

BEFORE THE  
WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

UG-\_\_  
GENERAL RATE APPLICATION  
OF  
NORTHWEST NATURAL GAS COMPANY

MARCH 28, 2008

**Direct Testimony of Ronald J. Amen:**  
**Rate Design**

## **RATE DESIGN TESTIMONY**

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1 **I. Introduction and Summary**

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

3 A. My name is Ronald J. Amen. My business address is 293 Boston Post Road  
4 West, Suite 500, Marlborough, MA 01752. I am a Vice President with  
5 Concentric Energy Advisors, Inc. ("Concentric") and a member of the  
6 Regulatory Advisory and Litigation Support Services Area of the Firm.  
7 Concentric is a management consulting and financial advisory firm focused on  
8 the North American energy and water industries.

9 **Q. Please describe Concentric's business activities.**

10 A. Concentric is a management consulting firm that provides strategic consulting,  
11 transaction-related financial advisory services, management, and regulatory  
12 and litigation support services spanning a variety of issues in the electric, gas  
13 and water industries.

14 From an industry-wide perspective, Concentric Staff and Affiliates have  
15 a wide breadth of experience including senior and executive level positions  
16 with management consulting firms, utility companies, regulatory agencies,  
17 competitive energy suppliers, investment banks and universities.

18 Included in Concentric's relevant experience are the areas of utility costing  
19 and pricing, resource planning, competitive market analysis, Federal/State  
20 regulatory practices and policies, utility mergers/acquisitions, corporate  
21 organization, asset purchases/sales, management prudence, and energy  
22 industry restructuring, representing a wide variety of client assignments.

1 Concentric has assisted numerous utility companies located in the U.S. and  
2 Canada.

3 **Q. On whose behalf are you testifying?**

4 A. I am testifying on behalf of Northwest Natural Gas Company (NW Natural or  
5 the Company).

6 **Q. Have you testified previously before the Washington Utilities and  
7 Transportation Commission (the Commission)?**

8 A. Yes. I have testified in Docket Nos. UG-931405 (General Rate Case of  
9 Washington Natural Gas Company (WNG)), UG-940814/UG-940034 (Cost of  
10 Service and Rate Design Proceeding of WNG), UG-941246/UG-950264  
11 (WNG Line Extension Policy), UG-950278 (General Rate Case of WNG), UE-  
12 960195 (Merger of Washington Energy Company and Puget Sound Power  
13 and Light Company), UG-960520 (WNG Propane Service), UG-011571  
14 (General Rate Case of Puget Sound Energy), and UG-060267 (General Rate  
15 Case of Puget Sound Energy). I have also previously appeared before the  
16 Commission on numerous occasions regarding various regulatory, customer  
17 contract and tariff matters.

18 **II. Purpose Of Testimony**

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

20 A. First, I will discuss revenue allocation and rate design principles, and the  
21 appropriate guidelines for use in evaluating class revenue levels and rate  
22 structures. This portion of my testimony will address the incorporation of Cost

1 of Service Study (COSS) guidelines and criteria into the rate design process.  
2 Second, I will support the Company's proposed increased level of fixed  
3 monthly customer charges, the reasons for the proposed fixed charge  
4 increases and the relationship of the proposal to rate design principles. An  
5 assessment of the impact of the proposed fixed charges on customers' bills is  
6 included.  
7 Finally, I will present and explain NW Natural's proposal to complete the  
8 migration of Rate Schedule 21 customers to either Rate Schedule 3 or Rate  
9 Schedule 41, a transition that was initiated in the Company's last general rate  
10 case.

11 **III. Revenue Allocation And Rate Design Principles**

12 **Q. How can the COSS results provide guidelines for rate design?**

13 A. COSS results provide cost guidelines for use in evaluating class revenue  
14 levels and rate structures. When evaluating class revenue levels, the rate of  
15 return results show that rates charged to certain rate classes recover less than  
16 their indicated cost of service. Conversely, rates for other rate classes  
17 recover more than their indicated cost of service. By adjusting rates  
18 accordingly, class revenue levels can be brought closer to the indicated cost  
19 of service resulting in class rates of return nearer the system average rate of  
20 return. Thus, rate levels will be more in line with the cost of providing service.

1 **Q. Do the COSS results provide guidance in establishing rates within each**  
2 **rate class as well?**

3 A. Yes. The classified costs, as allocated to each class of service within the  
4 COSS, provide useful cost information in determining the level of customer,  
5 demand, and commodity charges.

6 **Q. Please explain how the classified costs can be used for rate design.**

7 A. Page 4 of Mr. Heintz's Exhibit No.\_\_\_\_ (DAH-2) provides a summary of the  
8 Company's functionalized revenue requirement per unit of peak demand,  
9 annual throughput (commodity), and customer count for each rate class. If  
10 the classified costs presented in this exhibit were used to set three-part rates  
11 (Customer, Demand, and Commodity), the Company's operating expenses  
12 and return on investment in its pro forma revenue requirement would be  
13 recovered.

