Exhibit No. __ (SG-IT)
Docket No. UE-072300/UG-072301
2007 PSE GENERAL RATE CASE
WITNESS: STANLEY GENT

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, vs. PUGET SOUND ENERGY, INC., Respondent.	)	Docket No. UE-072300 Docket No. UG-072301

PREFILED TESTIMONY OF

STANLEY GENT ON BEHALF OF

SEATTLE STEAM COMPANY

MAY 30, 2008

I. INTRODUCTION

Q: Please state your name, occupation and business address.

A: My name is Stanley Gent. I am President and CEO of Seattle Steam Company ("Seattle Steam"), 1440 Puget Sound Plaza, 1325 Fourth Avenue, Seattle, WA 98101.

Q: Would you describe your education, relevant employment experience, and other professional qualifications.

A: I am a native of Ireland, and graduated from Queens University in Belfast with a degree in Mechanical Engineering. After immigrating to Canada in the 1970s I started my career in the design and construction of power generation facilities for Ontario Hydro and Edmonton Power. Since then my career has included development of many energy-related projects across North America. During the 1990s I was vice president of engineering and development for Chicago-based Unicom Thermal Technologies, where I became a leader in development of a variety of district cooling systems. Prior to coming to Seattle Steam I was President of Comfort Link, a district cooling company located in Baltimore, Maryland. I joined Seattle Steam in my current position in 2004.

Q: What is the purpose of your testimony?

A: I will present Seattle Steam's position, as one of Puget Sound Energy's ("Puget's") largest interruptible gas transportation customers, regarding Puget's gas cost of service study in this proceeding, and gas rate design and rate spread as it applies to Puget's largest industrial and commercial customers.

II. BACKGROUND ON SEATTLE STEAM COMPANY AND ITS USE OF PUGET'S SYSTEM

Q: What Puget rate schedule does Seattle Steam currently operate under?

A: For a number of years now Seattle Steam has purchased only gas transportation from Puget, under Puget's Schedule 57. Seattle Steam purchases its own gas on the open market.

Q: What other Puget rate schedule could Seattle Steam operate under?

A: If it chose to take bundled gas and transportation service from Puget rather than purchasing gas on the open market, Seattle Steam could purchase gas and transportation under Puget's Schedule 87. Puget is proposing to terminate Schedule 57 in fairly short order and at that point, if not before, we assume Seattle Steam will operate under either Schedule 87 or Puget's proposed Schedule 87T.

Q: Please describe the business of Seattle Steam Company.

A: Seattle Steam operates a steam district heating system serving over 220 customers in the downtown and First Hill areas of Seattle. The predecessors of Seattle Steam were founded in 1893. Through a steam distribution piping network under the streets of Seattle, we provide the space and water heating requirements of many of the office and government buildings in downtown Seattle, as well as hotels, colleges, hospitals and commercial establishments in an area extending from Elliott Bay on the west to Twelfth Avenue on the east, and from Qwest Field on the south to Virginia Street on the north.

Q: How does Seattle Steam's business relate to Puget's business?

A: Seattle Steam is in effect a competitor of Puget to supply the thermal energy needs of the commercial and office buildings in the heart of Seattle. The buildings that we serve do not need to have their own furnaces or water heaters; they get heat from us instead. Alternatively those buildings could install individual furnaces and hot water heaters, and buy gas directly from Puget, probably under Schedule 41, to make their own heat and hot water. So both Seattle Steam and Puget deliver energy to customers in the heart of Seattle. Because our business is providing heat, energy is our largest expense. By manipulating rates to make our delivered cost of gas more expensive while the cost to individual buildings remains stable, Puget could, over time, effectively drive Seattle Steam from the market.

Q: What portion of the gas that Puget transports for Seattle Steam is "firm" as opposed to "interruptible?"

A: Seattle Steam has only two therms per day of "firm" demand. The rest of our service from Puget is interruptible. On our peak day we use up to 4750 therms of gas per hour, which means that the ability to interrupt essentially Seattle Steam's entire load frees up considerable capacity on that portion of Puget's system served off of the same main as we are served from.

Q: Is the energy that Seattle Steam provides to its customers "firm" or "interruptible"?

A: It is firm. Our customers need heat and hot water without interruption. They do not maintain backup systems to meet their needs, so it is our responsibility to deliver service regardless of temperature or other demands on our system.

Q: Please describe Seattle Steam's plants and their operation.

A: Seattle Steam operates two steam plants, both of which are capable of burning either natural gas or fuel oil. The plants are located near the waterfront in Seattle. Historically the predominant fuel for Seattle Steam's operations has been natural gas. The plants can, however, be quickly switched from burning natural gas to #2 fuel oil, as Seattle Steam has been required to do a number of times most winters, when there are capacity restrictions on Puget's distribution system. Because of the significant increases in both the cost of transporting gas through Puget's system and the cost of the gas itself, and with the emergence of urban wood waste as an available source of lower cost fuel, Seattle Steam is about to begin the conversion of one of its natural gas fired boilers to being fired by urban wood waste.

Q: What will the impact of that change be on Seattle Steam's annual consumption of natural gas?

A: Upon completion of that project, Seattle Steam's consumption of natural gas will drop from its historic level of roughly sixteen million therms to an estimate of just under six million therms annually. At that point it will remain a significant customer of Puget but will not be one of its largest customers.

Q: What does it mean for the functioning of Puget's distribution system for Seattle Steam to be an interruptible customer?

A: As Puget's witnesses have described, Puget's distribution system is sized to allow it to meet the peak demand of its firm (non-interruptible) customers. Puget's peak design day is the coldest day expected in this area. On the peak demand day, when there is the maximum demand reducing the pressure of gas within Puget's distribution network, Puget

needs to still be able to maintain adequate pressure throughout its system to prevent customers at the end of its system from losing the functionality of their gas appliances. During periods of peak demand for natural gas, primarily cold spells when demand for heating peaks, the pipes in Puget's system are not large enough to deliver enough gas to all its customers on that system. As the number of customers on Puget's system grows, the inadequacy of its mains to deliver gas increases. As a result, if Puget had to continue delivering gas to all its customers, the pressure in its gas lines would drop. That could result not only in customers going cold, as insufficient gas was delivered to work their heating systems properly, but also in a dangerous situation because pilot lights could be extinguished by the drop in pressure. Of course one alternative for Puget would be for it to replace the existing mains with larger mains. For the sixteen-inch wrapped steel main that has served the heart of Seattle since the 1950s and that Seattle Steam is connected to, that would be extraordinarily expensive. Instead, when the demands on Puget's system exceed its capacity, upon notice from Puget, Seattle Steam switches from natural gas to fuel oil, thereby freeing up the "transportation capacity" that Puget otherwise uses to deliver natural gas to Seattle Steam. That helps Puget maintain the pressure in its delivery system, and helps assure that its non-interruptible customers continue to receive the natural gas they rely on.

Looked at another way, large customers that are interruptible allow Puget to serve more customers with its existing system, including more growth, because at periods of peak demand Puget can free up capacity by curtailing interruptible customers. Indeed, as Puget experiences more and more growth, interruptible customers may be curtailed more often, because Puget may reach the limits of the capacity of its system at higher temperatures which

are experienced more frequently. If a large customer has firm demand, by contrast, Puget must enlarge its system to meet the peak demands of growth, because the large firm customers must be served during the peak demand periods just like any small residential or commercial customer. As a result, large interruptible customers are particularly valuable to a gas utility when it is experiencing significant growth in its customer base, because to at least some extent the Company can meet the needs of an expanding customer base by curtailing interruptible customers instead of being forced to expand its system.

Q: In his prefiled testimony introducing Puget's position in this proceeding, Eric Markell describes Puget as being in the midst of a "significant capital investment cycle," driven by, among other things, "new energy supply projects, infrastructure to serve new gas and electric customers, [and] expansion of gas and electric system capacity to meet existing and future customer loads." (Prefiled Direct Testimony of Eric M. Markell, pp. 6-7 of 45.) To what extent has the Company been forced to make investments to serve Seattle Steam and other interruptible customers?

A: In our view, serving Seattle Steam and we believe most large interruptible transportation customers, is little or no part of the increasing costs that the Company claims in this proceeding and makes little or no demand on Puget for additional capital investment. Seattle Steam's two plants are attached to service lines directly connecting into a sixteen-inch wrapped steel gas supply main that runs from Northwest Pipeline's South Seattle meter station in Renton to Queen Anne Hill in Seattle. It was installed by Puget's predecessor in 1956, and is presumably fully depreciated. Because it is wrapped steel, the Company does not have to replace it, as it has had to replace many of its smaller bare steel and cast iron

mains. Although the identity of Puget's Schedule 87 and large Schedule 57 customers is confidential, so I don't know who they are, because there have not been many new large industrial facilities built in this region in the last two decades, I would expect most of Puget's large industrial customers to be similarly situated along the core trunk of Puget's distribution system.

Puget witness Susan McLain says that between December 31, 2003 and December 31, 2006 the Company added 70,000 gas customers to its system. (Prefiled Direct Testimony of Susan McLain, p. 6 of 47). She also says:

> As a result of customer growth, the Company has a much larger system to operate, inspect and maintain, and more customers who will require customer service interaction. This places increasing pressure on the Company's O&M spending. Additionally, customer growth ultimately results in the need for additional system capacity and the need for large capital investments, such as the $9 million Kent-Black Diamond Phase 1B and the $3 million Snoqualmie Phase 3 gas main projects. The Kent-Black Diamond Phase 1B project installed over five miles of 16-inch high pressure gas line from PSE's existing Sequoia Distribution Regulator east of Kent to a new Limit Station in downtown Kent. The Snoqualmie Phase 3 project installed over two miles of 12-inch high pressure gas line to replace existing 4-inch line from south of Fall City to the City of Snoqualmie, increasing gas deliverability to Snoqualmie and North Bend. These types of projects are required in order to support customer growth and to maintain reliable service to existing customers during peak conditions.

Id., p. 7 of 47. Large interruptible industrial customers are simply not the cause of this investment of capital. It may be that the investments she describes would have been required to meet the demands of residential growth in the Black Diamond or Snoqualmie areas even if the Company had large interruptible customers who could have been curtailed on that part of their system. Interruptible customers cannot entirely buffer the demands of growth. But the investments Ms. McLain describes are exactly the sort of investments that may be delayed or reduced as growth occurs at the perimeter of areas served by distribution mains that also serve

interruptible customers with a significant volume of gas that can be curtailed during peak periods.

Q: When you speak of "large" Schedule 57 customers, what do you mean?

A: It appears that Puget's Schedule 57 customers may fall roughly into two categories, similar to the division between Puget's Schedule 85 and 87 customers, except that Schedule 57 customers purchase their own gas on the open market rather than from Puget. Schedule 87 customers are generally much larger, and because they have such large loads, the ability to interrupt them has more potential impact on allowing the Company to serve a growing customer base with less investment in new facilities. Schedule 85 customers may be more spread out across Puget's distribution network, while Schedule 87 customers are more likely to be located along the Company's main trunk system. The Company is proposing to discontinue Schedule 57 and migrate those customers to a new Schedule 85T or Schedule 87T. When I refer to "large" Schedule 57 customers I am referring to those customers that the Company proposes to send to Schedule 87 or 87T.

Q: Does Puget make capital investments to serve its interruptible customers in general?

A: No. Puget Gas Rule No. 23 provides:

> PSE's gas distribution system and gas supply resource portfolio are designed to meet the needs of firm [not interruptible] customers. Interruptible service is made available as long as, in PSE's sole judgment and discretion, any one of the following conditions exists:
>
> a. distribution capacity and/or contracted gas supply resources are not needed to meet the expected demand of firm customers, or

b. any excess distribution capacity and/or supply resource may be used by interruptible customers without jeopardizing continuous service to firm customers, or

c. maintenance, repair or operational conditions of PSE's gas distribution system do not prevent or limit service to interruptible customers.

If Puget does not have adequate facilities to meet the needs of its interruptible customers, those customers are simply curtailed.

Q: Has Seattle Steam nonetheless benefited from Puget's investments in system capacity and reliability?

A: Not significantly. Puget claims that some of its investments have had the indirect benefit of reducing the number and duration of curtailments experienced by its interruptible customers. Seattle Steam was partially curtailed twice during the winter of 2007-2008 for a total of twelve hours, so Puget clearly is continuing to curtail us. More importantly, the very fact that we take interruptible service means three things for Seattle Steam. First, we must be prepared to be curtailed, whether or not we are curtailed. The cost to us of being interruptible has already been incurred, as our boilers must be able to be quickly converted to burning fuel oil, and we must maintain the supply of oil on site, whether or not that ability and supply are used. Second, Puget does not need to invest in its facilities to serve us. If its investments incidentally reduce the amount of curtailment we experience, so be it, but the company should not be making investments to serve its interruptible customers. If it is doing so, it is over-investing which is not reasonable, and the costs should not be recoverable. Third, according to Puget it expects growth to outstrip the capacity created by its recent investments. Attached as Exhibit No. _____ (SG-2) is a graph from a recent

presentation by Puget to its larger customers, showing how it expects its current capacity investments to be outstripped by growth over the next few years. As that occurs, Puget's interruptible customers can expect the number and duration of curtailments to go back up. So any current reduction in the number and duration of curtailments is likely to be a short-term phenomenon, of little or no economic benefit to interruptible customers.

III. SUMMARY OF SEATTLE STEAM'S CONCERNS IN THIS PROCEEDING

Q: Would you summarize Seattle Steam's concerns in this proceeding.

A: Those concerns began with shock at the sheer size of the rate increase Puget is proposing for its interruptible Schedule 57 and Schedule 87 customers, and how greatly disproportionate that increase is to the increases (indeed, decreases) proposed for interruptible customers on Schedule 85 or on Schedule 41. The disproportionate increase being proposed for Schedule 57 and Schedule 87 has led Seattle Steam to closely examine Puget's cost of service study and Puget's justification for how it is proposing to restructure the rate design and rate spread for its industrial customers. Our conclusion is that the Company's work violates key rate-making principles that the Commission has enunciated in prior decisions and indeed that the Company gives lip service to in its testimony.

Q: What are those principles?

The first is discussed by Puget witness Janet Phelps, who was asked:

> Q: What are the guiding principles of cost of service analysis?
>
> A: Cost causation is the fundamental principle of cost of service analysis. The question that must be answered is: which customer or group of customers causes the utility to incur particular types of costs? To answer this question, a connection must be made between customer requirements and usage characteristics, and costs incurred to meet those requirements.

