

BEFORE THE WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

WUTC V. CASCADE NATURAL GAS CORPORATION

DOCKET NO. UG-060256

CROSS-REBUTTAL TESTIMONY OF JIM LAZAR (JL-5T)

ON BEHALF OF

PUBLIC COUNSEL

DATED SEPTEMBER 12, 2006

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**INTRODUCTION**

**Q. Please state your name, address, and occupation.**

A. Jim Lazar, 1063 Capitol Way S. #202, Olympia, WA. I am a consulting economist specializing in utility rate and resource analysis.

**Q. Are you the same Jim Lazar who submitted Direct Testimony identified as Exhibit No. \_\_ (JL-1T) in this matter on behalf of Public Counsel?**

A. Yes. My qualifications and previous utility regulation experience are described on page 1, line 1 through page 2, line 6 of Exhibit No. \_\_ (JL-1T).

**Q. On whose behalf are you appearing in this proceeding?**

A. My testimony is sponsored by the Public Counsel Section, Office of the Attorney General.

**Q. What is the purpose of your cross-rebuttal testimony in this proceeding?**

A. First, I respond to the residential rate design recommendations of WUTC Staff witness Joelle Steward. Exhibit No. \_\_ (JRS-1T). Second, I respond to WUTC Staff’s proposals regarding miscellaneous fees. Exhibit No. \_\_ (MPP-1T). Third, I respond to adopt the cost of service study for this docket performed by Donald W. Schoenbeck on behalf of the Northwest Industrial Gas Users. Exhibit No. \_\_ (DWS-1T).

**RATE DESIGN**

**Q. What is Ms. Steward’s recommendation regarding residential rate design.**

1 A. Ms. Steward has proposed a residential rate consisting of a \$5.50 per month  
2 Basic Charge, and a flat commodity rate.

3 **Q. What is improper, in your opinion, with Ms. Steward's rate design**  
4 **proposals?**

5 A. There are four principal problems. First, the \$5.50 per month Basic Charge  
6 she proposes is excessive based on the cost analysis I prepared. Ms. Steward  
7 prepared no alternative analysis in support of her proposal. Second, her  
8 proposal for a sharp increase in the customer charge actually results in a  
9 decrease to the commodity charge, meaning that customer incentives to  
10 conserve will be reduced, resulting in increased gas consumption. Third, her  
11 proposal for a flat commodity charge fails to recognize the higher cost  
12 associated with serving space heating consumption due to the erratic and  
13 weather-dependent nature of that consumption. Finally, her proposal for a flat  
14 commodity charge coupled with a large increase to the customer charge is far  
15 out of synch with the overwhelming majority of natural gas customers along  
16 the West Coast (Washington, Oregon, and California), where over 85% pay  
17 inverted rates coupled with either no customer charge or at least a customer  
18 charge below the \$5.50 that Ms. Steward is proposing.

19 **Q. What is the residential revenue requirement that results from the Staff**  
20 **proposal?**

21 A. The overall staff proposal is a rate increase of \$1,629,422, but it proposes that  
22 \$1,885,720 be recovered through increases in various fees and charges, mostly

1 to residential customers. The net change in revenue requirement that is spread  
2 between classes is a decrease of \$256,298. Exhibit No. \_\_\_\_ (MPP-1T), at page  
3 5. I estimate that the residential class would bear about 90% of the fee  
4 increases, or \$1.63 million, offset by about \$161,000 of the residual decrease,  
5 for a total class increase of about \$1.5 million, of which \$1.63 million would  
6 be reflected in fee increases, and the tariff rates in the aggregate would need to  
7 decrease slightly. However, the Staff proposed increase to the Basic Charge  
8 would produce an additional \$2.6 million per year, meaning that under the  
9 overall staff proposal, the commodity delivery revenue would decrease by  
10 about \$2.7 million.