14 **Q. Should other factors be considered that would prevent the Company**  
15 **from simply translating the unit costs into rates for the various tariff**  
16 **services?**

17 A. Yes. Completely restructuring a utility Company's rates mechanistically to  
18 match the COSS is usually not desirable due to the resulting adverse impact  
19 on certain customer classes, particularly for smaller, low load factor  
20 customers. However, the unit costs do provide useful information for the  
21 design of portions of tariff services, in particular for establishing cost-based  
22 customer charges. The unit costs also can be used to design demand

1 charges where either demand metering is available or algorithm-based billing  
2 demands can be determined. Demand based rates provide for a charge  
3 based upon the maximum demand imposed by a customer on the utility's  
4 system within a specified time period, which establishes both the utility's  
5 responsibility to serve and the customer's obligation to pay for that level of  
6 service.

7 **Q. Please describe other considerations or criteria that should be used in**  
8 **the design of utility rates.**

9 A. Utility rate design should recognize that rates must be just and reasonable  
10 and not cause undue discrimination. Thus, customer impact considerations  
11 must be factored into the rate design process. Market conditions within the  
12 utility service territory with respect to the general economic environment and  
13 competitive fuel prices, where appropriate, could be a factor. Another  
14 important consideration is the financial stability of the utility. Toward this goal,  
15 it is generally an unsound rate-making practice to recover a substantial portion  
16 of fixed costs, such as customer related costs that bear no relationship to  
17 customer consumption patterns, in the volumetric portion of the rate schedule.  
18 Recovery of fixed costs via volumetric rates adversely impacts earnings  
19 stability because the revenues generated from customers' volumetric use of  
20 gas can be extremely sensitive to the vagaries of weather patterns and  
21 changing consumption characteristics. Recovery of utility fixed costs in  
22 volumetric rates sends uneconomic price signals to consumers that impede

1 their ability to make well founded energy consumption decisions. However,  
2 where volumetric rates are employed to recover fixed costs, weather  
3 normalization adjustment mechanisms as well as revenue decoupling  
4 mechanisms can serve to reduce customer bill volatility, improve cash flow  
5 and reduce the over- and under-recovery of non-gas revenues.

6 **Q. How then are the foregoing guidelines and criteria incorporated into the**  
7 **rate design process?**

8 A. A reasonable balance between the various cost guidelines and other criteria  
9 must be established in the process of designing rates, which consists of both  
10 the recovery of the revenue requirement from among the various customer  
11 classes and the determination of rate structures within tariff schedules.  
12 Economic, social, historical, and regulatory policy considerations can impact  
13 the rate design process. Both quantitative and qualitative factors must be  
14 considered in reaching a final rate design. Thus, it is necessary to allow the  
15 rate design process to be influenced by judgmental evaluations.

16 **IV. NW Natural's Existing Rate Schedules And Rate Design**

17 **Q. Please describe NW Natural's current residential and small commercial**  
18 **rate schedules.**

19 A. NW Natural has four residential and small commercial rate schedules:  
20 General Sales Service (Rate Schedule 1), Residential Sales Service (Rate  
21 Schedule 2), and Basic Firm Sales Service (Rate Schedule 3). The rate  
22 structure for all three rate schedules consists of a customer charge and a



1 volumetric charge. In addition, NW Natural has a Residential Heating Dry-Out  
2 Service (Rate Schedule 27) that contains only a flat volumetric charge.

3 **Q. Please describe NW Natural's current Commercial and Industrial ("C&I")**  
4 **rate schedules.**

5 A. NW Natural has four firm C&I rate schedules: High Load Factor Firm Sales  
6 (Rate Schedule 21), Non-Residential Sales and Transportation Service (Rate  
7 Schedule 41), Large Volume Non-Residential Sales and Transportation  
8 Service (Rate Schedule 42) and High Volume Non-Residential Transportation  
9 Service (Rate Schedule 43). The rate structures for Rate Schedule 41 consist  
10 of a customer charge and a blocked volumetric charge, and transportation  
11 customers have an additional \$250 per month charge. Rate Schedule 42 has  
12 a base rate structure consisting of a customer charge and a blocked  
13 volumetric rate. Rate Schedule 42 Firm Sales Service has two additional  
14 demand charges, a Storage charge and a Distribution Capacity Charge. Rate  
15 Schedule 42 Interruptible Sales Service is subject to the Storage charge,  
16 albeit at a lower level, and Rate Schedule 42 Firm Transportation service is  
17 subject to the Distribution Capacity Charge. Rate Schedule 42 Interruptible  
18 Transportation service is not subject to either demand charge. The rate  
19 structure for Rate Schedule 43 consists of a customer charge and a flat  
20 volumetric charge. Rate Schedule 21 is currently frozen (unavailable) to new  
21 customers and has a minimum bill for the first 500 Therms of usage, as  
22 opposed to a customer charge. The Company is proposing to terminate Rate

1 Schedule 21, which is presently “frozen” or closed to new customers and  
2 transfer the customers currently receiving service under that schedule to Rate  
3 Schedule 3 or Rate Schedule 41, as was intended under the settlement in NW  
4 Natural’s prior rate case, Docket UG-031885.