Exhibit No. ___ (JKP-IT) p. 23 of 50 (emphasis added). The second principle is that rate design should send appropriate price signals to customers, to encourage them to use the system economically, and to avoid exacerbating the situation the Company now seems to be in, of needing to make tremendous investments to serve growth, which result in constant needs for additional revenue. Finally, while we do not *per se* oppose the elimination of Schedule 57 and the migration of customers now on Schedule 57 to Schedule 87T or Schedule 85T, we believe it is a mistake to impose the restrictions of Schedule 87 and 85, which do not apply to Schedule 57, on the migrating customers. Those restrictions were developed in a different energy environment, and we believe will tend to discourage customers from remaining interruptible and encourage them to convert to firm service.

Q: How has Puget violated the first principle, of matching costs to the cause of costs?

A: Puget has violated that principle in two very important ways.

First, in Puget's previous general rate cases Puget established that the majority of the Company's large industrial customers under either Schedule 57 or 87 make no use of that portion of the Company's distribution system consisting of mains less than 4-inches in diameter. *See,* Direct Testimony of Janet K. Phelps filed in Docket No. UE-060266, pp. 15-16 of 35 (copy attached as Exhibit No__ (SG-3). In prior cost of service studies the cost of those less than 4-inch mains that its Schedule 87 and large Schedule 57 customer <u>do</u> use has been identified, subtracted from the Company's total plant in service, and directly assigned to Schedule 87 or 57. *Id.* The remainder of the network of less than 4-inch diameter mains has

not been allocated to Schedule 87 or 57 (or 85), because as Ms. Phelps said before, "these customers do not typically utilize the Company's smaller distribution mains." *Id.*, p. 16 of 35. By contrast in this proceeding, the Company has allocated a share of its entire network of small distribution mains to its large industrial and commercial customers, in spite of the fact that those customers make no use of the vast majority of that network and are no part of the cause of its installation.

Second, Puget's Gas Rate Review identified a significant issue with its rate design applicable to customers using Schedule 85, 87 and 57. That is that although those schedules were intended to be for interruptible customers, some of its customers on Schedules 85, 87 and 57 have "firmed" most or all of their load, so that they effectively are not interruptible at all. A customer which has a large firm load offers none of the cost savings to Puget that I described above from interruptible customers. Firm load from large commercial and industrial customers may have a different cost than the firm load of residential customers because industrial customers tend to have a higher load factor than residential customers. But firm customers cost the Company significantly more than interruptible customers because the Company must invest as needed to meet the peak demands of its firm customers, while it has no need to invest to meet the peak load of interruptible customers.

Having identified that problem with its industrial rate design, however, the Company did nothing to address it. Instead it conducted its cost of service study and designed its rates so that customers whose load is entirely or mostly interruptible must share the added cost of the large customers who have firmed most of or their entire load. What the Company should have done is to create two rates, each of which reflects the cost of providing the service

received. The first would be a rate for large firm load. The second would be a rate for interruptible load. In the alternative the Company should raise the "demand" charge for its industrial and large commercial customers to the actual cost of meeting their firm demand, and lower the volumetric rates for interruptible load to the cost of providing interruptible service.

Q. How did the Company violate the rate making principle of having rate design send appropriate price signals to customers?

A. Again, the Company's rate design for its three proposed primary "interruptible" customer classes (Schedules 85 and 85T, 87 and 87T, and 57/special contracts) ignores the fact that a significant minority of the customers in those classes are in fact firm customers, with quite different cost to the Company than interruptible customers. Large commercial or industrial customers in most instances could be primarily interruptible if the economics of doing so made sense to their businesses. Seattle Steam's two therms per day are to keep its pilot lights operating during curtailment. Different large customers will have different demands that are not easily curtailed. But the principle remains the same – for a price, most of a large customer's volume can be made interruptible. They can, as Seattle Steam has done, install alternative fuel sources, or they can make other arrangements to allow their natural gas supply to be curtailed during peak periods. In most instances the decision to be or not be interruptible depends on comparing the savings in natural gas transportation costs from being interruptible with the cost of required capital investment or business losses incurred by being interrupted.

The Company's rate design reduces the costs of firm service to large customers by spreading that cost over the volumetric rates paid by both firm and interruptible customers. The result is that customers get less benefit from being interruptible, and have less incentive to make the investments necessary to be interruptible, than would be the case if the rate structure of the three major interruptible classes was properly designed. If it were properly designed, customers in Schedule 85, 87 and 57 would first be required to pay the full cost of their firm demand.[1] Only the remaining revenue requirement after the cost of firm demand for those classes was recovered would be recovered through volumetric rates. A rate design that required large customers to pay the full cost of their firm demand would send the appropriate price signals encouraging them to make as much of their load interruptible as possible. That would increase the extent to which interruptible customers buffer the demands of growth that are driving the Company to invest more and more money each year. By contrast, the rate design that the Company has proposed tends to hide the true cost of the firm demand of its large customers. By doing that it reduces the marginal benefit of being interruptible and will tend to encourage large customers to firm more of their demand. That will in turn tend to spiral the need for added investment, and higher rates to compensate the Company for that investment. We believe those are the wrong price signals.

[1] The Company is proposing to raise the monthly customer charge to approximately equal the customer costs that the Company incurs for individual customers. Seattle Steam agrees with the Company's approach to monthly customer charges.

IV. PUGET IS PROPOSING A LARGE AND DISPROPORTIONATE INCREASE FOR SCHEDULE 57 AND SCHEDULE 87.

Q: Returning to the size of the rate increase being proposed for Schedule 57 and Schedule 87, what is Puget proposing here?

A: That varies based on the volume a customer uses, and the amount of their demand that is firmed. Under Seattle Steam's current operations, our best estimate is that Puget is proposing a 15.9% increase for Seattle Steam, whether it remains on Schedule 57 or migrates to Schedule 87T. The proposed increase for other customers that will stay on Schedule 57 or migrate to Schedule 87T may be even greater if less of their load is in the final rate block, or if more of their load is firm. That is a particularly shocking increase in light of the fact that as I have described, the needs for extraordinary capital investments that are the stated reason for the increase Puget is seeking have not been caused by truly interruptible customers such as Seattle Steam.

Q: How does Puget propose to change the rates for interruptible customers under Schedule 57 and 87?

A: The proposed changes are as follows:

	Current	Proposed	Change
Basic charge for Schedule 57	$800	$1,050	+31%
Basic charge for Schedule 87	$500	$750	+50%
Per-month per therm for the first 25,000 therms	12.483¢	14.883¢	+19.2%
Per-month per therm for the next 25,000 therms	7.621¢	9.087¢	+19.2%
Per-month per therm for the next 50,000 therms	4.921¢	5.867¢	+19.2%
Per-month per therm for the next 100,000 therms	3.226¢	3.846¢	+19.2%
Per-month per therm for the next 300,000 therms	2.376¢	2.833¢	+19.2%
Per-month per therm for the next 500,000 therms	1.876¢	2.237¢	+19.2%
Per-therm balancing charge – Schedule 57	.14¢	.07¢	-50%
Gas procurement charge – Schedule 87	.5¢	.5¢	unchanged

Those charges apply to interruptible volume. I should note that the Company is also proposing to raise the "demand" charge which is the monthly charge per therm of daily contract demand from $1.02 per therm to $1.50 per therm of firm demand, which will result in a higher increase for customers that have firmed a significant part of their load.

Q: How do the increases proposed for Schedule 57 and 87 compare with the rate changes Puget is proposing for its other industrial customers?

A: Puget is proposing that all other interruptible industrial and commercial customers receive either no increase or a decrease in their rates under the Company's proposal. For instance, the Company's review of Schedule 57 showed that the majority of Schedule 57 customers are too small to qualify for Schedule 87, and Puget proposes that they be migrated to Schedule 85 as a result of this proceeding. Interruptible customers migrating from Schedule 57 to Schedule 85 will receive a very significant rate decrease, as is indicated by the table below.

	Current Schedule 57	**Proposed Schedule 85T**	**Change**
Basic charge	$800	$750	-6.3%
Per month for first 25,000 therms	12.483¢	8.111¢	-35%
Per month for next 25,000 therms	7.621¢	5.751¢	-24.5%
Per month for next 50,000 therms	4.921¢	4.217¢	-14.3%

Q: What is Puget's proposed change for customers currently on Schedule 85?

A: If they are truly interruptible, most current Schedule 85 customers should also experience a rate decrease under Puget's proposal. Although the basic monthly charge is being raised by $250/month, that is more than offset by a decrease in the per-therm charge for the first 25,000 therms per month and a decrease in the gas procurement charge.

Q: How is Puget proposing to change the volumetric and gas procurement charges for Schedule 85?

	Current Schedule 85	Proposed Schedule 85	Change
Per month, per therm for first 25,000 therms	10¢	8.111¢	-1.889¢/therm
Per month, per therm for the next 25,000 therms	5.127¢	5.751¢	+.624¢/therm
Per month, per therm for all therms over 50,000 therms	4.921¢	4.217¢	-.704¢/therm
Gas procurement charge	.65¢/therm	.50¢/therm	-.15¢/therm

Q: What do you mean "if they are truly interruptible"?

A: Puget is proposing to raise the delivery demand charge for "firm demand" gas for Schedules 85, 86, 87 and 57 from $1.02 per therm per month multiplied by the maximum daily delivery of firm use gas as set forth in the customer's service agreement, to $1.50 per therm. Thus customers with a significant firm demand will receive a larger increase in that portion of their bills under Puget's proposal, although as discussed below, the demand charge will in most instances still be far below the cost of demand for the customer class.

Q: What about Puget's proposed changes for customers on Schedule 41?

A: Again, for truly interruptible customers on Schedule 41, Puget is proposing a significant rate decrease. Although it is proposing a $40/month increase in the basic charge, that is offset by a 6.152¢ per therm decrease in the volumetric charge for the first 5,000 therms and a 5.02¢/per therm decrease in the volumetric charge for everything over 5,000 therms per month. As with Schedules 85, 86, 87 and 57, Puget is proposing to raise the delivery demand charge for firm gas under Schedule 41 to $1.50 per therm – in the case of Schedule 41 from its current rate of 70¢ per therm. The actual impact of Puget's proposal would depend on the amount of its load that a customer has firmed, but some Schedule 41

customers with even a significant firm load will experience a decrease in their total monthly bill under Puget's proposal.

Q: So is it the case that Schedules 87 and 57 are the only schedules serving significant industrial and commercial customers for which Puget is proposing an increase in the rates for interruptible gas delivery ?

A: That's correct.

Q: What impact does that have on Seattle Steam's ability to compete with Puget for providing the heat and hot water needs of buildings in the heart of Seattle?

A: It obviously makes Seattle Steam less competitive. Seattle Steam's customers will have the opportunity for lower gas costs as a result of this change. Many of Seattle Steam's customers have the ability to switch from using steam heat to natural gas and purchase gas directly from Puget on Schedule 41. By incorrectly allocating system costs to the cost of providing service to large industrial customers like Seattle Steam, while lowering the cost of service to customers of Seattle Steam should they leave the steam system, Puget appears to be using the regulatory process to unfairly impact the large thermal energy marketplace in Seattle. Because Seattle Steam's customers have firm demand and cannot be curtailed, this also has potentially unintended consequences such as adding firm gas load in downtown Seattle that the system is currently unable to support and consequently increasing the investment that Puget would need to make to serve such load growth. This is one more example of how rates that encourage customers to take firm service from Puget tend to create a spiraling effect in the capital investment cycle that Puget claims is driving its need for additional revenue.

V. PUGET HAS SIGNIFICANTLY CHANGED ITS COST OF SERVICE STUDY METHODOLOGY FROM ITS THREE PRIOR RATE CASES, REQUIRING ITS LARGEST COMMERCIAL AND INDUSTRIAL CUSTOMERS TO PAY FOR INVESTMENTS THEY HAD NO PART IN CAUSING.

Q: How does Puget explain significantly raising the rates of its largest interruptible industrial and commercial customers while lowering the rates to all other classes of interruptible customers?

A: That was the first thing Seattle Steam wanted to know. Seattle Steam has participated in previous rate proceedings. We no longer have all the testimony regarding those earlier proceedings, but our records showed that Puget's cost of service study for the 2004 rate case showed the parity ratio (revenue from the class, divided by the cost of serving the class) for Schedule 57 as being 171% and showed Puget earning a 15.97% return on net investment from Schedule 57. Its 2006 cost of service study showed a parity ratio for Schedule 57 of 165% and showed Puget earning a 25% rate of return from Schedule 57. Puget's cost of service study for this case, by contrast, purports to show the parity ratio for "Transport & Contracts" (which is how the Company lumped those customers it expects to stay on Schedule 57 with Special Contracts customers) at 105%, with a current rate of return of 10.2376%, and a parity ratio for the customers Puget expects to be on Schedule 87 or Schedule 87T of 79%, with a current rate of return from Schedule 87 and the proposed Schedule 87T customers of 4.971%. Exhibit No. ___ (JKP-5) page 1 of 4, lines 15, 35. Our conclusion was that there was no way that the current numbers could be correct unless the cost of service studies in the previous two cases were significantly incorrect.

We asked Puget to explain how the current cost of service study can be reconciled with their previous cost of service studies.

Q. What did you learn?

A. Puget provided us with two tables that were revealing. They are attached as Exhibit No. ___ (SG-4) and Exhibit No. __ (SG-5).

Exhibit No. ___ (SG-4) shows the allocation of Account 376 (the cost of installed distribution mains) to each of Puget's rate classes in the cost of service study supporting the 2001 rate case settlement, the 2004 rate case settlement, Puget's cost of service study for the 2006 rate case, and Puget's cost of service study for this rate case. It is difficult to make a direct comparison between rate cases for individual rate classes because in this 2007 rate case Puget has "migrated" most of what were Schedule 57 customers to either Schedule 85 or Schedule 87 and then combined the remainder of the company's Schedule 57 customers with what were previously a separate "Special Contracts" class. Looking at the combination of Schedule 85, 87, 57 and Special Contracts, however, the total allocation of the Company's investment in its distribution mains (Account 376) to those classes has been as follows:

Allocation of Account 376 to Schedule 85, 87, 57 and Contracts, combined

2001 rate case settlement	$52,971,747
2004 rate case settlement	$50,894,934
2006 rate case	$36,542,699
2007 rate case	$70,025,889

Exhibit No. ___ (SG-4) shows that between the 2006 and 2007 rate cases the Company's total plant in service under account 376 increased by 32.2% ($1,034,541,312 ÷ $782,343,896), and the plant in service allocated to the residential class increased by 32.3% ($668,948,731 ÷ $505,625,035). The amount allocated to Schedules 85, 87, 57 and Contracts,

by contrast, went up by 91.6% ($70,025,889 ÷ $36,542,699), or nearly three times as much. That makes no sense when it is applied to interruptible customers, because as I described above, the interruptible customers have not caused the tremendous investment that Puget seeks to recover in this rate case.