11 **Q. What are the rates that you estimate would result from the Staff**  
12 **proposal?**

13 A. After giving effect to Ms. Steward's proposed 37.5% increase in the  
14 residential Basic Charge, Ms. Steward's proposal actually results in a  
15 significant (12.5%) decrease to the commodity delivery rate to residential  
16 customers. Ms. Steward did not present rates which reflect her proposed rate  
17 design. I consider this a significant omission. The table below shows my  
18 estimate of the overall effect of her total proposal (revenue requirement, fee  
19 increases, rate design) on residential gas delivery rates:

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**Table 1**  
**Staff Residential Rate Design As Proposed (With Fee Increases)**

		<b>Current</b>		<b>Staff Proposal</b>		<b>Change</b>
<b>Basic Charge</b>		<b>\$ 4.00</b>		<b>\$ 5.50</b>		<b>37.5%</b>
<b>Delivery Charge</b>		<b>\$ 0.22658</b>		<b>\$ 0.19825</b>		<b>-12.5%</b>

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**Q. What would the effect of this proposed rate design be on residential consumption?**

A. The effect would be to decrease consumers' incentives to constrain gas usage. Based on the same approach I used in my direct testimony, where I estimated that an inverted rate would eventually produce gas savings of 265,000 to 795,000 therms per year, I have estimated that the Staff rate design as proposed would produce an increase in residential gas consumption of about 720,000 therms per year, enough to meet the annual needs of about 1,000 new homes. In an era of natural gas scarcity, wholesale gas prices at record levels, and little evidence that these costs will abate in the future, I think it would be irresponsible for the Commission to fail to recognize the benefits of an inverted rate design in this proceeding.

**Q. Is Ms. Steward's proposed increase in the Basic Charge cost-justified?**

A. No, it is not.

**Q. What is the basis of your calculation in support of retaining the existing charge of \$4.00?**

1 A. As is set forth in my Exhibit No.\_\_\_\_ (JL-4), page 4, the two components of  
2 the Basic Charge are the recovery of the meter investment rate base, and the  
3 recovery of the meter reading, billing, and customer accounting expenses. I  
4 calculated the return on the metering rate base and it came to \$17.51 per year,  
5 or \$1.46 per month. The Company calculated the cost of meter reading and  
6 billing at \$18.61 per year, or \$1.55 per month. These total to \$3.01 per  
7 month, compared with the existing Basic Charge of \$4.00 per month.

8 **Q. Please provide a bit of background on this issue, and why it is important?**

9  
10 A. In Cascade’s last general rate case, one contested issue was the level of the  
11 Company’s meter reading and billing expenses. At one point, Public Counsel  
12 suggested that the Company be required to enter into joint meter reading and  
13 billing programs with electric or water utilities to reduce costs, as Avista  
14 Corporation and Puget Sound Energy have done. The Company agreed, in the  
15 Settlement and Stipulation resolving its last general rate case, to:

16 ...prepare a plan for reducing expenses of meter reading and  
17 billing...not later than November 30, 1996. This plan will  
18 result in a reduction in meter reading and billing expenses or  
19 increases in revenues from such activities or a combination of  
20 both so that by December 31, 1999, such expenses would not  
21 be more than two-thirds of test year expenditures increased at  
22 the compound rate of the Seattle Consumer Price Index plus  
23 customer growth.”

24  
25 Stipulation and Settlement, Docket Nos. UG-950326 and UG-951415

26 (Consolidated), at page 7. In other words, Cascade agreed to reduce billing  
27 expenses by more than thirty percent within three years, adjusted for inflation

1 and growth. See also, Docket Nos. UG-950326 and UG-951415, Fourth  
2 Supplemental Order (July 22, 1996), at p. 4.

3 **Q. What were the results of the Company's efforts to reduce these costs?**

4 A. As set forth in Cascade's response to Public Counsel Data Request No. 64,  
5 included as Exhibit No. \_\_ (JL-6), the Company achieved the following  
6 trajectory of these costs:

7 **Table 2**

8 **Cascade Natural Gas Meter Reading and Billing Expenses**

9

	<b>Cost Per Customer Per Year</b>	<b>Cost Per Customer Per Month</b>
<b>UG-950326 Test Period</b>	\$37.21	\$3.10
<b>December, 1999</b>	\$22.50	\$1.875
<b>UG-060256</b>	\$18.61	\$1.55

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11 As is evident, the cost per customer of meter reading and billing has  
12 declined by 50% in nominal terms, ignoring inflation. On an inflation-  
13 adjusted basis, these costs have come down more than 60%. Yet Ms. Steward  
14 has proposed increasing the Basic Charge that recovers these costs by 37.5%  
15 in the context of a general rate case in which the Staff is recommending an  
16 overall rate decrease.

17 This is inappropriate, deviates from the cost-basis in the record, and  
18 has the effect of shifting costs to small-use customers and discouraging  
19 conservation by reducing the rate per therm. Quite simply, the underlying  
20 costs for the Basic Charge have declined sharply since the last general rate

1 case, and there is no basis whatsoever for increasing the Basic Charge paid by  
2 consumers.