5 **V. Proposed Rate Structure Changes And Rate Design**

6 **Q. What are the proposed rates for each of NW Natural’s proposed rate**  
7 **schedules?**

8 A. The proposed rates by rate schedule are summarized in Exhibit No.\_\_\_\_ (RJA-  
9 2). Except as described below in regard to Dry-Out Service (Rate Schedule  
10 27) there has been no change in the rate structures. Customer charges have  
11 been increased for General Service (Rate Schedule 1), Residential Service  
12 (Rate Schedule 2), Basic Firm Service (Rate Schedule 3) and Non-Residential  
13 Sales and Transportation Service (Rate Schedule 41). The demand charges  
14 for Large Volume Non-Residential Service (Rate Schedule 42) have been  
15 increased to reduce the recovery of fixed costs in the volumetric rates.

16 **Q. How were the proposed rates for each rate schedule calculated?**

17 A. Detailed calculations for each rate component of each rate schedule are  
18 included in pages 2 through 5 of Exhibit No.\_\_\_\_ (RJA-2) as well as the  
19 resulting proposed revenues by rate schedule. The proposed revenues are  
20 consistent with those summarized in Mr. Heintz’s Exhibit No\_\_ (DAH-4),  
21 Proposed Revenue Responsibility by Rate Class.

1 A. Increased Level of Monthly Customer Charges

2 **Q. Do the proposed rate schedules include increases to the existing**  
3 **monthly customer charges?**

4 A. Yes. Increases to the existing customer charges for certain classes are  
5 summarized in the table below, alongside the respective class levels of  
6 customer-related costs from Mr. Heintz’s Exhibit No.\_\_\_\_ (DAH-2).

7 **TABLE 1**

Rate Schedule	COSS Indicated Charge	Current Charge	Proposed Charge	Dollar Change	Percent Change
RS 01 General Sales	\$16.82	\$2.00	\$8.00	\$6.00	300.0%
RS 02 Residential Sales	\$16.64	\$5.00	\$12.00	\$7.00	140.0%
RS 03 Basic Firm	\$42.74	\$10.50	\$21.00	\$10.50	100.0%
RS 27 Residential Heating Dry-Out	\$27.03	None	\$8.00	\$8.00	N/A
RS 41 Non-Residential Sales	\$274.41	\$195.16	\$275.00	\$79.84	40.9%

8

9 **Q. Please summarize the reasons why the Company is proposing to**  
10 **increase the service charge levels and the relationship to the rate design**  
11 **principles discussed earlier.**

12 A. The Company has proposed monthly residential and small commercial  
13 customer charges at levels that make meaningful progress toward closing the  
14 significant gap that currently exists with their full customer cost responsibility.

1 The proposed \$12.00 Residential Sales (Rate Schedule 2) customer charge  
2 would raise this charge to approximately 72 percent of its full customer cost  
3 level, while the proposed \$8.00 customer charge for the General Sales class  
4 (Rate Schedule 1) will only approach 50 percent of full customer cost. Over  
5 half the customers in this class use less than 100 therms per year and provide  
6 on average only \$3.00 to \$11.00 per month toward the fixed costs the  
7 Company incurs to provide distribution service.

8 The proposed Basic Firm Sales (Schedule 3) customer charge of  
9 \$21.00 will amount to a little more than half of the indicated customer cost for  
10 this customer class. The increase to the customer charge for the Non-  
11 Residential Sales Service (Rate Schedule 41) brings this rate to the indicated  
12 full customer cost. These proposed customer charges reduce customer bill  
13 volatility, alleviate some of the instability in the Company's margin recovery,  
14 are fair to customers within the Residential and Small Commercial classes,  
15 are easily understood, do not place a greater burden on lower income  
16 customers than rates that have a more volumetric weighting, and convey more  
17 appropriate price signals with respect to recovery of fixed distribution costs.

18 **Q. Please elaborate.**

19 A. The unit costs from the COSS identify costs related to providing monthly  
20 service to customers. Establishing higher monthly service charges helps to  
21 equalize the contribution each customer within a class makes towards  
22 recovery of customer costs attributable to that class. This method of customer

1 cost recovery is preferable to including such costs in the volumetric prices,  
2 which has the effect of causing some customers to pay too much while others  
3 pay too little.

4 The monthly customer charges provide for recovery of a portion of the  
5 Company's fixed customer costs, which are incurred solely because of the  
6 existence of customers connected to the system. These costs, such as the  
7 expense of reading meters and billing, occur regardless of whether gas is  
8 consumed and are not related to demands placed on the system. The  
9 proposed service charge increases will also help to ensure recovery by the  
10 Company of a greater portion of its fixed costs of providing service. Inasmuch  
11 as customer costs are not related to usage, they should be recovered to the  
12 extent possible through a tariff mechanism that does not depend upon  
13 volumetric billing. The proposed customer charge increases will further  
14 stabilize about \$5.5 million of fixed cost recovery.