To understand how that increase in allocation of plant in service applied to customers who have historically been in Schedules 85, 87 and 57, Seattle Steam asked Puget to prepare a spreadsheet like Exhibit No. ___ (SG-4), but without migrating customers from Schedule 57 to Schedule 85 or 87. Puget's response to that request is attached as Exhibit No. ___ (SG-6). What it shows is that in this rate case the change in plant in service allocated to customers who were in Schedules 85, 87, 57 and Special Contracts in the 2006 rate case (without any migration) is as follows:

	Schedule 85	Schedule 87	Schedule 57 and Contracts
2006 rate case	$3,070,846	$4,725,352	$28,746,501
2007 rate case	$3,091,421	$7,750,293	$59,184,175
Change	+0.67%	+64.0%	+105.9%

The change in total plant in service allocated to customers in Schedule 85, 87, 57 and Transport between the 2004 Settlement and this 2007 rate case shown by Exhibit No.___ (SG-6) is as follows:

	Schedule 85	Schedule 87	Schedule 57 and Contracts
2004 settlement	$9,123,966	$6,925,219	$34,845,748
2007 rate case	$3,091,421	$7,750,293	$59,184,175
Change	-66.1%	+11.9%	+69.8%

In short, the change in cost of service methodology in the Company's cost of service study for this rate case has resulted in a greatly increased allocation of plant in service to the Company's two classes of largest interruptible customers – which will be Schedule 87and 87T as one class, and a combination of customers remaining on schedule 57 and Special Contracts as the second class. The result of allocating far more plant in service to those rate classes, of course, is to require that more costs be attributed to those classes for depreciation and maintenance, and to lower the apparent return on investment by increasing the apparent investment in those rate classes.

Q. In her prefiled testimony, Puget witness Janet Phelps was asked, and answered in part:

> **Q. Is the methodology employed in the Company's cost of service study for its natural gas service in this case consistent with its cost of service study in the Company's last general rate case?**
>
> **A. <u>Yes</u>. The Company has conducted the cost of service study in this case consistent with the methodology used in its last general rate case, UE-060266 and UG-060267. Because the Company proposes to offer transportation service as an option on five of its sales schedules instead of having a single transportation schedule for customers of all sizes and load characteristics, transportation no longer appears as a separate rate class in the cost of service study. The costs that are unique to transportation service have been identified, directly assigned to the schedules where transportation customers are expected to migrate when the proposed changes to schedules are made, and tracked within the cost of service study. . . <u>In terms of cost allocation, this is consistent with the last case</u>.**

Exhibit No. ___(JKP-IT) p. 26 of 50 (emphasis added). She also testified at JKP-1T, p. 28, l. 10, and at JKP-1T, p. 39, l. 2-5, that the current cost of service study is "consistent"

with the study proposed in the 2006 general rate case. Is that testimony accurate to the extent it suggests that the Company's cost of service methodology is the same in this case as in the prior case?

A. No. It is obvious from the comparisons described above that it could not be. Seattle Steam asked for an explanation of the methodology used in each rate case. Puget's response is attached as Exhibit No. ___ (SG-7). In a nutshell, the cost of service studies were somewhat different in 2001, 2004 and 2006, but started with a customer by customer analysis showing that most Schedule 87 and 57 customers were served off mains 4 inches in diameter and larger. Smaller lines used by Schedule 57 or 87 customers were dedicated to those individual customers and the cost of those smaller lines was directly assigned to those classes. The cost of those directly-assigned mains was subtracted from the total Company investment in mains to be allocated among all customer classes. The remainder of the mains greater than 4 inches in diameter were allocated to all classes based on "peak and average" methodologies that varied from year to year. The cost of the majority of the mains less than 4 inches in diameter, which were not directly assigned to Schedule 85, 87 and 57 and Special Contracts, was allocated among the remaining customer classes based on peak and average methodologies that varied by rate case. In short, in the earlier case, customers in Schedule 87 and 57 were not expected to pay for the Company's web of small distribution mains that play no part in serving those customers.

In the current cost of service study, by contrast, while the Company allocated the peak portion of the cost of its plant based on the actual mains that would be used to serve the firm demand of Schedule 85, 87 and 57 and Special Contracts customers on the Company's

"design day," it included the cost of all mains, including the growing network of mains less than 4 inches that Schedule 87 and 57 and Special Contracts customers do not use, in the "average" allocation to Schedule 85, 87, 57 and Special Contracts. The large interruptible customers on Schedules 87 and 57 and Special Contracts have a significant load during even their lowest months. As a result, determining the "average" part of the allocation based on the volume carried in off-peak periods and spreading that load across the thousands of miles of small distribution mains serving residential and small commercial customers added millions of dollars to the allocation to Schedules 87 and 57 and Special Contracts in particular.

Q. What were you able to learn about the Company's methodology in its 2001 rate case?

A. Nothing more than what is described in Exhibit No.____ (SG-7). We had a meeting with Puget, at which they explained Exhibit No. ___ (SG-4) and Exhibit No. ___ (SG-5). At that meeting they told us there was a limit to what they could tell us about the 2001 cost of service methodology, because the people who did it were no longer available to them.

Q. How did Puget's 2004 and 2006 methodology differ?

A. Exhibit No. ___ (SG-5) shows the dollar amounts that were directly assigned and how other assignments were made in the 2004, 2006 and 2007 cost of service studies. In 2004 Puget didn't actually do a "peak and average" analysis for the interruptible classes, allocating part of the cost of the plant to what is necessary to serve the "peak" demand and part to the plant necessary for the average throughput. Instead it identified the peak month of the test year, which happened to be February, and allocated plant in service to the four

interruptible classes (85, 87, 57 and Special Contracts) based on the volume of gas going to those customers through that portion of the Company's distribution system that serves those customers during that month, as compared to the total volume going through that same portion of the Company's distribution system. That is not a peak and average analysis because during most of any month, interruptible customers are not curtailed, and the Company is not required to meet its peak demand. The Company does not design its system to meet the needs of all of its customers during a peak month; it designs its system to meet its peak firm demand, which is typically at most a day or two. Thus the Company's methodology in its 2004 cost of service study in effect gave no credit to interruptible customers for the fact that the Company does not need to build facilities adequate to serve interruptible customers at the peak period it designs its system to serve.

Puget's 2006 methodology, by contrast, recognized that interruptible customers make no demands on Puget's system at the peak period because they are curtailed. The Company allocated 66 percent of plant based on demand, recognizing that only the "firm" demand of Schedule 85, 87, and 57 and Special Contract customers is served on the design day. It then allocated 33 percent of the plant related to commodity usage based on the minimum monthly volume of Schedule 85, 87, 57 and Special Contracts customers, applied to that portion of the plant they actually use. We believe that methodology is most consistent with the Commission's precedent and sound rate making methodology.

Q. What is the effect of the methodology used for the current 2007 cost of service study?

A. It requires large interruptible customers to pay for a significant amount of the Company's plant in service that they do not use, do not need, and which they played no part in causing the Company to install.

Q. Has Puget provided information from which you can quantify the disparity between the small mains that customers in Schedule 85, 87, 57 and Special Contracts use and what they are being asked to pay for in this proceeding?

A. Not perfectly, but it has provided information that illustrates the extent to which the principle of cost causation is not being followed. Attached as Exhibit No.___(SG-8) is Puget's response to NWIGU's data request number 16, in which NWIGU asked Puget to provide the work papers used to derive the distribution main allocation factor for its cost of service study and two new cost of service studies that Puget had prepared at NWIGU's request. Exhibit No.___(SG-8) p. 2 of 7 shows the total quantities of each size and material of mains in Puget's system. Exhibit No.___(SG-8) p. 3 of 7 shows the number of feet of each size and material of mains that Puget's flow analysis shows is used to serve the firm demand of each of the industrial and commercial rate class groups. What it shows concerning the number of feet of mains less than 4 inches in diameter used by customers in Schedules 85, 87 and 57 and Special Contracts is as follow:

	Company total quantity in feet	Schedule 85 and 85T (feet)	Schedule 87 and 87T (feet)	Schedule 57 and special contracts (feet)
1.25PE	2,684,891	393	0	149
2PE	14,228,508	4,315	327	11,225
3PE	63,039	710	0	0
2ST	4,008,126	2,837	105	5,535
.75-2.5ST	6,007,214	28	0	0
total under 4 inches	26,991,778	8,283	432	16,909
percentage of mains under 4 inches		0.030687%	0.001600%	0.062645%

Although the Company's current cost of service study does not disclose how many feet of main are used by customers in those Schedules who are fully curtailed on the peak design day, these data clearly support the conclusion reached in the prior cost of service studies that customers in the large interruptible classes generally do not use mains less than 4 inches in diameter. We do not disagree with the process used in the prior studies of identifying the small mains that are used by the large customers and directly assigning those mains to the applicable customer classes, but clearly the vast majority of the small mains are not used by customers in the Schedules 85, 87 or 57 and special contracts.

Q. What costs for small mains did the Company assign to the large interruptible classes in their cost of service study for this proceeding?

A. In their peak allocation the Company simply determined the current replacement cost for each size and material of main used by each class and multiplied that cost by the number of feet of used by the class. The total for each class was then used to

allocate the 66% of the Company's investment in mains that was allocated to peak demand. Seattle Steam does not necessarily disagree with that approach to finding the peak allocation; Seattle Steam's concern is with requiring customers who are fully curtailed at the design day to pay for the costs of the peak allocation. The cost allocation for the "average" day, however, was completely without justification. Even though the Company clearly knew that customers in Schedules 85, 87, 57 and Special Contracts make no use of 99.9% of the Company's mains less than 4 inches in diameter, the Company apparently allocated 4.07% of the total allocation for its small mains to Schedule 85, 10.02% of its total allocation for small mains to Schedule 87, and 3.18% of its total allocation for small mains to Schedule 57 and special contracts. Those percentages may seem relatively small, but when approximately 43% of the Company's total investment in mains is in mains less than 4 inches in diameter, that makes a very significant increase in the costs allocated to the large interruptible classes.

Q. How would the allocation of Account 376 have been different if Puget had used its 2006 cost of service methodology in this rate case?

A. We don't know. Seattle Steam requested Puget to prepare a spreadsheet like Exhibit No. ___ (SG-4), but using the 2006 methodology for 2007, as well as not migrating customers. Puget refused to do that, claiming it was unduly burdensome. It did, however, provide a spreadsheet using the 2004 methodology without migrating customers, and basing the entire allocation to Schedule 85, 87, 57 and Special Contracts customers on flow during a 41 degree day. The Company's design day has an average temperature 13 degrees (52 heating degree days), so on a day with an average temperature of 41 degrees, none of the Company's interruptible customers would be curtailed and the analysis would give no credit

to customers for the fact that they are interruptible. The Company's analysis using the 2004 methodology is attached as Exhibit No. ___ (SG-9). Comparing Exhibit No. ___ (SG-6) with Exhibit No. ___ (SG-9), using the 2004 methodology and an average temperature of 41 degrees would increase the amount of plant allocated to Schedule 85 customers by $2,193,155, or 71%, reduce the amount allocated to the Company's Schedule 87 customers by $109,299 or 1.4%, and reduce the amount allocated to its Schedule 57 and Special Contracts customers by $12,964,213 or 22%. That basically shows the impact of the Company's decision in this cost of service study to include an allocation to its largest interruptible customers of all of its small main network. Had the Company done a true peak and average analysis for its largest customers, such as it did in its 2006 cost of service study, we believe much of the cost attributable to the largest customer classes would have been related to serving the firm demand.

Q: Are there other ways to address the problem that would be fair, just and reasonable?

A: Kevin Higgins, the expert for Nucor, has proposed that the allocation of mains less than 4 inches in diameter to Schedules 85, 87 and 57/Special Contracts be capped by the percentage of those mains that those classes actually use. That appears to us to be a reasonable alternative approach to the problem.

VI. PUGET'S PROPOSED RATE DESIGN FOR ITS LARGEST CUSTOMERS IGNORES THE BENEFIT OF INTERRUPTIBLE CUSTOMERS, AND REQUIRES ITS LARGE INTERRUPTIBLE CUSTOMERS TO PAY THE COST OF LARGE FIRM CUSTOMERS.

Q: Puget is proposing to sunset Schedule 57 and migrate its current Schedule 57 customers to either a new Schedule 85T or a new Schedule 87T. What is Seattle Steam's position on that ?

A: In concept we are not opposed to the termination of Schedule 57 and the creation of a new Schedules 85T and 87T. We believe that Puget's rate design for Schedules 85T, 87T and 57 is flawed, however, because it fails to address one of the primary reasons Puget gives for what it is doing.

Q: Why do you say that?

A: Puget witness Janet Phelps testified:

> Q: What is the Company trying to achieve with the proposed changes to transportation service?
>
> A: ". . . [T]here are transportation customers who have firmed their entire loads. This indicates there is a need for firm transportation service, and the Company's intention is to provide this service in a manner that is consistent with firm sales service.
>
> Q: Why can't the existing interruptible schedules be combined to be consistent with the transportation schedule, Schedule 57?
>
> A: The three interruptible sales schedules serve three distinct groups of customers, and combining them into a single class would be problematic. Schedule 87 is designed to serve large interruptible customers <u>who have very small contract demands relative to their total loads</u>. Their presence allows the Company to curtail large volumes relatively efficiently should curtailment be necessary.

Exhibit No. ____ (JKP-IT) p. 9 of 50 (emphasis added). Schedule 85, 87 and 57 were all designed to be interruptible schedules, allowing the Company to meet increasing peak demands resulting from growth by curtailing large volumes during peak periods. There may, in fact, be a need for firm transportation or sales service to large customers, but firm demand from large customers has entirely different cost implications for the Company than does interruptible load.

Q: Why is that important in this case?

A: The Company's fundamental argument for why it needs to have significantly more revenue is that it is being forced to make enormous investments to meet the demands of growth. Large interruptible customers significantly reduce the requirement for that investment because as peak demands increase with growth, those demands can be met by increasing curtailments. Large customers with firm demand, by contrast, must continue to be served and they do nothing to reduce the need for investment to serve growth.

Q: Aren't all Schedule 57 customers pretty much the same in terms of their firm demand?