3 **Q. Please turn to the proposed flat rate design. Why is Staff's**  
4 **recommendation inappropriate?**

5 A. It is undisputed that a significant portion of the cost of providing a firm gas  
6 supply is ensuring its availability during peak usage. Therefore, it is quite  
7 intuitive that weather-dependent and seasonal space heating consumption,  
8 which pushes closer to the peak, is more expensive to serve than year-round  
9 baseload usage like water heating and cooking. In other words, the Company  
10 must have adequate capacity available to serve the winter peak demand, but  
11 that capacity is only fully used for a few weeks per year at most. In order to  
12 recover the "demand-related" portion of these costs over the relatively short  
13 period when it is needed to provide reliable service, the price needs to be  
14 higher for that sporadic usage. Yet Mr. Steward has proposed using a flat rate  
15 design, which charges the higher-cost space heating usage at the same rate as  
16 the lower-cost year-round baseload consumption.

17 **Q. What is the best way to recover the higher costs of space heating service**  
18 **in residential rates?**

19 A. I believe that the best way is an inverted rate design. Ideally, that rate design  
20 would have three blocks, one for baseload usage, one for "predictable" space  
21 heat usage, and one for "cold-year" space heat usage. Each would be



1 designed to recover the appropriate share of demand-related costs over the  
 2 expected usage.

3 **Q. Can you provide a simple numerical example of how demand-related**  
 4 **costs would be converted into unit costs for rate design?**

5 A. Yes. Assume, hypothetically, that the demand-related costs of the gas supply  
 6 and gas distribution system cost a total of \$30 per therm per year for  
 7 distribution capacity and gas supply (pipeline capacity and supplier  
 8 commitments), and that commodity-related cost of gas and gas distribution is  
 9 \$1.00 per therm. With that information, and reasonably good data on the  
 10 annual load factor of different uses, one can convert the demand-related costs  
 11 into unit costs, and easily calculate a unit cost for each type of service. I note  
 12 that these calculations are based on hypothetical numbers, because the  
 13 Company's cost of service model is insufficient to supply the data necessary  
 14 to identify actual costs.

15 **Table 3**  
 16 **Hypothetical Conversion of Unit Costs to Inverted Blocks**  
 17

	Water Heat	Space Heat
Load Factor	93%	20%
Annual Therms per Peak Therm	339.5	73
Assumed Annual Capacity-Related Cost Per Peak Therm	\$30.00	\$30.00
Capacity-Related Cost Per Therm	\$0.088	\$0.41
Commodity Cost Per Therm	\$1.00	\$1.00
Total Cost Per Therm	\$1.088	\$1.41

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1                   My proposed inverted rate design moves only a small portion of the  
2                   way towards the kind of inversion suggested by the assumptions above.

3           **Q.    What have you relied on for your estimate of space and water heating**  
4           **load factor?**

5           A.    I have used the data developed by Richard Byers, then with the Washington  
6           State Energy Office, in uncontested evidence presented to this Commission in  
7           1989. That analysis showed that the water heating load factor was about 93%,  
8           and the space heating load factor was 20%.

9           **Q.    Are these estimates consistent with more recent analyses of end-use load**  
10           **factors?**

11          A.    Yes. I serve on the Northwest Power and Conservation Council’s Regional  
12          Technical Forum (RTF), which advises the Council on energy conservation  
13          technical issues. The RTF has developed end-use load factor estimates for a  
14          wide variety of end-uses. Space heating load factors in our analyses were as  
15          low as 17%, depending on the climate zone and heating system design. The  
16          Byers study estimates from 1989 are very consistent with the more recent data  
17          we have developed. This is not surprising – water heat is still a year-round  
18          use of gas, and space heat remains highly seasonal. If anything, based on  
19          analysis by the RTF, I would expect space heating load factors to have  
20          declined due to improved energy codes reducing some shoulder-season space  
21          heating needs, since internal heating gains from people and appliance usage is  
22          retained within homes.

1                   Puget Sound Energy has reported a rather significant decline in the  
2                   load factor for its residential customers, from about 35% in 1994 to 24% in  
3                   the current rate proceeding. These load factors include all residential usage,  
4                   not just space heating. This decline is consistent with improved space heating  
5                   energy efficiency in new homes under current energy codes, because with  
6                   greater insulation levels, there is less need for heating during the shoulder  
7                   months, and therefore the remaining space heating usage has a lower annual  
8                   load factor.