15 In terms of understandability, customers should easily understand a full  
16 customer cost based charge. A full customer cost based charge is easily  
17 explained since the rate is based on customer costs. Because these costs do  
18 not vary with the customer's usage, it is perfectly understandable that the  
19 charge should not vary as well. It is intuitively obvious that a customer should  
20 not pay more for being a customer when the weather is cold, and conversely  
21 should not pay less when the weather is warm.

1 **Q. Please explain how the Company's proposed increase to the Customer**  
2 **Charge will impact the average Residential customer's gas bills.**

3 A. The Company's proposed customer charge will increase the average  
4 customer's bills in the summer (\$4.53 in June through September) and  
5 shoulder months (\$3.69 in October), when customer bills are at their lowest  
6 levels, and will decrease customer's bills in the winter months (-\$8.42 in  
7 January and -\$6.75 in February), when bills are at their highest levels. This  
8 distinct benefit is depicted on Page 1 of Exhibit No.\_\_\_\_ (RJA-3). This  
9 Schedule presents a monthly and annual bill for an average residential  
10 customer, at the proposed revenue level for the class, comparing the  
11 proposed \$12.00 customer charge with retaining the current \$5.00 charge.  
12 Page 2 of Exhibit No.\_\_\_\_ (RJA-3) presents monthly residential bill comparisons  
13 at present and proposed rates for various ranges of monthly gas consumption.

14 **Q. In view of the level of customer charges proposed by NW Natural, can**  
15 **you offer any further analysis that would evaluate the magnitude of**  
16 **increases to which individual customers will be exposed?**

17 A. Yes. As is evident from the response to the previous question, this can  
18 generally be assessed by analyzing how a change in rates impacts a  
19 customer's total bill, rather than individual components, and is best analyzed  
20 by looking at the sum total of the customer's bills over a twelve-month period.  
21 A useful analysis should take into consideration the net effect of higher  
22 summer bills and lower winter bills. I also believe the analysis should look at

1 the amount of change in dollars paid instead of merely focusing on  
2 percentage increases. This is because the percentage increase in a smaller  
3 bill appears relatively high.

4 **Q. Did you perform the analysis for the Company's proposed Residential**  
5 **Customer Charge?**

6 A. Yes. Following as Figure 1, and accompanying this testimony as Exhibit No.  
7 \_\_\_\_ (RJA-4, page 1) is a graph that shows the impact that an increase from  
8 current rates to the Company's proposed residential rates, including the  
9 proposed \$12.00 customer charge, would have on bills paid by Residential  
10 customers over a twelve month period, expressed as average dollars per  
11 monthly bill. This graph shows that 73 percent of Residential customers  
12 would see an increase within approximately \$1.00 of the average increase  
13 (approximately \$5.05 per month) based on the sampled test year population  
14 of residential meters with twelve consecutive months of consumption, and an  
15 additional 10 percent would see increases less than \$4.00 per month.  
16 Approximately 16 percent of customers would experience average monthly bill  
17 increases exceeding \$6.00, with no customers experiencing increases that  
18 exceed \$9.00 per month.

19 ///

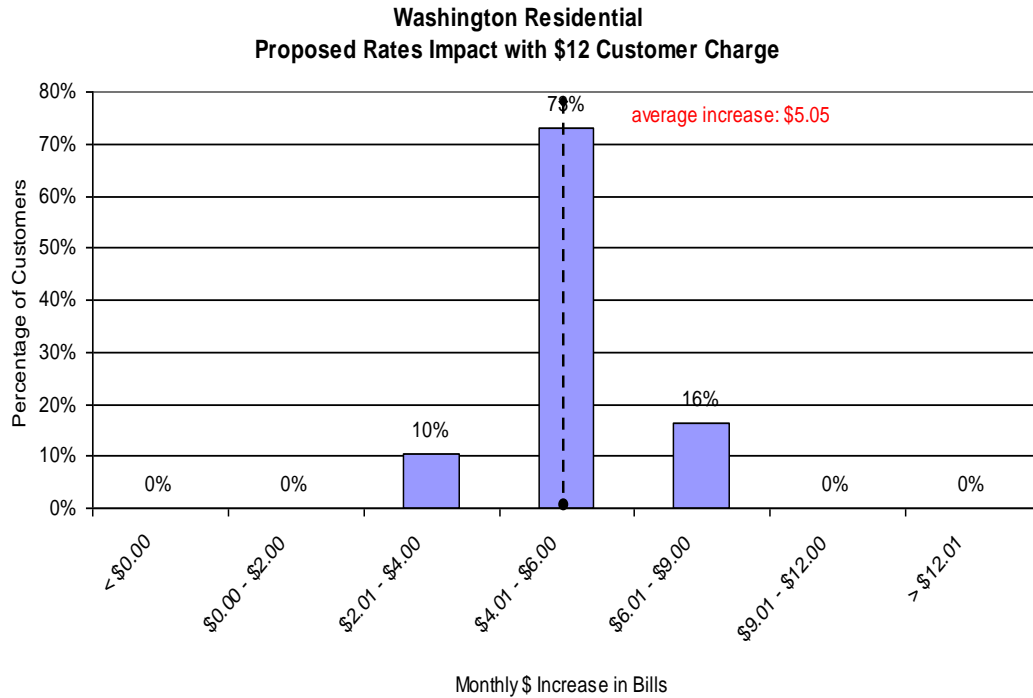
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**Figure 1**