A: Not at all. As I said before, Seattle Steam uses roughly 16 million therms of gas per year but has only 2 therms of firm demand – enough to keep our pilot lights operating. We asked Puget to tell us how many of its current Schedule 57 customers had firmed more than 100% of their demand, between 75 and 100%, between 30 and 74%, between 10 and 29%, between 6 and 9% and 5% or less, and to tell us the amount of demand firmed by each category of customer. Their answer was as follows:

Firm Demand	More than 100%	75-100%	30-74%	10-29%	6-9%	less than 5%	Schedule 57 Total
Number of Customers	14	4	7	11	8	58	102
Total Daily Firm Demand (Therms)	41,453	9,939	53,800	15,330	3,543	1,093	125,158

Puget Response to Seattle Steam Data Request No. 025, 026 and 027.

In short, 65% of Puget's Schedule 57 customers have firmed less than 10% of their demand. The firm demand of those customers makes up less than 4% of the firm demand of its Schedule 57 customers as a whole. By contrast, 14 Schedule 57 customers are not interruptible at all and just 25 Schedule 57 customers account for 84% of the firm demand of the class as a whole.

Q: Assuming that is true, what is wrong with Puget's rate design for Schedule 85, 87 and 57?

A: It spreads the cost of meeting the peak firm demands to all Schedule 57 customers, whether or not those customers have any significant firm demand. The consequence is that firm customers pay significantly less than the true cost of providing them with firm service, while the truly interruptible Schedule 57 customers pay significantly more than the true cost of providing interruptible service.

Q: Has Puget quantified these disparities?

A: Yes. The work papers of Janet Phelps include a review of each schedule. Attached as Exhibit No. ____ (SG-10) are pages 1 and 4 of the Company's review of Schedule 57, as well as Attachments B and C referred to on those pages. It asks:

Are the demand charges consistent with demand costs?

The distribution demand charge is $1.02 per therm compared with a unit cost of $4.00, so the charge is 75 percent below cost.

SG-10, p. 2 of 4. Attached as Exhibit No. ___(SG-11) are pages 1 and 3 the Company's review of Schedule 87. On page 3 it asks:

Are the demand charges consistent with demand costs?

The distribution demand charge is $1.02 per therm compared with a unit cost of $58.42, so the charge is 98 percent below cost. The gas supply demand charge is $1.05 compared with a unit cost of $91.12, so the charge is 99 percent below cost. Schedule 87 has very low contract demands, which increases the unit cost significantly.

From Exhibit No. ___(JKP-5), page 4 of 4, it appears that as the Company proposes to migrate customers, the unit cost of demand for Schedule 87 will be $9.24 per them per month. That would make the proposed $1.50 per therm demand charge 84% below cost. The difference is made up with higher volumetric charges, applicable to all Schedule 87 customers, both those with large firm loads and those that remain primarily interruptible.

Q: That would appear that Puget is not expecting to recover the cost of demand in this proceeding either. Is that true?

A: That is how it appears to us. The Company determined its revenue requirement for each of its classes of customers as a whole, lumping firm and interruptible customers into one class for Schedule 85 (and the new 85T), 87 (and the new 87T), and the remaining 57/Special Contracts. Then it determined how it would design the rates to recover the revenue. From Exhibit No. ___(JKP-10), p. 12 of 13, it appears that of the $1,242,877 of additional revenue that the Company hopes to receive from the combined Schedule 87 and

87T, it expects to recover only $343,438 from the increase in the demand charge from $1.02 to $1.50, and it expects to recover $889,474, or 72% through increases in the volumetric charges. The increases in volumetric charges are of course paid equally by truly interruptible customers and by customers who have firmed most or all of their demand. The result is that the interruptible customers subsidize the customers which have firmed large portions of their demand.

Q: What are the consequences of spreading the cost of meeting the peak demand of large firm demand customers across the class of large interruptible customers?

A: As I described above, one of the objectives of rate design is to send appropriate price signals. Not only in this case but in the prior case as well, Puget has sought very large revenue increases, claiming it must have additional revenue in order to meet the demands of the growth this region is experiencing. Those needs are real, but they highlight the need to do what can be done to limit Puget's need for capital investment. Because Puget's investment need is driven by the need to meet peak firm demand, reducing that peak demand reduces the investment needs. Any time a large interruptible customer increases its firm demand, that has the same effect as if a comparable new demand came from hundreds or thousands of new residential customers. Conversely, any time a customer with a large firm demand becomes interruptible, it reduces Puget's need for investment or allows Puget to serve more new customers with its existing plant. At a cost, most large industrial or commercial customers can make their load interruptible. The decision whether to do so or not is driven by the costs and returns of the investment. By designing its rates so that large firm customers do not pay

the full cost of their firm load, and large interruptible customers do not receive the full benefit of being interruptible, Puget encourages more large customers to firm their loads and discourages large customers from making the investments that would allow more of their load to be interruptible.

Q: What is the solution?

A: As Janet Phelps has testified, Schedule 87 and Schedule 57 were intended to be interruptible classes. The rate review disclosed that instead, Puget really has two distinctly different classes of large customers – firm customers and interruptible customers. Then there are some customers who are hybrids – part firm and part interruptible. The rate design should recognize that, and interruptible customers should not be expected to subsidize the firm customers. That could be done either by creating two rate classes – one firm and the other interruptible, with a percentage of "interruptibility" established to qualify for the interruptible class, or by increasing the demand charge to cover the full cost of meeting demand, and reducing the volumetric charges for interruptible load accordingly. Either solution would result in customers paying the full cost of the firm demand that they take from Puget, and paying substantially less on a volumetric basis for volume that Puget can curtail when necessary in order to meet its peak demands, as those demands may change because of growth.

VII. CUSTOMERS MIGRATING TO SCHEDULE 85T OR SCHEDULE 87T FROM SCHEDULE 57 SHOULD RETAIN THE OPERATING FLEXIBILITY OF SCHEDULE 57

Q: What are your concerns about imposing the restrictions of Schedule 85 or Schedule 87 on customers that are being migrated from Schedule 57?

A: There have been other benefits from receiving transportation service from Puget on Schedule 57 besides being able to buy our gas on the open market. The tariff for Schedule 85 has a provision that "The customer agrees that whenever this service is available, customer will use gas under this schedule as the exclusive fuel in those operations and for those purposes set forth in the service agreement between the customer and the company." There is no such restriction on Schedule 57 customers. The tariff for Schedule 87 has a provision that requires the customer to maintain stand-by fuel capability in the event of a curtailment. Schedule 57 has no such provision. Those are two examples of restrictions on the business decisions by customers that do not exist for current Schedule 57 customers, but which the Company intends to impose on them when they migrate to Schedule 85T or Schedule 87T. We would submit that there is no basis for imposing those other restrictions on the Schedule 57 customers. They certainly do not enhance the Company's service to its customers. Indeed, the Company has offered no justification for why it should be allowed to restrict customers' business decisions as part of consolidating its rate schedules. While Seattle Steam does not object to the termination of Schedule 57 and the migrating of customers if it does not harm the customers, it sees no reason why the restrictions of Schedules 85 and 87 should apply to Schedules 85T and 87T when those restrictions may harm customers.

VIII. SUMMARY

Q: In summary, how do you believe Puget's cost of service study should be changed ?

A: We can accept the breaking of Schedule 57 into Schedule 85T and Schedule 87T. The cost of service study must be amended, however, to assign the cost of small mains as was done in the 2001, 2004 and 2006 cost of service studies. Puget clearly can identify any small mains actually used to deliver gas to Schedule 87, 57 or Special Contracts customers, and those mains can be assigned to that class. Schedule 87, 57 and special contract customers should not be required to pay for the entire network of small mains which they do not use. The proposal of Kevin Higgins may be a reasonable alternative way to return to the principle that customers should only pay for that plant in service they are a cause of creating.

The cost of service study must also include a true peak and average analysis for Schedules 85, 87, 57 and Special Contracts such as was done in 2006, so that the cost of firm demand can be separated from the cost of interruptible load.

Q: How should the rate design for Puget's large customers be changed?

A: Large customers should pay the full cost of their firm demand, and that cost should not be spread to interruptible customers. That could be accomplished by either creating two classes of large customers – those with interruptible load and those with firm demand, or by increasing the demand charge to meet the cost of demand and lowering the volumetric charge for interruptible demand correspondingly.

Q: Does that complete your testimony?

A: Yes it does.

Exhibit No. _____ (SG-2T)
Docket No. UE-070200/UG-07-2301
2007 PSE GENERAL RATE CASE
WITNESS: STANLEY GENT

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, vs. PUGET SOUND ENERGY, INC., Respondent.	)	Docket No. UE-072300 Docket No. UG-072301

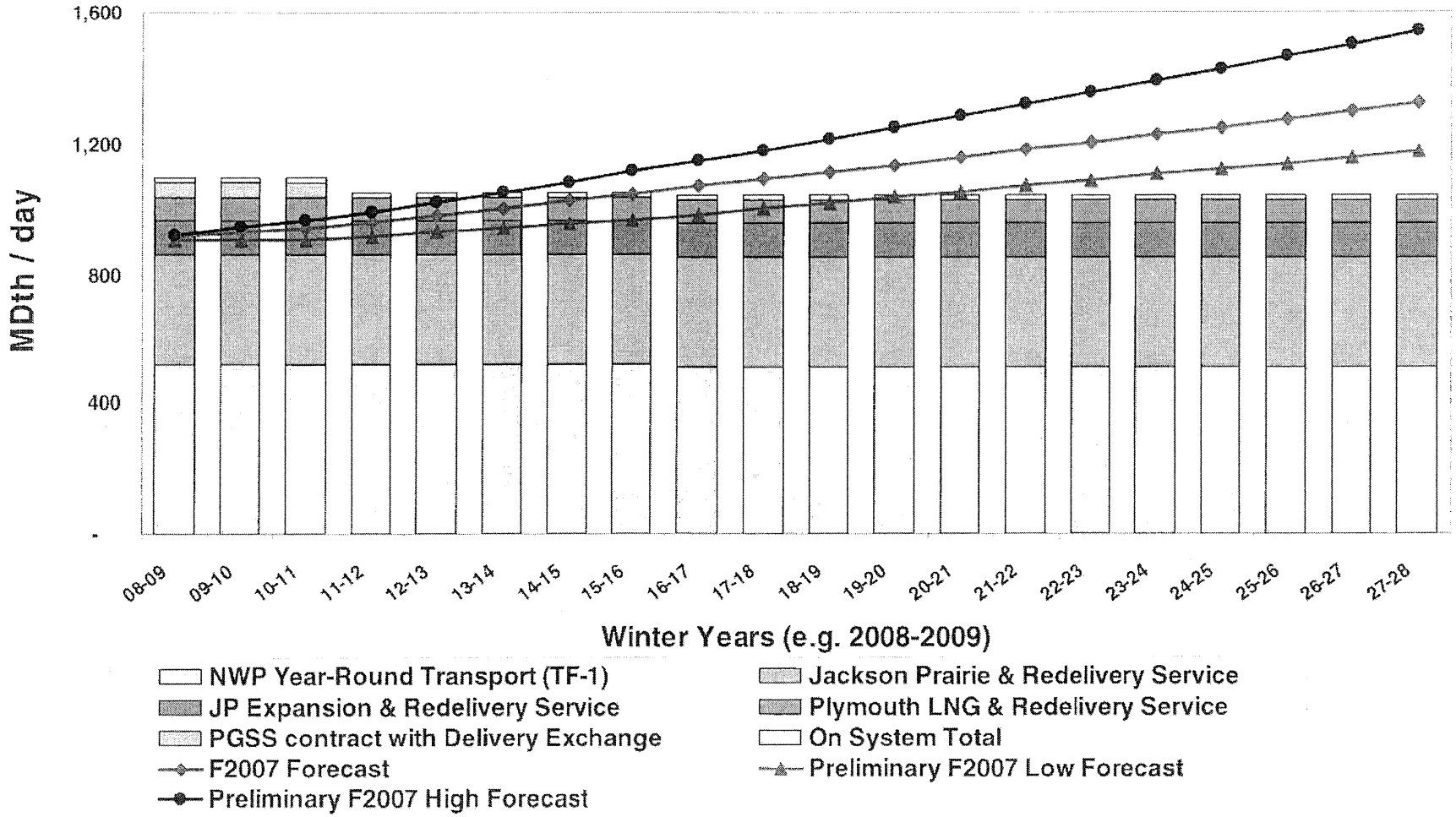
PREFILED TESTIMONY OF

STANLEY GENT ON BEHALF OF

SEATTLE STEAM COMPANY

MAY 30, 2008

Natural Gas Peak Day Load Forecast



PUGET SOUND ENERGY

Exhibit No. ____ (SG-2T)
Page 1 of 1

Exhibit No. _____ (SG-3T)
Docket No. UE-070200/UG-07-2301
2007 PSE GENERAL RATE CASE
WITNESS: STANLEY GENT

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, vs. PUGET SOUND ENERGY, INC., Respondent.	)	Docket No. UE-072300 Docket No. UG-072301

PREFILED TESTIMONY OF

STANLEY GENT ON BEHALF OF

SEATTLE STEAM COMPANY

MAY 30, 2008

EXHIBIT NO. ___(JKP-1T)
DOCKET NO. UE-06___/UG-06___
2006 PSE GENERAL RATE CASE
WITNESS: JANET K. PHELPS

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PUGET SOUND ENERGY, INC., Respondent.	Docket No. UE-06 0266 Docket No. UG-06 0267

PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF JANET K. PHELPS ON BEHALF OF PUGET SOUND ENERGY, INC.

FEBRUARY 15, 2006

in cost of service analysis. Design day peak is a better indicator of cost causation than historical peak demands. The Company designs its system to meet a design day peak demand, which is based on cold weather conditions. Regardless of how often those design day conditions occur, the Company incurs the costs associated with being able to provide natural gas service on a design day. PSE is obligated to provide reliable service, and customers expect that reliability, especially during cold weather.

Design day peak also provides a more stable allocation factor than historical peak volumes provide. Historical volumes change from year to year, yet these changes are not related to the costs of the Company's system. If historical data is used, cost allocation depends on weather conditions that happened to prevail during the period considered rather than the cost of the system itself. This could result in greater volatility of cost assignments from one cost study to the next.

The importance of using design day as the basis for the peak allocator is also discussed in the prefiled direct testimonies of Mr. Amen and Mr. William Donahue, Exhibit No. ___(WFD-1CT).

Q. Was any portion of distribution mains directly assigned?

A. Yes. The Company's analysis indicated that most commercial and industrial customers are served off of distribution mains four inches or larger in diameter, therefore the Company separated the distribution main investment into two subgroups: mains four inches or greater and mains less than four inches in

diameter. The Company conducted an analysis of facilities used to serve its largest customers, which are those in Rate Schedules 85, 87, 57 and the special contract customers. Each customer's location on the Company's distribution system was determined and the amount of main that serves only that customer was identified. This plant data was combined with data on the cost of mains to identify the original cost of the distribution mains dedicated to serve the customer. The costs of the dedicated mains were then directly assigned to the largest customer groups. The remaining plant balance for small diameter mains was allocated to all customer groups except Rate Schedules 85, 87, 57 and special contract customers based on the peak and average allocation factors, as discussed above. Mains four inches or greater in diameter not dedicated to specific customers were allocated to all customers that are served by the underground pipeline distribution system.

