 20 therms. If $1,500 of annual capacity-related cost is recovered strictly on the basis of peak demand (i.e., a demand-based charge), Customers B will have twice the cost responsibility ($1,000) than will customer A, ($500). The average demand cost to Customer B will be approximately $.463 per therm of usage, whereas the average cost to Customer A will be $.231 per therm. Such result rewards Customer A's high load factor use of the system. However, if half of the $1,500 of capacity-related cost is recovered via a volumetric charge, Customer A, who is using the system efficiently, will pay approximately $625 of the capacity-related cost, or $125 more than he or she would have had the volumetric charge not been levied. Customer B, the inefficient user of the utility system, would pay $125 less. Customer A's share of the $1,500 demand-related cost has increased from 33% to 42%, even though that customer only used 33% of the on-peak capacity. In other words, the reliance on volumetric-based charges to recover fixed costs greatly benefits the customer demonstrating a lower load factor and penalizes the customer with a higher load factor.

By recovering a larger portion of the fixed capacity costs in a volumetric charge, Customer B is not encouraged to improve its load factor, but rather it is encouraged to continue its less efficient use of the system. A comparison of the two rate designs and the underlying calculations are provided in a tabular computation below:

	Description	Customer A	Customer B	Total
	Peak Demand (CCF)	10	20	30
	Avg. Monthly Usage (CCF)	180	180	360
	Fixed Capacity Costs			$1,500
1.	Demand Charge [$1,500/(10+20)] =			$50
	($50 * Peak Demand) =	$500	$1,000	$1,500
2.	Demand Charge + Volumetric Rate:			
	Demand Charge [$750/(10+20)] =			$25
	($25 * Peak Demand) =	$250	$500	$750
	Volumetric Rate: [$750/((360)12)] =			$0.1736
	($0.1736 * Annual Use) =	$375	$375	$750
	Total Annual Bill	$625	$875	$1,500