2

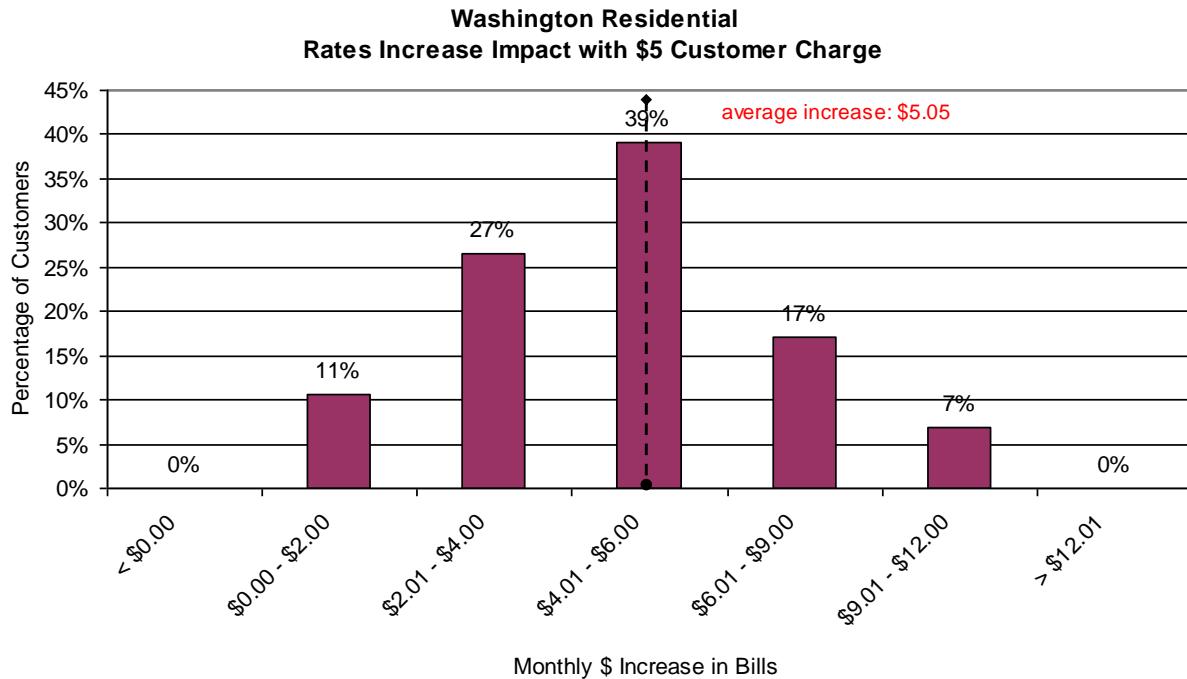
3 **Q. Have you done the analysis described above for a Residential Customer**  
4 **Charge at its current level of \$5.00 per month?**

5 A. Yes. Following as Figure 2 and accompanying this testimony as part of  
6 Exhibit No. \_\_ (RJA-4, page 2) is a graph showing the impact that an increase  
7 from current rates to the Company's proposed residential revenue level,  
8 keeping the customer charge at its current \$5.00 level, would have on bills  
9 paid by Residential customers over a twelve month period, expressed as  
10 average dollars per monthly bill. This scenario results in about 39 percent of  
11 customers clustered within roughly \$1.00 of the average increase of \$5.05 per  
12 month under the Company's customer charge proposal, while an additional 24



1 percent would see increases greater than \$6.00 per month, with 7 percent of  
2 those receiving average increases that exceed \$9.00 per month.