Q. Why did the Schedule 85, 87, 57 and special contract customers not receive an allocated share of the costs associated with distribution mains less than four inches in diameter?

A. The analysis described above specifically identified the amount of small diameter main that is dedicated to these customers, and this portion was directly assigned to them. Aside from these dedicated mains, these customers do not typically utilize the Company's small diameter distribution mains.

Exhibit No. _____ (SG-4T)
Docket No. UE-070200/UG-07-2301
2007 PSE GENERAL RATE CASE
WITNESS: STANLEY GENT

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, vs. PUGET SOUND ENERGY, INC., Respondent.	)	Docket No. UE-072300 Docket No. UG-072301

PREFILED TESTIMONY OF

STANLEY GENT ON BEHALF OF

SEATTLE STEAM COMPANY

MAY 30, 2008

Allocation of Account 376
2001, 2004, 2006 and 2007 Rate Cases

Rate Case	Total Plant in Service	Residential	Commercial & Industrial 31,36,51,61	Large Volume 41	Interruptible 85	Limited Interruptible 86	Non-exclusive Interruptible 87	Transport 57 (1)	Contracts (1)	CNG 50	Rentals	Total	Subtotal 85, 87, 57 & Contracts	Subtotal 41, 85, 87, 57 & Contracts
2001 Settlement	$ 567,103,671	$ 349,952,528	$ 128,880,300	$ 23,531,771	$ 5,385,186	$ 11,740,976	$ 10,093,069	$ 28,515,879	$ 8,977,613	$ 26,347	$ -	$ 567,103,669	$ 52,971,747	$ 76,503,518
		61.7%	22.7%	4.1%	0.9%	2.1%	1.8%	5.0%	1.6%	0.0%	0.0%	100.0%	9.3%	13.5%
2004 Settlement	$ 685,004,546	$ 423,544,826	$ 163,978,080	$ 34,181,747	$ 9,123,966	$ 12,377,419	$ 6,925,219	$ 27,262,858	$ 7,582,890	$ 27,540	$ -	$ 685,004,546	$ 50,894,934	$ 85,076,680
		61.8%	23.9%	5.0%	1.3%	1.8%	1.0%	4.0%	1.1%	0.0%	0.0%	100.0%	7.4%	12.4%
2006 - Proposed	$ 782,343,896	$ 505,625,035	$ 194,959,289	$ 37,882,683	$ 3,070,846	$ 7,315,082	$ 4,725,352	$ 23,102,991	$ 5,643,510	$ 19,108	$ -	$ 782,343,896	$ 36,542,699	$ 74,425,382
		64.6%	24.9%	4.8%	0.4%	0.9%	0.6%	3.0%	0.7%	0.0%	0.0%	100.0%	4.7%	9.5%
2007 - Proposed	$ 1,034,541,312	$ 668,948,731	$ 244,204,882	$ 44,532,849	$ 16,723,646	$ 6,774,013	$ 36,887,585		$ 16,414,658	$ 54,949	$ -	$ 1,034,541,313	$ 70,025,889	$ 114,558,738
		64.7%	23.6%	4.3%	1.6%	0.7%	3.6%		1.6%	0.0%	0.0%	100.0%	6.8%	11.1%

(1) Schedule 57 and contracts were combined in the 2007 cost of service study.

Exhibit No. ____ (SG-4T)
Page 1 of 1

Exhibit No. _____ (SG-5T)
Docket No. UE-070200/UG-07-2301
2007 PSE GENERAL RATE CASE
WITNESS: STANLEY GENT

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, vs. PUGET SOUND ENERGY, INC., Respondent.	)	Docket No. UE-072300 Docket No. UG-072301

PREFILED TESTIMONY OF

STANLEY GENT ON BEHALF OF

SEATTLE STEAM COMPANY

MAY 30, 2008

Allocation of Account 376 Plant in Service
2004, 2006 and 2007 General Rate Cases

Description	Residential (23,16)	Commercial & Industrial (31,61)	Large Volume (41)	Interruptible (85)	Limited Interruptible (86)	Non-exclusive Interruptible (87)	Transport (57)	Transport & Contracts (57,SC)	CNG (50)	Rentals (71,72,74)	Total	Subtotal 85,87,57, Contracts
2004 Cost of Service Study												
Direct assignment				$ 9,123,966		$ 6,925,219	$ 27,262,858	$ 7,582,890			$ 50,894,933	$ 50,894,933
Other	$ 423,544,826	$ 163,978,080	$ 34,181,747		$ 12,377,419				$ 27,540		$ 634,109,612	$ -
Total	$ 423,544,826	$ 163,978,080	$ 34,181,747	$ 9,123,966	$ 12,377,419	$ 6,925,219	$ 27,262,858	$ 7,582,890	$ 27,540	$ -	$ 685,004,545	$ 50,894,933
Percent of total	61.8%	23.9%	5.0%	1.3%	1.8%	1.0%	4.0%	1.1%	0.0%	0.0%	100.0%	7.4%
2006 Cost of Service Study												
Direct assignment				$ 687,177		$ 329,033	$ 1,448,926	$ 281,753			$ 2,746,889	$ 2,746,889
Large diameter	$ 221,395,253	$ 85,209,267	$ 16,344,939	$ 2,383,669	$ 2,999,876	$ 4,396,320	$ 21,654,065	$ 5,361,758	$ 8,094	$ -	$ 359,753,240	$ 33,795,811
Small diameter	$ 284,229,783	$ 109,750,022	$ 21,537,743	$ -	$ 4,315,206	$ -	$ -	$ -	$ 11,014	$ -	$ 419,843,768	$ -
Total	$ 505,625,035	$ 194,959,289	$ 37,882,683	$ 3,070,846	$ 7,315,082	$ 4,725,353	$ 23,102,991	$ 5,643,511	$ 19,108	$ -	$ 782,343,897	$ 36,542,700
Percent of total	64.6%	24.9%	4.8%	0.4%	0.9%	0.6%	3.0%	0.7%	0.0%	0.0%	100.0%	4.7%
2007 Cost of Service Study												
Direct assignment				$ 2,840,985	$ -	$ 2,709,754	$ -	$ 5,570,305			$ 11,121,044	$ 11,121,044
Other peak	$ 486,184,166	$ 174,239,603	$ 21,067,752	$ -	$ 955,324	$ -	$ -	$ -	$ 13,487		$ 682,460,332	$ -
Average	$ 182,764,565	$ 69,965,279	$ 23,465,096	$ 13,882,661	$ 5,818,689	$ 34,177,830	$ -	$ 10,844,353	$ 41,462		$ 340,959,936	$ 58,904,844
Total	$ 668,948,731	$ 244,204,882	$ 44,532,849	$ 16,723,646	$ 6,774,013	$ 36,887,585	$ -	$ 16,414,658	$ 54,949	$ -	$ 1,034,541,312	$ 70,025,888
Percent of total	64.7%	23.6%	4.3%	1.6%	0.7%	3.6%	0.0%	1.6%	0.0%	0.0%	100.0%	6.8%

Notes:

2004 direct assignment was based on flow analysis from city gate to customer, assuming system utilization in historical peak conditions. Balance was classified as demand and commodity based on the system load factor and allocated using peak and commodity, respectively.

2006 direct assignment was based on data from 2004 flow analysis, including only main dedicated to serving individual customers. Balance was allocated based on peak and average, with the pe estimated on design day conditions and the average component allocated on commodity. Aside from the direct assignment, large customers (Schedules 85, 87, 57 and contracts) received only cost associated with main at least four inches in diameter.

2007 main was split into peak and average components based on system load factor. Large customers' responsibility for peak portion was based on flow analysis from city gate to customer, assuming system utilization in design day peak conditions. Average component was allocated based on commodity, with large customers' commodity defined as volume in the lowest-volume month times 12.

Schedule 57 was grouped with special contracts in the 2007 cost of service study.

Exhibit No. ___ (SG-5T)
Page 1 of 1

Exhibit No. _____ (SG-6T)
Docket No. UE-070200/UG-07-2301
2007 PSE GENERAL RATE CASE
WITNESS: STANLEY GENT

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, vs. PUGET SOUND ENERGY, INC., Respondent.	)	Docket No. UE-072300 Docket No. UG-072301

PREFILED TESTIMONY OF

STANLEY GENT ON BEHALF OF

SEATTLE STEAM COMPANY

MAY 30, 2008

Allocation of Account 376
2001, 2004, 2006 and 2007 Rate Cases
2007 Without Schedule 57 Migration to Schedules 85T and 87T

Rate Case	Total Plant in Service	Residential	Commercial & Industrial 31,36,51,61	Large Volume 41	Interruptible 85	Limited Interruptible 86	Non-exclusive Interruptible 87	Transport 57 (1)	Contracts (1)	CNG 50	Rentals	Total	Subtotal 85, 87, 57 & Contracts	Subtotal 41, 85, 87, 57 & Contracts
2001 Settlement	$ 567,103,671	$ 349,952,528	$ 128,880,300	$ 23,531,771	$ 5,385,186	$ 11,740,976	$ 10,093,069	$ 28,515,879	$ 8,977,613	$ 26,347	$ -	$ 567,103,669	$ 52,971,747	$ 76,503,518
		61.7%	22.7%	4.1%	0.9%	2.1%	1.8%	5.0%	1.6%	0.0%	0.0%	100.0%	9.3%	13.5%
2004 Settlement	$ 685,004,546	$ 423,544,826	$ 163,978,080	$ 34,181,747	$ 9,123,966	$ 12,377,419	$ 6,925,219	$ 27,262,858	$ 7,582,890	$ 27,540	$ -	$ 685,004,546	$ 50,894,934	$ 85,076,680
		61.8%	23.9%	5.0%	1.3%	1.8%	1.0%	4.0%	1.1%	0.0%	0.0%	100.0%	7.4%	12.4%
2006 - Proposed	$ 782,343,896	$ 505,625,035	$ 194,959,289	$ 37,882,683	$ 3,070,846	$ 7,315,082	$ 4,725,352	$ 23,102,991	$ 5,643,510	$ 19,108	$ -	$ 782,343,896	$ 36,542,699	$ 74,425,382
		64.6%	24.9%	4.8%	0.4%	0.9%	0.6%	3.0%	0.7%	0.0%	0.0%	100.0%	4.7%	9.5%
2007 - Without Migration (2)	$ 1,034,541,312	$ 668,948,731	$ 244,204,882	$ 44,532,849	$ 3,091,421	$ 6,774,013	$ 7,750,293		$ 59,184,175	$ 54,949	$ -	$ 1,034,541,312	$ 70,025,889	$ 114,558,737
		64.7%	23.6%	4.3%	0.3%	0.7%	0.7%		5.7%	0.0%	0.0%	100.0%	6.8%	11.1%

(1) Schedule 57 and contracts were combined in the 2007 cost of service study.

(2) Two relatively small Schedule 57 customers who were assumed to migrate to Schedule 41T remain in Schedule 41 for purposes of this analysis because their data was not included in the equivalent footage of pipe produced by the flow analysis.

Exhibit No. ____ (SG-6T)
Page 1 of 1

Exhibit No. _____ (SG-7T)
Docket No. UE-070200/UG-07-2301
2007 PSE GENERAL RATE CASE
WITNESS: STANLEY GENT

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, vs. PUGET SOUND ENERGY, INC., Respondent.	)	Docket No. UE-072300 Docket No. UG-072301

PREFILED TESTIMONY OF

STANLEY GENT ON BEHALF OF

SEATTLE STEAM COMPANY

MAY 30, 2008

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Docket Nos. UE-072300 and UG-072301
Puget Sound Energy, Inc.'s
2007 General Rate Case

SEATTLE STEAM DATA REQUEST NO. 017

SEATTLE STEAM DATA REQUEST NO. 017:

With respect to the spreadsheet produced in response to Seattle Steam's Data Request No. 002 captioned "Allocation of Account 376 - 2001, 2004, 2006 and 2007 Rate Cases" please explain in detail the methodology used in each rate case that led to the conclusion that Schedules 85, 87, 57, Contracts and the combination of 85, 87, 57 & Contracts had the amounts shown below attributable to them within Account 376.

	Interruptible 85	Non-exclusive interruptible 87	*Transport 57*	Contracts	85, 87, 57 & Contracts
2001 Settlement	$5,385,186	$10093,069	$28,515,879	$8,977,613	$52,971,747
2004 Settlement	$9,123,966	$6,925,219	$27,262,858	$7,583,890	$50,894,934
2006 Proposed	$3,070,846	$4,725,352	$23,102,991	$5,643,510	$36,542,699
2007 Proposed	$16,723,646	$36,887,585		$16,414,658	$70,025,889

Response:

2001 WUTC Docket No. UG-011571

In WUTC Docket No. UG-011571, Account 376 was allocated to customer classes using a peak and average method with a directly assigned component to customers on Schedules 85, 87, 57 and special contracts. The allocated cost of Account 376 presented in the table provided in Puget Sound Energy, Inc.'s ("PSE") Response to Seattle Steam Data Request No. 002 was based on an analysis described in the following excerpt from the Prefiled Direct Testimony of Russell A. Feingold, Exhibit No. ___(RAF-1T), PSE's cost of service witness in WUTC Docket No. UG-011571:

Q: Please describe how investment in distribution mains was classified and allocated.

A: Before classifying and allocating distribution mains, an extensive analysis of PSE's facilities serving its largest customers was performed to identify dedicated plant investment that could be directly assigned to these customers. The analysis covered all customers served under Rate Schedules 87 and 57. For each of these large customers, its

location on PSE's distribution system was determined and plant investment data was compiled to develop the original cost of the distribution lines dedicated to serve the customer. For each customer, the particular main was traced upstream to its intersection with a 4-inch or larger "common" main. Based on this analysis, it was determined that most Rate 87 and 57 customers were served off of distribution mains 4 inches or larger in diameter. This conclusion led PSE to disaggregate its distribution main investment into two subgroups: (1) mains less than 4 inches in diameter and (2) mains 4 inches or greater in diameter.

Using the results of this analysis, the costs of the dedicated small diameter (less than 4 inches) facilities directly assigned to Rate 85, 87, 57 and the special contract customers were subtracted from the total mains investment for this subgroup. For mains 4 inches or greater, the plant balance was classified between demand and commodity on a system load factor basis and allocated to all customers based on design day demand and commodity throughput allocation factors. Mains less than 4 inches in diameter were classified in the same manner and were allocated to all customers except Rate 85, 87, 57 and special contract customers.