9           **Q. Do other utilities in the Western United States have inverted natural gas**  
10           **rate designs?**

11           A. Yes. Out of 11.5 million residential natural gas customers on the West Coast,  
12           approximately 9.9 million, or about 86%, have inverted gas rates. Inverted  
13           natural gas rate designs are the norm in this region. Both Cascade's current  
14           rate design and Ms. Steward's proposed rate design are distinctly contrary to  
15           the rate design dominant on the West Coast.

16           **Q. Which gas utilities on the West Coast have inverted rates?**

17           A. I attempted to review all West Coast natural gas utilities. It is possible that I  
18           missed one or two minor companies. The following gas utilities on the West  
19           Coast have inverted residential rates, and their current rate designs are shown,  
20           (including both commodity and margin); the first block sizes vary by utility,  
21           with most in the range of 15 - 20 therms in summer and 50 – 80 therms in  
22           winter:

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**Table 4**  
**West Coast Gas Utilities With Inverted Rates**

<b>Utility</b>	<b>Basic Charge</b>	<b>First Block Rate</b>	<b>Second Block Rate</b>
<b>Long Beach Gas</b>	\$5.00	\$0.9143	\$1.0966
<b>Pacific Gas and Electric</b>	None	\$1.08803	\$1.31938
<b>Southern California Gas Company</b>	\$4.00	\$0.88143	\$1.06404
<b>San Diego Gas and Electric</b>	\$0.00	\$1.13051	\$1.35966
<b>Sierra Pacific No. California</b>	\$5.00	\$1.45267	\$1.55490
<b>Sierra Pacific So. California</b>	\$5.00	\$1.24215	\$1.39143
<b>Southwest Gas Lake Tahoe</b>	\$5.50	\$0.91399	\$1.09494

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Copies of the rate schedules of these companies, and the calculation of the percentage of West Coast residential gas customers who have inverted rates is included in my Exhibit No. \_\_ (JL-7). Note that two very large gas utilities, Pacific Gas and Electric and San Diego Gas and Electric have zero customer charges (PG&E does have a monthly minimum charge of \$3.00, what is known as a “disappearing minimum bill,” of the type referenced by Mr. Weiss). Only Southwest Gas, at Lake Tahoe, serving a very small number of consumers, has as high a Basic Charge as Ms. Steward is proposing in this docket. Most of these utilities have much more progressive rate designs than Cascade’s current rates, Cascade’s proposed rates, or Ms. Steward’s proposed rates.

1       **Q.     Which investor-owned gas utilities on the West Coast do not have**  
2       **inverted rates?**

3       A.     Based on my review, only the utilities regulated by this Commission continue  
4       to have flat rates: Puget Sound Energy, Avista Utilities, Cascade Natural Gas,  
5       and Northwest Natural Gas; three of these also serve Oregon with flat rates.

6       **Q.     Has this Commission approved inverted rates for the electric utilities**  
7       **which it regulates?**

8       A.     Yes. All three regulated electric utilities have inverted rates for residential  
9       consumers. These rates appropriately reflect the higher cost of providing  
10      space heating service, and provide appropriate prices to encourage energy  
11      conservation by electric consumers.

12      **Q.     What is your conclusion regarding Staff's flat commodity natural gas**  
13      **rate design?**

14      A.     Inverted natural gas rates are the most common form of gas rate on the West  
15      Coast, applying to the overwhelming majority of residential gas consumers.  
16      These types of rates fairly apportion costs, ensure that small-use customers are  
17      not overcharged, encourage conservation, and help to constrain spiraling gas  
18      usage that is putting upward price pressure on all natural gas supplies.

19      **Q.     What is your overall recommendation with respect to rate design?**

20      A.     I recommend that Ms. Steward's proposal to increase the Basic Charge by  
21      37.5% be rejected, and that the Company be directed to implement any  
22      residential rate increase that results from this proceeding to the block of usage

1 that begins at 30 therms per month. In my direct testimony, I also  
 2 recommended that the proposed increases in fees and charges not be adopted.  
 3 I retain that recommendation because those fees have radical customer  
 4 impacts, particularly on low-income consumers. Unless and until Cascade has  
 5 a strong low-income bill assistance program in place, such fees should not be  
 6 increased or imposed.