3 **Figure 2**



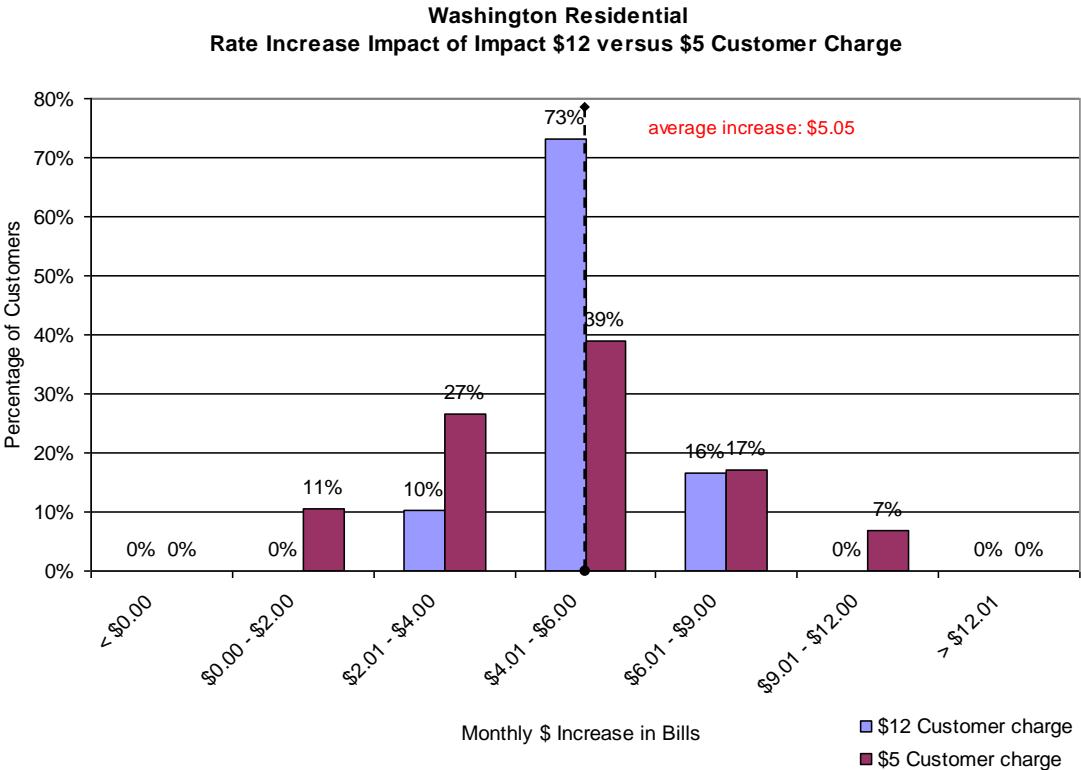
4  
5 **Q. What general conclusion can one draw from the foregoing analysis?**

6 A. A side-by-side comparison of the two alternative customer charge scenarios is  
7 presented below as Figure 3. The evidence suggests that the size of the  
8 Company's proposed increase to the residential customer charge will not  
9 amplify the range and magnitude of bill increases to which the majority of  
10 individual customers will be exposed. In fact, over 83 percent of residential  
11 customers will experience bill increases that are either in line with the average  
12 increase for the Residential class or \$1.00 to \$3.00 less than the average. By  
13 contrast, if the Company were to retain the current customer charge level of

1 \$5.00, over 62 percent of these customers would see average monthly bill  
2 increases at or above the average increase for the group. The analysis  
3 reflects the fact that over 48 percent of the Company's Washington residential  
4 customers have annual consumption levels above 700 Therms, which is near  
5 the break-even point between the two customer charge levels. In summary,  
6 by keeping the customer charge at an artificially low level of \$5.00, the  
7 majority of residential customers will be greatly subsidizing a small group (11  
8 percent) of low use customers, those with usage ranging from zero to less  
9 than 300 Therms per month.

10

**Figure 3**



11

1 **Q. At the proposed levels, will the customer charges result in substantial**  
2 **recovery of the overall fixed costs for these classes?**

3 A. More than \$19.6 million of fixed, distribution system costs representing  
4 approximately 65 percent of the total fixed costs of the Company will still be  
5 recovered through the volumetric rates for gas sales and transportation.

6 **Q. Have you considered the impact that the Company's proposed \$12.00**  
7 **customer charge will have on the bills of low-income customers?**

8 A. Yes. A comparison was made of the annual bill frequencies of low-income  
9 customers with those of residential customers generally. Although the  
10 Company does not keep records of income characteristics of its customers, it  
11 is possible to identify customers who received bill assistance during the test  
12 year. Customers who receive bill assistance typically have low incomes. The  
13 Company has provided information on the annual consumption levels of bill  
14 assistance customers with consumption in twelve consecutive months. The  
15 figures show that 39 percent of the 789 "bill-assisted" customers in this group  
16 had annual usage greater than 400 Therms, which would place them in the  
17 \$3.00 – \$6.00 average monthly bill impact range. In the bill-assisted customer  
18 group, 15 percent had annual usage levels greater than 700 Therms, which  
19 approximates the predominant consumption level for the general population of  
20 the Company's Washington residential customers (712 Therms) and the  
21 approximate break-even usage level mentioned earlier for the \$12.00 charge.  
22 85 percent of bill-assisted customers had annual usage levels above 100