Q: Why didn't the Rate 85, 87, 57 and special contract customers receive an allocated share of the costs associated with the distribution mains less than 4 inches in diameter?

A: These customers did not cause PSE to install any downstream distribution mains on their behalf. In other words, these customers do not utilize any of PSE's downstream distribution mains to receive gas volumes at their burner tip locations.

In the cost of service model used for settlement purposes in WUTC Docket No. UG-011571 and as the basis for PSE's Response to Seattle Steam Data Request No. 002 in this proceeding, the peak demand was based on historical weather data rather than the design day peak mentioned in Mr. Feingold's Prefiled Direct Testimony, Exhibit No. ___(RAF-1T).

The portion of main directly assigned to Schedule 85, 87, 57 and special contract customers in the 2001 case settlement was $2,263,273, and the total cost assigned to these large customers was $52,971,747. This represented 9.3 percent of $567,103,671, the total Account 376 plant in service in the case.

2004 WUTC Docket No. UG-040640

In WUTC Docket No. UG-040640, Account 376 was allocated to customer classes using a peak and average method with a directly assigned component to customers on Schedules 85, 87, 57 and special contracts.

The portion of Account 376 to be directly assigned to customers on Schedules 85, 87, 57 and special contracts was identified based on a flow analysis conducted using PSE's gas planning software. Each customer on those schedules was identified, and the flow of gas for the whole distribution system based on assumed weather conditions and system load given those weather conditions was modeled. For the specific customers being studied, this flow analysis was used to identify what pipe was used to serve the customer on the day in question, throughout the system from the city gate to the customer. Tracing the flow all the way from the city gate to the customer eliminated the critical assumption that had been made in previous cases, that large customers would not be served off small diameter mains.

The weather assumptions used in the flow analysis were based on an average of actual weather for each day of the coldest month of the test year, which was February 2003. The average daily temperature was 41 degrees Fahrenheit, and the average number of heating degree days (HDD) was 23. The use of the average temperature for the month is equivalent to allocating the cost of mains to these customers based on throughput (average) for the entire month of February – but only for that peak month. It thus represents a combination of the concepts of peak and average – peak in that it uses data only from the one peak month of the year, and average in that it uses average data for the entire peak month.

This portion of main identified by the flow analysis to be directly assigned was given a dollar value based on average installed cost of pipe by size and type in 2003 dollars. The relationship between the value of the directly assigned piece in 2003 dollars and the total value of Account 376 in 2003 dollars was applied to test year rate base to determine the directly assigned plant cost.

All remaining pipe in Account 376, regardless of pipe diameter, was classified between demand and commodity based on the system load factor, with 60 percent classified as demand and 40 percent classified as commodity. The demand-related portion was then allocated to all other customer classes (excluding Schedules 85, 87, 57 and special contracts) based on those customer classes' respective contributions to system peak demand. The commodity-related portion was allocated to customer classes (excluding Schedules 85, 87, 57 and special contracts) based on those customer classes' weather-normalized throughput during the test year.

The flow analysis resulted in $50,894,933 of Account 376 being directly assigned to Schedule 85, 87, 57 and special contract customers. These large customers received no other allocation of main costs. This represented 7.4 percent of $685,004,546, the total Account 376 plant in service in the case.

2006 WUTC Docket No. UG-060267
In WUTC Docket No. UG-060267, Account 376 was allocated to customer classes using a peak and average method with a directly assigned component to customers on Schedules 85, 87, 57 and special contracts.

PSE's 2006 cost of service study relied on data from the flow analysis developed in WUTC Docket No. UG-040640, rather than a new flow analysis, to determine the footage of main to be directly assigned. Pipe dedicated to serving any single customer on Schedules 85, 87, 57 and special contracts was identified from records from WUTC Docket No. UG-040640, thus the direct assignment did not include a shared portion of any small main. This limited the size of the direct assignment.

The footage of main to be directly assigned was given a dollar value based on average installed cost of pipe by size and type in 2005 dollars. This amount was subtracted from the total plant in Account 376. The remaining plant was split into main less than four inches in diameter and main greater than or equal to four inches in diameter. Small main was allocated to all customer classes except Schedules 85, 87, 57 and special contracts based on peak and average, with 67 percent on each customer class's contribution to the system design day peak, and 33 percent on each customer class's weather normalized annual volume. Large main was allocated to all customer class's including Schedules 85, 87, 57 and special contracts based on peak and average, with 67 percent on each customer classes' contribution to the system design day peak, and 33 percent on each customer classes' weather normalized annual volume. The design day peak was based on 52 HDD.

The portion of main directly assigned to Schedule 85, 87, 57 and special contract customers in the 2006 case was $2,746,899, and the total cost assigned to these customers was $36,542,700. This represented 4.7 percent of $782,343,896, the total Account 376 plant in service in the case.

2007 WUTC Docket No. UG-072301
In WUTC Docket No. UG-072301, Account 376 was allocated to customer classes using a peak and average method with a directly assigned component to customers on Schedules 85, 87, 57 and special contracts.

The entire Account 376 balance was split between demand and commodity based on the system load factor, with 67 percent identified as demand and 33 percent identified as commodity. Of the 67 percent related to demand, a subset to be directly assigned to customers on Schedules 85, 87, 57 and special contracts was identified.

This portion of Account 376 to be directly assigned to customers on Schedules 85, 87, 57 and special contracts was identified based on a flow analysis conducted using PSE's gas planning software. Each customer on those schedules was identified, and the flow of gas for the whole distribution system based on assumed weather conditions and system load given those weather conditions was modeled. For the specific customers

being studied, this flow analysis was used to identify what pipe was used to serve the customer on the day in question, throughout the system from the city gate to the customer. Tracing the flow all the way from the city gate to the customer was consistent with the analysis in WUTC Docket No. UG-040640.

The peak day weather assumption used in the flow analysis was based on PSE's design day assumption of a 10 degree minimum temperature, which is consistent with PSE's 52 HDD planning standard. This assumption meant that the interruptible portion of these customers' loads was curtailed.

This portion of main identified by the flow analysis to be directly assigned was given a dollar value based on average installed cost of pipe by size and type in 2007 dollars. The relationship between the value of the directly assigned piece in 2007 dollars and the total value of Account 376 in 2007 dollars was applied to test year rate base to determine the directly assigned plant cost.

Of the 67 percent of plant related to demand, the portion not directly assigned to large customers was allocated to all other customer classes (excluding Schedules 85, 87, 57 and special contracts) based on those customer classes' respective contributions to system peak demand, as estimated based on PSE's design peak day of 52 HDD and used to allocate other demand-related costs.

The 33 percent of plant related to commodity was allocated to all customer classes (including Schedules 85, 87, 57 and special contracts) based on either total or minimum energy requirements for the test year. For Schedules 85, 87, 57 and special contracts the minimum energy requirements were used, defined as each customer's minimum monthly volume multiplied by 12 months. For all other schedules, weather-normalized throughput during the test year was used.

The flow analysis resulted in $11,121,044 of Account 376 being directly assigned to Schedule 85, 87, 57 and special contract customers. The average or commodity component of costs allocated to these large customers was $58,904,844, and their total allocation of main costs was $70,025,888. This represents 6.8 percent of $1,034,541,312, the total Account 376 plant in service in this case.

Exhibit No. _____ (SG-8T)
Docket No. UE-070200/UG-07-2301
2007 PSE GENERAL RATE CASE
WITNESS: STANLEY GENT

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, vs. PUGET SOUND ENERGY, INC., Respondent.	Docket No. UE-072300 Docket No. UG-072301

PREFILED TESTIMONY OF

STANLEY GENT ON BEHALF OF

SEATTLE STEAM COMPANY

MAY 30, 2008

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Docket Nos. UE-072300 and UG-072301
Puget Sound Energy, Inc.'s
2007 General Rate Case

NWIGU DATA REQUEST NO. 016

NWIGU DATA REQUEST NO. 016:

Please provide the EXCEL workpaper file used to derive the distribution main allocation factor for each of the new cost of service studies provided in response to the NUCOR data request No. 2.

Response:

Attached as Attachment A to Puget Sound Energy, Inc.'s ("PSE") Response to NWIGU Data Request No. 016, please find the workpapers used to derive the distribution main allocation factor for each of the new cost of service studies provided in PSE's Response to NUCOR Data Request No. 2. Attachment A is being provided in electronic format only.

Date of Response: May 15, 2008
Person who Prepared the Response: Janet K. Phelps
Witness Knowledgeable About the Response: Janet K. Phelps

Account 376
Unit Costs
2007 $

	2007 Costs by Type	Total Quantity	2007 Unit Costs
1.25PE	$ 53,217,566.76	2,684,891	$ 19.82
2PE	$ 263,069,356.99	14,228,508	$ 18.49
3PE	$ 2,652,002.82	63,039	$ 42.07
4PE	$ 164,609,345.67	5,110,398	$ 32.21
6PE	$ 137,739,535.75	2,083,402	$ 66.11
8PE	$ 35,214,683.16	363,690	$ 96.83
2ST	$ 107,823,512.01	4,008,126	$ 26.90
4ST	$ 17,182,619.25	200,233	$ 85.81
6ST	$ 151,213,003.56	2,116,140	$ 71.46
8ST	$ 77,857,357.61	526,281	$ 147.94
12ST	$ 164,914,439.68	815,892	$ 202.13
20ST	$ 10,839,497.63	39,777	$ 272.51
.75-2.5ST	$ 143,505,145.49	6,007,214	$ 23.89
14-16ST	$ 6,055,704.58	39,887	$ 151.82

Puget Sound Energy
2007 General Rate Case
Account 376 - Directly Assigned Equivalent Pipe Footage and Costs (2007 $)

Line No.	Sum of Equivalent Footage (D*G) Pipe size and type	Lookup	Pro Forma Schedule 57G-C	57G-I	85G-C2	85G-I2	85T-C	85T-I	87G-C3	87G-I3	87T-C	87T-I	SC	Grand Total
1	**1" Steel**	.75-2.5ST			3			0						3
2	**1.25" PE**	1.25PE		11	368		25	0					138	541
3	**1.25" Steel**	.75-2.5ST			1		24							25
4	**12" Steel**	12ST	397	1,724	318	2	2,453	974	102		0	12,318	4,497	22,784
5	**16" Steel**	14-16ST	454	2,878	1,134	21	1,686	1,472	48	125	0	5,009	860	13,688
6	**2" PE**	2PE		7,404	1,244	0	2,502	569	14	310		3	3,821	15,869
7	**2" Steel**	2ST	13	2,495	2,295	770	1,997	70	98			7	3,027	10,772
8	**20" Steel**	20ST		203	110		44	315	39		-	662	341	1,713
9	**3" PE**	3PE			702		8							710
10	**4" PE**	4PE		5,791	1,820	813	7,209	7,591	590	493		0	9,613	33,920
11	**4" Steel**	4ST	1,377	18,553	4,468	1,436	4,992	7,840	797	609		64	6,868	47,005
12	**6" PE**	6PE		5,748	298	3,678	1,274	2,713	1	1,109		740	6,140	21,702
13	**6" Steel**	6ST	640	8,625	1,526	490	4,256	3,552	989		65	3,235	5,777	29,154
14	**8" PE**	8PE			3	121	8	66				2,057	762	3,017
15	**8" Steel**	8ST	91	11,318	1,086	256	837	1,030	56	359	0	7,284	15,218	37,534
16	**Grand Total**		2,972	64,751	15,375	7,586	27,314	26,193	2,734	3,006	66	31,378	57,064	238,438

	Sum of Equivalent Footage (D*G) Pipe size and type	Lookup	Pro Forma Schedule 57G-C	57G-I	85G-C2	85G-I2	85T-C	85T-I	87G-C3	87G-I3	87T-C	87T-I	SC	Grand Total
17	**1" Steel**	.75-2.5ST	$ -	$ -	$ 68	$ -	$ -	$ 0	$ -	$ -	$ -	$ -	$ -	$ 68
18	**1.25" PE**	1.25PE	$ -	$ 209	$ 7,287	$ -	$ 498	$ 3	$ -	$ -	$ -	$ -	$ 2,737	$ 10,733
19	**1.25" Steel**	.75-2.5ST	$ -	$ -	$ 13	$ -	$ 584	$ -	$ -	$ -	$ -	$ -	$ -	$ 598
20	**12" Steel**	12ST	$ 80,259	$ 348,544	$ 64,203	$ 360	$ 495,833	$ 196,868	$ 20,585	$ -	$ 12	$ 2,489,739	$ 908,915	$ 4,605,320
21	**16" Steel**	14-16ST	$ 68,961	$ 437,007	$ 172,225	$ 3,139	$ 255,979	$ 223,491	$ 7,285	$ 18,971	$ 30	$ 760,437	$ 130,571	$ 2,078,094
22	**2" PE**	2PE	$ -	$ 136,891	$ 23,001	$ 7	$ 46,260	$ 10,527	$ 262	$ 5,736	$ -	$ 63	$ 70,654	$ 293,402
23	**2" Steel**	2ST	$ 346	$ 67,121	$ 61,743	$ 20,707	$ 53,712	$ 1,888	$ 2,639	$ -	$ -	$ 182	$ 81,438	$ 289,777
24	**20" Steel**	20ST	$ -	$ 55,347	$ 29,863	$ -	$ 12,018	$ 85,930	$ 10,647	$ -	$ -	$ 180,269	$ 92,847	$ 466,920
25	**3" PE**	3PE	$ -	$ -	$ 29,534	$ -	$ 328	$ -	$ -	$ -	$ -	$ -	$ -	$ 29,863
26	**4" PE**	4PE	$ -	$ 186,546	$ 58,634	$ 26,178	$ 232,201	$ 244,500	$ 18,991	$ 15,874	$ -	$ 2	$ 309,653	$ 1,092,578
27	**4" Steel**	4ST	$ 118,178	$ 1,592,085	$ 383,413	$ 123,209	$ 428,347	$ 672,770	$ 68,430	$ 52,266	$ -	$ 5,533	$ 589,406	$ 4,033,638
28	**6" PE**	6PE	$ -	$ 380,025	$ 19,697	$ 243,131	$ 84,250	$ 179,395	$ 76	$ 73,350	$ -	$ 48,905	$ 405,963	$ 1,434,793
29	**6" Steel**	6ST	$ 45,697	$ 616,340	$ 109,014	$ 34,981	$ 304,111	$ 253,803	$ 70,653	$ -	$ 4,669	$ 231,170	$ 412,831	$ 2,083,269
30	**8" PE**	8PE	$ -	$ -	$ 291	$ 11,748	$ 732	$ 6,407	$ -	$ -	$ -	$ 199,153	$ 73,816	$ 292,148
31	**8" Steel**	8ST	$ 13,416	$ 1,674,381	$ 160,631	$ 37,885	$ 123,828	$ 152,314	$ 8,233	$ 53,116	$ 2	$ 1,077,542	$ 2,251,346	$ 5,552,693
32	**Grand Total**		$ 326,857	$ 5,494,497	$ 1,119,618	$ 501,347	$ 2,038,680	$ 2,027,894	$ 207,799	$ 219,313	$ 4,713	$ 4,992,996	$ 5,330,177	**$ 22,263,893**
33												**Total Costs:**		**$ 2,071,111,014**
34												**Ratio of Direct to Total:**		**0.0107**
35	Allocation Factors		1.5%	24.7%	5.0%	2.3%	9.2%	9.1%	0.9%	1.0%	0.0%	22.4%	23.9%	100.0%
36												Total Account 376 Plant in Service:		$ 1,033,284,953
37												Total Mains Direct Assignment:		$ 11,107,538
38	Allocated Direct Costs		$ 163,070	$ 2,741,225	$ 558,582	$ 250,124	$ 1,017,105	$ 1,011,724	$ 103,672	$ 109,416	$ 2,351	$ 2,491,024	$ 2,659,245	$ 11,107,538