7 **Q. Have you estimated the residential rates that would result from the Staff**  
 8 **revenue requirement using an inverted rate design and either your**  
 9 **proposed rate spread principles or those advocated by Ms. Steward?**

10 A. Yes, I have. Table 5 shows my estimate of the inverted rates that would result  
 11 from the Staff revenue requirement, but excluding the fee increases proposed  
 12 by the Company, and reflecting both the rate spread principles set forth in Ms.  
 13 Steward's Table 4 on Page 22 of her testimony, and also reflecting the  
 14 uniform percentage of margin approach that I have recommended in my direct  
 15 testimony.

16 **Table 5**  
 17 **Inverted Rates Based on Staff Revenue Requirement**  
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				<b>Staff Rate Spread</b>		<b>Public Counsel Rate Spread</b>
<b>Basic Charge</b>				\$ 4.00		\$ 4.00
<b>First 30 Therms</b>				\$ 0.22658		\$ 0.22658
<b>Over 30 Therms</b>				\$ 0.24460		\$ 0.23883

Note: "Staff Rate Spread" is per Steward Table 4, Page 22  
 Increases to fees and charges not included.

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**MISCELLANEOUS CHARGES**

**Q. What has Staff proposed regarding Cascade’s miscellaneous charges?**

A. Most significantly, Staff proposes a disconnection fee of \$15.00, a reconnection fee of \$32.00, a reconnection after-hours fee of \$75.00, and a new account activation fee of \$32.00.

**Q. Have you updated Table 7, “Gas Company Fee Comparisons” contained in Exhibit No.\_\_(JL-1T), at p. 34 to reflect Staff’s proposals?**

A. Yes. I updated the chart to reflect the fees and service charges proposed by Staff and compare these to those currently charged by Cascade, those proposed by Cascade and those currently charged by other gas utilities regulated by the Commission. This chart is included as Exhibit No.\_\_(JL-8).

**Q. How do the miscellaneous charges proposed by Staff for Cascade compare with those of other gas utilities in Washington and those proposed by Cascade?**

A. WUTC Staff’s proposed charges are generally higher than those of other Washington utilities. Of particular concern is Staff’s endorsement of Cascade’s request for an Account Activation Charge of \$32.00. The only utility charging for daytime account activation is PSE. PSE charges only \$6.10 so Cascade would be charging nearly six times as much as the only utility with a daytime activation fee. Avista charges \$32.00 but only if the customer seeks activation after hours.

1 Staff's endorsement of a \$32.00 daytime and \$75.00 evening  
2 reconnection charge is also troublesome since it too would be borne  
3 particularly by those who move more often, namely low-income customers  
4 and renters.

5 Wisely, Staff recognized the safety problems associated with the  
6 Company's proposed Equipment Service Charge and is recommending that  
7 the Commission reject that charge.

8 **Q. What do you recommend?**

9 A. I recommend that the Commission retain existing miscellaneous charge  
10 amounts and reject new charges. The current fees are generally in line with  
11 those approved for other Washington utilities.

12 **COST OF SERVICE STUDY**

13 **Q. Why are you adopting Mr. Schoenbeck's cost of service study discussed**  
14 **in his testimony, Exhibit No. \_\_ (DWS-1T), page 7, line 11 through page**  
15 **11, line 5.**

16 A. As noted in my testimony, Exhibit No. \_\_ (JL-1T), pages 11 through 12, I was  
17 unable to perform a cost of service study in this docket because of the  
18 inadequacy of the Company's recordkeeping and load research. Additionally,  
19 the opaque nature of Mr. Dickey's study made it very difficult to even attempt  
20 to do so. Instead, I performed some sensitivity analysis on a study prepared  
21 by Mr. Schoenbeck, to see how two specific changes to his effort to prepare a  
22 Commission-Basis study affected the results.



1                   After reviewing Mr. Schoenbeck’s study, I am adopting its results.  
2                   Indeed, Mr. Schoenbeck’s study produces identical results to those shown on  
3                   page 13 of my testimony, Exhibit No.\_\_ (JL-1T). It is his model, and the  
4                   assumptions and results appear to be identical. The supporting calculations  
5                   and workpapers can be obtained from Mr. Schoenbeck.

6           **Q.    Does this complete your Cross-Rebuttal Testimony?**

7           A.    Yes.