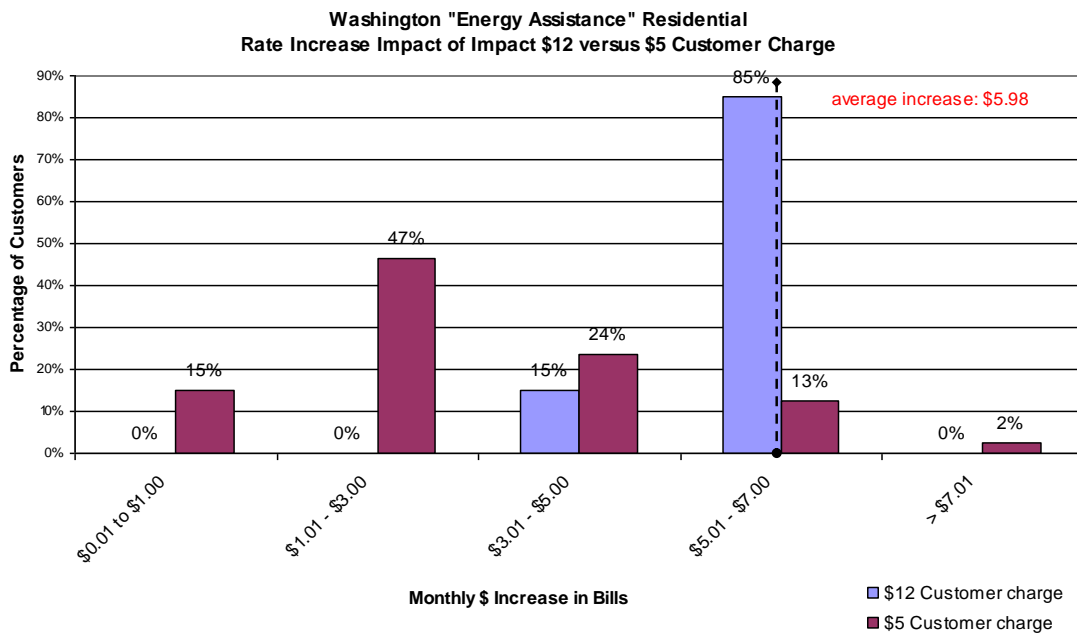
1 therms, which is a slightly lower percentage than the general population of  
2 Washington residential customers at 97 percent. This information addresses  
3 a not uncommon perception of low income customers, which is that they all  
4 tend to be low-use customers as well. In fact, 19 of the sampled bill-assisted  
5 customers (3 percent of the total) have annual consumption levels in excess  
6 of 1,000 therms. The higher-use customers receiving bill assistance will  
7 benefit the most from the Company's proposed \$12.00 customer charge. In  
8 addition, the \$12.00 customer charge will provide needed relief on all  
9 customers' winter bills, the time of year when the monthly utility budgets of low  
10 income customers are stretched to their limits.

11 **Q. Have you performed a stratified annual bill analysis for the bill-assisted**  
12 **customer group similar to that which you described earlier for the**  
13 **residential customer population?**

14 A. Yes. Following as Figure 4, and accompanying this testimony as part of  
15 Exhibit No.\_\_\_\_ (RJA-5) is a graph showing a side-by-side comparison of the  
16 impact of the two alternative customer charge scenarios on bills paid by  
17 Washington bill-assisted residential customers over a twelve month period,  
18 expressed as average dollars per monthly bill. This graph shows that 85  
19 percent of bill-assisted residential customers would see an increase within  
20 approximately \$1.00 of the average increase of approximately \$5.98 per  
21 month. The remaining 15 percent would see increases even less than \$5.00  
22 per month. No bill assisted customers would experience average monthly bill

1 increases exceeding \$7.00. By contrast, at the \$5.00 customer charge level,  
 2 only 13 percent of the bill-assisted customers would similarly experience  
 3 average monthly bill increases within roughly \$1.00 of the average increase of  
 4 \$5.98 per month. However, an additional 2 percent of the bill-assisted  
 5 customers would see increases greater than \$7.00 per month.

6 **Figure 4**



7

8 **B. Customer Charge Addition to the Residential Heating Dry-Out**  
 9 **Schedule (Schedule 27)**

10

11 **Q. Has the Company made other structural changes to any of its rate**  
 12 **schedules?**

13 **A.** Yes. The Company has introduced an \$8.00 per month Customer Charge to  
 14 the Residential Heating Dry-Out Schedule (Rate Schedule 27). Rate  
 15 Schedule 27 is available to residential home builders, developers, and

1 contractors during the period that a residential dwelling is under construction  
2 but no longer than twelve (12) months from the date the gas meter is set at  
3 the dwelling. In keeping with the Company's objective of establishing monthly  
4 customer charges that are more in line with the level of class customer-related  
5 cost, NW Natural has decided to add a monthly customer charge for the first  
6 time to this schedule. As shown in Table 1 above, the level of customer cost  
7 applicable to this class is \$27.03 per month.