Puget Sound Energy
2007 General Rate Case
Account 376 - Directly Assigned Equivalent Pipe Footage and Costs (2007 $) - COS 2

Line No.	Sum of Equivalent Footage (D*G) Pipe size and type	Lookup	Pro Forma Schedule 41T	57G-C	57G-I	85G-C2	85G-I2	85T-C	85T-I	87G-C3	87G-I3	87T-C	87T-I	SC	Grand Total
1	**1" Steel**	.75-2.5ST				3			0						3
2	**1.25" PE**	1.25PE			11	368		25	0					138	541
3	**1.25" Steel**	.75-2.5ST				1		24							25
4	**12" Steel**	12ST	198	397	1,724	318	2	2,453	974	102		0	12,318	4,497	22,982
5	**16" Steel**	14-16ST	129	454	2,878	1,134	21	1,686	1,472	48	125	0	5,009	860	13,817
6	**2" PE**	2PE	4,264		7,404	1,244	0	2,502	569	14	310		3	3,821	20,133
7	**2" Steel**	2ST	802	13	2,495	2,295	770	1,997	70	98			7	3,027	11,574
8	**20" Steel**	20ST	99		203	110		44	315	39		-	662	341	1,813
9	**3" PE**	3PE				702		8							710
10	**4" PE**	4PE	2		5,791	1,820	813	7,209	7,591	590	493		0	9,613	33,922
11	**4" Steel**	4ST	580	1,377	18,553	4,468	1,436	4,992	7,840	797	609		64	6,868	47,585
12	**6" PE**	6PE	822		5,748	298	3,678	1,274	2,713	1	1,109		740	6,140	22,524
13	**6" Steel**	6ST	1,526	640	8,625	1,526	490	4,256	3,552	989		65	3,235	5,777	30,680
14	**8" PE**	8PE	18			3	121	8	66				2,057	762	3,035
15	**8" Steel**	8ST	1,953	91	11,318	1,086	256	837	1,030	56	359	0	7,284	15,218	39,487
16	**Grand Total**		10,393	2,972	64,751	15,375	7,586	27,314	26,193	2,734	3,006	66	31,378	57,064	248,830

	Sum of Equivalent Footage (D*G) Pipe size and type	Lookup	Pro Forma Schedule 41T	57G-C	57G-I	85G-C2	85G-I2	85T-C	85T-I	87G-C3	87G-I3	87T-C	87T-I	SC	Grand Total
17	**1" Steel**	.75-2.5ST	$ -	$ -	$ -	$ 68	$ -	$ -	$ 0	$ -	$ -	$ -	$ -	$ -	$ 68
18	**1.25" PE**	1.25PE	$ -	$ -	$ 209	$ 7,287	$ -	$ 498	$ 3	$ -	$ -	$ -	$ -	$ 2,737	$ 10,733
19	**1.25" Steel**	.75-2.5ST	$ -	$ -	$ -	$ 13	$ -	$ 584	$ -	$ -	$ -	$ -	$ -	$ -	$ 598
20	**12" Steel**	12ST	$ 40,026	$ 80,259	$ 348,544	$ 64,203	$ 360	$ 495,833	$ 196,868	$ 20,585	$ -	$ 12	$ 2,489,739	$ 908,915	$ 4,645,346
21	**16" Steel**	14-16ST	$ 19,601	$ 68,961	$ 437,007	$ 172,225	$ 3,139	$ 255,979	$ 223,491	$ 7,285	$ 18,971	$ 30	$ 760,437	$ 130,571	$ 2,097,695
22	**2" PE**	2PE	$ 78,838	$ -	$ 136,891	$ 23,001	$ 7	$ 46,260	$ 10,527	$ 262	$ 5,736	$ -	$ 63	$ 70,654	$ 372,240
23	**2" Steel**	2ST	$ 21,566	$ 346	$ 67,121	$ 61,743	$ 20,707	$ 53,712	$ 1,888	$ 2,639	$ -	$ -	$ 182	$ 81,438	$ 311,342
24	**20" Steel**	20ST	$ 27,102	$ -	$ 55,347	$ 29,863	$ -	$ 12,018	$ 85,930	$ 10,647	$ -	$ -	$ 180,269	$ 92,847	$ 494,022
25	**3" PE**	3PE	$ -	$ -	$ -	$ 29,534	$ -	$ 328	$ -	$ -	$ -	$ -	$ -	$ -	$ 29,863
26	**4" PE**	4PE	$ 61	$ -	$ 186,546	$ 58,634	$ 26,178	$ 232,201	$ 244,500	$ 18,991	$ 15,874	$ -	$ 2	$ 309,653	$ 1,092,639
27	**4" Steel**	4ST	$ 49,752	$ 118,178	$ 1,592,085	$ 383,413	$ 123,209	$ 428,347	$ 672,770	$ 68,430	$ 52,266	$ -	$ 5,533	$ 589,406	$ 4,083,390
28	**6" PE**	6PE	$ 54,351	$ -	$ 380,025	$ 19,697	$ 243,131	$ 84,250	$ 179,395	$ 76	$ 73,350	$ -	$ 48,905	$ 405,963	$ 1,489,144
29	**6" Steel**	6ST	$ 109,009	$ 45,697	$ 616,340	$ 109,014	$ 34,981	$ 304,111	$ 253,803	$ 70,653	$ -	$ 4,669	$ 231,170	$ 412,831	$ 2,192,278
30	**8" PE**	8PE	$ 1,722	$ -	$ -	$ 291	$ 11,748	$ 732	$ 6,407	$ -	$ -	$ -	$ 199,153	$ 73,816	$ 293,870
31	**8" Steel**	8ST	$ 288,961	$ 13,416	$ 1,674,381	$ 160,631	$ 37,885	$ 123,828	$ 152,314	$ 8,233	$ 53,116	$ 2	$ 1,077,542	$ 2,251,346	$ 5,841,654
32	**Grand Total**		$ 690,990	$ 326,857	$ 5,494,497	$ 1,119,618	$ 501,347	$ 2,038,680	$ 2,027,894	$ 207,799	$ 219,313	$ 4,713	$ 4,992,996	$ 5,330,177	**$ 22,954,882**
33													**Total Costs:**		**$ 2,071,111,014**
34													**Ratio of Direct to Total:**		**0.0111**
35	Allocation Factors		3.0%	1.4%	23.9%	4.9%	2.2%	8.9%	8.8%	0.9%	1.0%	0.0%	21.8%	23.2%	97.0%
36													Total Account 376 Plant in Service:		$ 1,033,284,953
37													Total Mains Direct Assignment:		$ 11,452,276
38	Allocated Direct Costs		$ 344,737	$ 163,070	$ 2,741,225	$ 558,582	$ 250,124	$ 1,017,105	$ 1,011,724	$ 103,672	$ 109,416	$ 2,351	$ 2,491,024	$ 2,659,245	$ 11,452,276

Exhibit No. _____ (SG-8T)
Page 4 of 7

Puget Sound Energy
2007 General Rate Case
Derivation of Peak-Average Allocation Factor for Mains

Line No.	Item	Amount	Percent	Allocator	Residential (16,23,53)	Comm. & Indus. (31,36,51,61)	Large Volume (41)	Interruptible Sales (85S)	Limited Interruptible (86)	Non-Exclusive Interruptible Sales (87S)	Transportation (57)	Special Contracts	CNG Service (50)	Interruptible Transport (85T)	Non-Exclusive Inter. Transport (87T)
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
	Original														
	Peak		67.042%												
1	Allocated Mains Costs	692,739,082													
2	Direct Assignment	11,107,538		Direct	-	-	-	2,837,535	-	2,706,464	-	5,563,540	-		
3	Net Allocated Costs	681,631,544		Design Peak	485,593,738	174,028,004	21,042,167	-	954,164	-	-	-	13,471	-	-
4	Total Peak Costs	692,739,082			485,593,738	174,028,004	21,042,167	2,837,535	954,164	2,706,464	-	5,563,540	13,471	-	-
	Average		32.958%												
5	Allocated Mains Costs	340,545,871													
6	Direct Assignment	-			0	0	0	0	0	0	0	0	0	0	0
7	Net Allocated Costs	340,545,871		Volume	182,542,614	69,880,312	23,436,600	13,865,801	5,811,623	34,136,325	-	10,831,184	41,412	-	-
8	Total Average Costs	340,545,871			182,542,614	69,880,312	23,436,600	13,865,801	5,811,623	34,136,325	-	10,831,184	41,412	-	-
9	Total (PA_MAINS)	$ 1,033,284,953			668,136,352	243,908,316	44,478,767	16,703,336	6,765,786	36,842,788	-	16,394,724	54,883	-	-
10	Percent	100.00%			64.66%	23.61%	4.30%	1.62%	0.65%	3.57%	0.00%	1.59%	0.01%	0.00%	0.00%
	Allocators														
11	Design Peak	8,828,973			6,289,753	2,254,133	272,553	-	12,359	-	-	-	174	-	-
12	Percent	100.00%			71.24%	25.53%	3.09%	0.00%	0.14%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
13	Total Annual Volume	822,201,562			532,765,816	203,951,509	68,401,668	-	16,961,705	-	-		120,864		
14	Minimum Annual Volume	171,709,912			-	-	-	40,468,496	-	99,629,705	-	31,611,711	-	-	-
15	Volume	993,911,474			532,765,816	203,951,509	68,401,668	40,468,496	16,961,705	99,629,705	-	31,611,711	120,864	-	-
16	Percent	100.00%			53.60%	20.52%	6.88%	4.07%	1.71%	10.02%	0.00%	3.18%	0.01%	0.00%	0.00%

Exhibit No. _____ (SG-8T)
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Puget Sound Energy
2007 General Rate Case
Derivation of Peak-Average Allocation Factor for Mains

Line No.	Item	Amount	Percent	Allocator	Residential (16,23,53)	Comm. & Indus. (31,36,51,61)	Large Volume (41)	Interruptible Sales (85S)	Limited Interruptible (86)	Non-Exclusive Interruptible Sales (87S)	Transportation (57)	Special Contracts	CNG Service (50)	Interruptible Transport (85T)	Non-Exclusive Inter. Transport (87T)
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
	COS 2														
	Peak		67.042%												
1	Allocated Mains Costs	692,739,082													
2	Direct Assignment	11,452,276		Direct	-	-	-	808,706	-	213,088	-	10,430,482	-	-	-
3	Net Allocated Costs	681,286,807		Design Peak	485,544,312	174,010,291	20,764,667	-	954,066	-	-	-	13,469	-	-
4	Total Peak Costs	692,739,082			485,544,312	174,010,291	20,764,667	808,706	954,066	213,088	-	10,430,482	13,469	-	-
	Average		32.958%												
5	Allocated Mains Costs	340,545,871													
6	Direct Assignment	-			0	0	0	0	0	0	0	0	0	0	0
7	Net Allocated Costs	340,545,871		Volume	182,616,273	69,908,510	23,308,642	2,279,880	5,813,968	7,530,831	-	49,046,339	41,429	-	-
8	Total Average Costs	340,545,871			182,616,273	69,908,510	23,308,642	2,279,880	5,813,968	7,530,831	-	49,046,339	41,429	-	-
9	Total (PA_MAINS)	$ 1,033,284,953			668,160,585	243,918,801	44,073,309	3,088,586	6,768,034	7,743,919	-	59,476,821	54,898	-	-
10	Percent	100.00%			64.66%	23.61%	4.27%	0.30%	0.66%	0.75%	0.00%	5.76%	0.01%	0.00%	0.00%
	Allocators														
11	Design Peak	8,825,406			6,289,753	2,254,133	268,986	-	12,359	-	-	-	174	-	-
12	Percent	100.00%			71.27%	25.54%	3.05%	0.00%	0.14%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
13	Total Annual Volume	821,800,666			532,765,816	203,951,509	68,000,772	-	16,961,705	-	-	-	120,864	-	-
14	Minimum Annual Volume	171,709,912			-	-	-	6,651,337	-	21,970,491	-	143,088,084	-	-	-
15	Volume	993,510,578			532,765,816	203,951,509	68,000,772	6,651,337	16,961,705	21,970,491	-	143,088,084	120,864	-	-
16	Percent	100.00%			53.62%	20.53%	6.84%	0.67%	1.71%	2.21%	0.00%	14.40%	0.01%	0.00%	0.00%

Puget Sound Energy
2007 General Rate Case
Derivation of Peak-Average Allocation Factor for Mains

Line No.	Item	Amount	Percent	Allocator	Residential (16,23,53)	Comm. & Indus. (31,36,51,61)	Large Volume (41)	Interruptible Sales (85S)	Limited Interruptible (86)	Non-Exclusive Interruptible Sales (87S)	Transportation (57)	Special Contracts	CNG Service (50)	Interruptible Transport (85T)	Non-Exclusive Inter. Transport (87T)
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
	COS 3														
	Peak		67.042%												
1	Allocated Mains Costs	692,739,082													
2	Direct Assignment	11,107,538		Direct	-	-	-	808,706	-	213,088	-	5,563,540	-	2,028,829	2,493,376
3	Net Allocated Costs	681,631,544		Design Peak	485,593,738	174,028,004	21,042,167	-	954,164	-	-	-	13,471	-	-
4	Total Peak Costs	692,739,082			485,593,738	174,028,004	21,042,167	808,706	954,164	213,088	-	5,563,540	13,471	2,028,829	2,493,376
	Average		32.958%												
5	Allocated Mains Costs	340,545,871													
6	Direct Assignment	-			0	0	0	0	0	0	0	0	0	0	0
7	Net Allocated Costs	340,545,871		Volume	182,542,614	69,880,312	23,436,600	2,278,961	5,811,623	7,527,793	-	10,831,184	41,412	11,586,841	26,608,531
8	Total Average Costs	340,545,871			182,542,614	69,880,312	23,436,600	2,278,961	5,811,623	7,527,793	-	10,831,184	41,412	11,586,841	26,608,531
9	Total (PA_MAINS)	$ 1,033,284,953			668,136,352	243,908,316	44,478,767	3,087,666	6,765,786	7,740,881	-	16,394,724	54,883	13,615,670	29,101,907
10	Percent	100.00%			64.66%	23.61%	4.30%	0.30%	0.65%	0.75%	0.00%	1.59%	0.01%	1.32%	2.82%
	Allocators														
11	Design Peak	8,828,973			6,289,753	2,254,133	272,553	-	12,359	-	-	-	174	-	-
12	Percent	100.00%			71.24%	25.53%	3.09%	0.00%	0.14%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
13	Total Annual Volume	822,201,562			532,765,816	203,951,509	68,401,668	-	16,961,705	-	-		120,864		
14	Minimum Annual Volume	171,709,912			-	-	-	6,651,337	-	21,970,491	-	31,611,711	-	33,817,159	77,659,214
15	Volume	993,911,474			532,765,816	203,951,509	68,401,668	6,651,337	16,961,705	21,970,491	-	31,611,711	120,864	33,817,159	77,659,214
16	Percent	100.00%			53.60%	20.52%	6.88%	0.67%	1.71%	2.21%	0.00%	3.18%	0.01%	3.40%	7.81%

Exhibit No. ____ (SG-8T)
Page 7 of 7

Exhibit No. _____ (SG-9T)
Docket No. UE-070200/UG-07-2301
2007 PSE GENERAL RATE CASE
WITNESS: STANLEY GENT

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, vs. PUGET SOUND ENERGY, INC., Respondent.	Docket No. UE-072300 Docket No. UG-072301

PREFILED TESTIMONY OF

STANLEY GENT ON BEHALF OF

SEATTLE STEAM COMPANY

MAY 30, 2008

Allocation of Account 376 Plant in Service
2004, 2006 and 2007 General Rate Cases
Supplemented with 2004 Method Applied to 2007

Description	Residential (23,16)	Commercial & Industrial (31,61)	Large Volume (41)	Interruptible (85)	Limited Interruptible (86)	Non-exclusive Interruptible (87)	Transport (57)	Transport & Contracts (57,SC) (4)	CNG (50)	Rentals (71,72,74)	Total	Subtotal 85,87,57, Contracts
2004 Cost of Service Study (1)												
Direct assignment				$ 9,123,966		$ 6,925,219	$ 27,262,858	$ 7,582,890			$ 50,894,933	$ 50,894,933
Other	$ 423,544,826	$ 163,978,080	$ 34,181,747		$ 12,377,419				$ 27,540		$ 634,109,612	$ -
Total	$ 423,544,826	$ 163,978,080	$ 34,181,747	$ 9,123,966	$ 12,377,419	$ 6,925,219	$ 27,262,858	$ 7,582,890	$ 27,540	$ -	$ 685,004,545	$ 50,894,933
Percent of total	61.8%	23.9%	5.0%	1.3%	1.8%	1.0%	4.0%	1.1%	0.0%	0.0%	100.0%	7.4%
2006 Cost of Service Study (2)												
Direct assignment				$ 687,177		$ 329,033	$ 1,448,926	$ 281,753			$ 2,746,889	$ 2,746,889
Large diameter	$ 221,395,253	$ 85,209,267	$ 16,344,939	$ 2,383,669	$ 2,999,876	$ 4,396,320	$ 21,654,065	$ 5,361,758	$ 8,094	$ -	$ 359,753,240	$ 33,795,811
Small diameter	$ 284,229,783	$ 109,750,022	$ 21,537,743	$ -	$ 4,315,206	$ -	$ -	$ -	$ 11,014	$ -	$ 419,843,768	$ -
Total	$ 505,625,035	$ 194,959,289	$ 37,882,683	$ 3,070,846	$ 7,315,082	$ 4,725,353	$ 23,102,991	$ 5,643,511	$ 19,108	$ -	$ 782,343,897	$ 36,542,700
Percent of total	64.6%	24.9%	4.8%	0.4%	0.9%	0.6%	3.0%	0.7%	0.0%	0.0%	100.0%	4.7%
2007 Cost of Service Study (3,4,5)												
Direct assignment				$ 2,840,985	$ -	$ 2,709,754	$ -	$ 5,570,305			$ 11,121,044	$ 11,121,044
Other peak	$ 486,184,166	$ 174,239,603	$ 21,067,752	$ -	$ 955,324	$ -	$ -	$ -	$ 13,487		$ 682,460,332	$ -
Average	$ 182,764,565	$ 69,965,279	$ 23,465,096	$ 13,882,661	$ 5,818,689	$ 34,177,830	$ -	$ 10,844,353	$ 41,462		$ 340,959,936	$ 58,904,844
Total	$ 668,948,731	$ 244,204,882	$ 44,532,849	$ 16,723,646	$ 6,774,013	$ 36,887,585	$ -	$ 16,414,658	$ 54,949	$ -	$ 1,034,541,312	$ 70,025,888
Percent of total	64.7%	23.6%	4.3%	1.6%	0.7%	3.6%	0.0%	1.6%	0.0%	0.0%	100.0%	6.8%
2007 Using 2004 Method (4,6,7)												
Direct assignment				$ 5,284,576		$ 7,640,994		$ 46,219,962			$ 59,145,531	$ 59,145,531
Other peak												
Average												
Total				$ 5,284,576		$ 7,640,994		$ 46,219,962			$ 1,034,541,312	$ 59,145,531
Percent of total				0.5%		0.7%		4.5%				5.7%

Notes:

(1) 2004 direct assignment was based on flow analysis from city gate to customer, assuming system utilization in historical peak conditions. Balance was classified as demand and commodity based on the system load factor and allocated using peak and commodity, respectively.

(2) 2006 direct assignment was based on data from 2004 flow analysis, including only main dedicated to serving individual customers. Balance was allocated based on peak and average, with the peak estimated on design day conditions and the average component allocated on commodity. Aside from the direct assignment, large customers (Schedules 85, 87, 57 and contracts) received only cost associated wtih main at least four inches in diameter.

(3) 2007 main was split into peak and average components based on system load factor. Large customers' responsibility for peak portion was based on flow analysis from city gate to customer, assuming system utilization in design day peak conditions. Average component was allocated based on commodity, with large customers' commodity defined as volume in the lowest-volume month times 12.

(4) Schedule 57 was grouped with special contracts in the 2007 cost of service study.

(5) 2007 proposed results include customers assumed to migrate to Schedules 41T, 85T and 87T in Schedules 41, 85 and 87 rather than Schedule 57/Contracts.

(6) 2007 results using the 2004 method include customers assumed to migrate to Schedules 41T, 85T and 87T in Schedule 57/Contracts rather than Schedules 41, 85 and 87.

(7) This analysis is consistent with that used in UG-040640 with respect to the directly assigned component of mains to Schedules 85, 87, 57 and contracts only. It is a partial study of the directly assigned component of Account 376. It does not reflect a full cost of service study, therefore estimates of allocated costs to the other classes are not available.

Exhibit No. _____ (SG-10T)
Docket No. UE-070200/UG-07-2301
2007 PSE GENERAL RATE CASE
WITNESS: STANLEY GENT

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, vs. PUGET SOUND ENERGY, INC., Respondent.	Docket No. UE-072300 Docket No. UG-072301

PREFILED TESTIMONY OF

STANLEY GENT ON BEHALF OF

SEATTLE STEAM COMPANY

MAY 30, 2008

Gas Rate Schedule Review
Review of Schedule No. 57
(Transportation)
May 17, 2007

Policy Considerations

What is the history of this schedule, i.e., why was it created?

- 1985 – current (prior to this time billing was through the customer's primary sales schedule because unbundled was not available).
- Initially two transportation schedules offered, by customer size.
- Service agreement required.
- Interruptible.
- Firm option available.

In general, how has this schedule changed over time? Why?
Responsibility for metering costs and telemetry was shifted to PSE. Changes in balancing provisions. Took into account the use by these customers of PSE storage facilities. Option for firm was not initially offered. Went from one block to 6 blocks. The addition of balancing service credit rate.

In its order in UG-920840, the WUTC allowed PSE to implement two transportation schedules, 57 and 58, based on customer size. At the same time the Commission also ordered the company to file a single, declining block transportation schedule no later than January 1, 1994. In its order the WUTC expressed a preference for a single schedule but noted that the company had not provided cost of service analysis that would allow proper determination of the customer charge or rate blocks. The company proposed to change to a single declining block transportation rate in UG-940814.

What is the purpose of this schedule?
To allow for unbundled gas service and in response to bypass threats.

What is the theoretical basis for this schedule?
The only difference is whose commodity is being delivered, with the exception of balancing the use of the distribution system is the same as when PSE supplies the gas.

Is this schedule or service durable?
Yes.

Is this schedule consistent with electric tariffs? If not, why not?
Similar to Schedule 448 and 449

What corporate objective does this schedule address? How?
Customer service.

Demand related costs are allocated to customer classes based on estimated peak day demands of each class. For transportation customers, their firm demands are used. Peak demands of firm sales customers are estimated based on weather normalization volume and 52 heating degree days.

An alternative way to measure each customer class's contribution to demand costs is to analyze actual load data.

Are the demand charges consistent with demand costs?
The distribution demand charge is $1.02 per therm compared with a unit cost of $4.00, so the charge is 75 percent below cost.

What are the load characteristics of customers on this schedule (customer count, schedule count, throughput, winter (November-March) throughput, use per customer, peak demand, annual load factor, etc.)?
Load characteristics are summarized in Attachment E. Frequency distributions of usage per customer are provided as Attachment F.

Rules and Standards

Is the schedule consistent with gas rules in the tariff?
Inconsistencies have not been identified.

Is the schedule consistent with the Washington Administrative Code (WAC)?
Inconsistencies have not been identified.

Workability

Is the schedule clear and understandable?
Response is provided in Attachment G.

How easy is the schedule to administer, i.e., how large is the administrative burden?
Response is provided in Attachment G.

Other Considerations

Does the schedule serve customers the way it was intended to?

Are customers better off on this schedule than on alternative schedules?

What other considerations are there regarding this schedule?

Exhibit No. _____ (SG-11T)
Docket No. UE-070200/UG-07-2301
2007 PSE GENERAL RATE CASE
WITNESS: STANLEY GENT

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

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PREFILED TESTIMONY OF

STANLEY GENT ON BEHALF OF

SEATTLE STEAM COMPANY

MAY 30, 2008

Gas Rate Schedule Review
Review of Schedule No. 87
(Non-exclusive Interruptible With Firm Option)
April 24, 2007

Policy Considerations

What is the history of this schedule, i.e., why was it created?
Schedule 87 was created in 1977 to offer interruptible gas sales service to the largest customers of the Company.

In general, how has this schedule changed over time? Why?
Schedule 87 had seasonal rates from 1977 until 1986. The number of blocks in the rate was expanded from 3 to 4 in 1987 then reduced to 2 in 1989, expanded to 4 in 1995 and to 6 in 2002. From 1983 to 1986 there was a "Base-Year" concept in the tariff where there was an incentive rate for gas usage greater than the "Base-Year". The "Gas Procurement Charge" was broken out of other charges in 2005.

Firm charge has increased over time to send economic signal.

What is the purpose of this schedule?
To offer competitive rates to the largest customers.

What is the theoretical basis for this schedule?
The gas distribution system has limited capacity and in times of high usage all customers cannot be provided with service so we need to have the ability to interrupt some customers.

Is this schedule or service durable?
Possibly. However, there may be concerns about offering interruptible service on a portion of the distribution system where there is sufficient capacity. Or a need to offer a rate that is sufficient to entice existing firm customers to switch to interruptible.

Is this schedule consistent with electric tariffs? If not, why not?
No. Under the electric tariffs Schedule 46 can be interrupted for economic reasons in addition to system related reasons. No back-up fuel is required under Schedule 46.

What corporate objective does this schedule address? How?
Customer service.

System

What is the engineering basis for the schedule?
Split of firm and interruptible. System designed to serve firm. Interruptible is on basis of using capacity that is available. Looking at Rule 23, if the customer decides to continue

Cost of Service

How are costs for service on this schedule different from service on other schedules?
In the 2006 cost of service study, the average distribution cost for Schedule 87 was $0.04 per therm. This is approximately half the cost for Schedule 41, which provides firm service for large volume, high load factor customers, and is equal to the unit cost for transportation customers. A summary of unit costs by schedule is attached as Attachment B, and a summary of costs by type is attached as Attachment C.

In the 2006 cost of service study, costs that are generally related to large customers were identified and directly assigned to certain classes, including the interruptible classes. These costs included Major Accounts, Energy Measurement, Instrumentation, System Control & Protection, and Business Account Services, and they reside in multiple FERC accounts.

How can we identify and measure demand costs?
In the cost of service study, demand costs are those costs incurred to serve the peak day demand of customers. Demand costs are associated with designing, installing and operating the system to meet maximum hourly gas flow requirements.

The plant items that are specifically identified as demand related are production plant, most of which is related to liquefied natural gas; all storage plant except the portion of Jackson Prairie that is used for balancing; transmission; distribution mains; distribution general measuring and regulating station equipment; and compressed natural gas (CNG) equipment. Operations and maintenance costs that are related to this plant are also classified as demand related.

Demand related costs are allocated to customer classes based on estimated peak day demands of each class. For transportation customers, their firm demands are used. Peak demands of firm sales customers are estimated based on weather normalization volume and 52 heating degree days.

An alternative way to measure each customer class's contribution to demand costs is to analyze actual load data.

Are the demand charges consistent with demand costs?
The distribution demand charge is $1.02 per therm compared with a unit cost of $58.42, so the charge is 98 percent below cost. The gas supply demand charge is $1.05 compared with a unit cost of $91.12, so the charge is 99 percent below cost. Schedule 87 has very low contract demands, which increases the unit cost significantly.

What are the load characteristics of customers on this schedule (customer count, schedule count, throughput, winter (November-March) throughput, use per customer, peak demand, annual load factor, etc.)?
Load characteristics are summarized in Attachment E. Frequency distributions of usage per customer are provided as Attachment F.