## 8 **VI. The Cancellation Of Rate Schedule 21**

### 9 **Q. Why is the Company proposing to cancel Rate Schedule 21?**

10 A. This rate schedule has been frozen since July 1, 2004 and therefore closed to  
11 new customers. In Docket No.UG-031885, the Company proposed to  
12 eliminate Rate Schedule 21 as part of its rate restructuring. During the course  
13 of that proceeding it became obvious in attempting to structure rates to  
14 accommodate all the affected customers that the Rate Schedule 21  
15 customers would be subject to unacceptably large bill increases upon their  
16 move to the newly designed rates. These increases were an unintended  
17 consequence of keeping the new rates revenue neutral. When it became  
18 apparent that nearly all customers on Rate Schedule 21 would experience  
19 significant rate increases on the new schedules, the Company and Staff  
20 decided to retain Rate Schedule 21 in order to mitigate the bill impacts, and to  
21 begin a transition by which Rate Schedule 21 would eventually be eliminated.  
22 The Company proposes to transfer the customers currently receiving service

1 under Rate Schedule 21 to either Rate Schedule 3 or Rate Schedule 41, as  
2 was contemplated by the settlement in NW Natural's prior rate case.

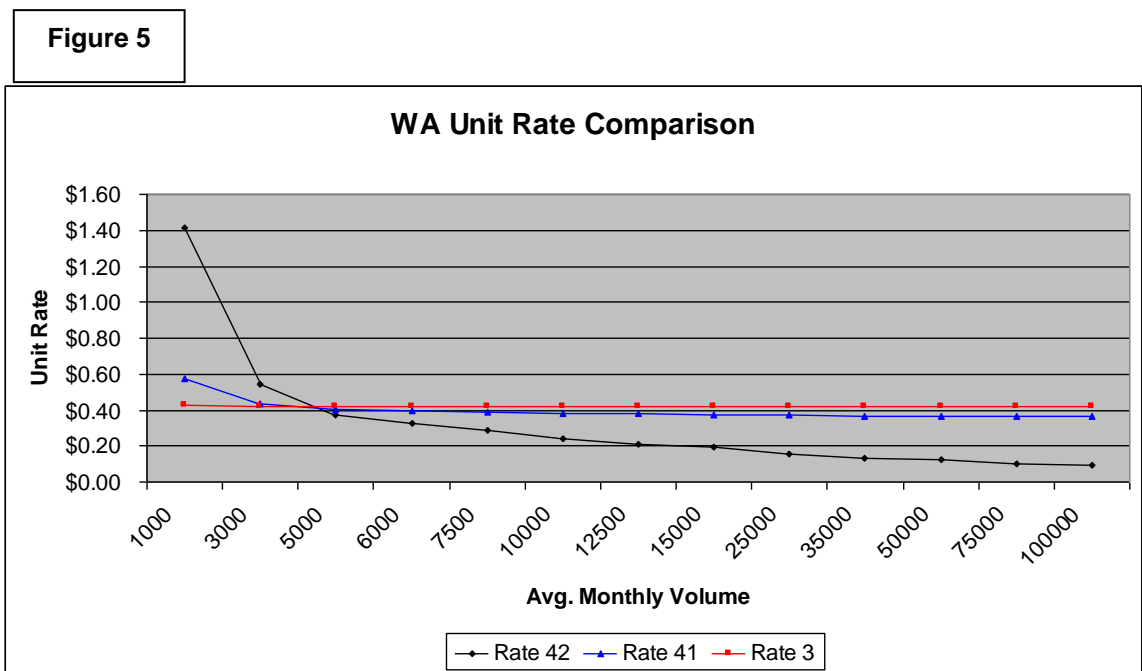
3 **Q. How has the transfer of Rate Schedule 21 customers been**  
4 **accomplished?**

5 A. Mr. Heintz's testimony describes the process by which the Rate Schedule 21  
6 customers were separated into two groups, the first group that would be  
7 transferred to Rate Schedule 3 and the second group that would be  
8 transferred to Rate Schedule 41, which under current rates has only two  
9 customers. *See, Exhibit No \_\_\_\_ (DAH-1).* In summary, it was an iterative  
10 process of establishing the respective classes' cost of service, designing rates  
11 from the resulting class-by-class revenue responsibility, calculating bill impacts  
12 for the Rate Schedule 21 customers under the alternative rate schedules of  
13 Rate Schedule 3 and Rate Schedule 41, determining the most favorable  
14 (lower cost) rate schedule for the Rate Schedule 21 customers, and then  
15 reconfiguring and rerunning the COSS for the reconstituted rate classes.  
16 Once the process had been through two cycles, a more definitive separation  
17 between the average unit cost under the respective rate schedules emerged  
18 than under their previous rate structures. The very narrow gap between the  
19 average unit cost under the existing Rate Schedule 3 and Rate Schedule 41  
20 was the primary reason that no natural migration of customers had occurred  
21 since the last rate case.

1 **Q. Can you illustrate the condition with regard to the narrow pricing gap**  
2 **between Rate Schedule 3 and Rate Schedule 41 that you just described?**

3 A. Yes. The following Figure 5 provides a graphical comparison of the average  
4 unit costs under Rate Schedule 3, Rate Schedule 41 and Rate Schedule 42.  
5 Under the existing rate design, only two customers found it economic to take  
6 service under Rate Schedule 41.

7



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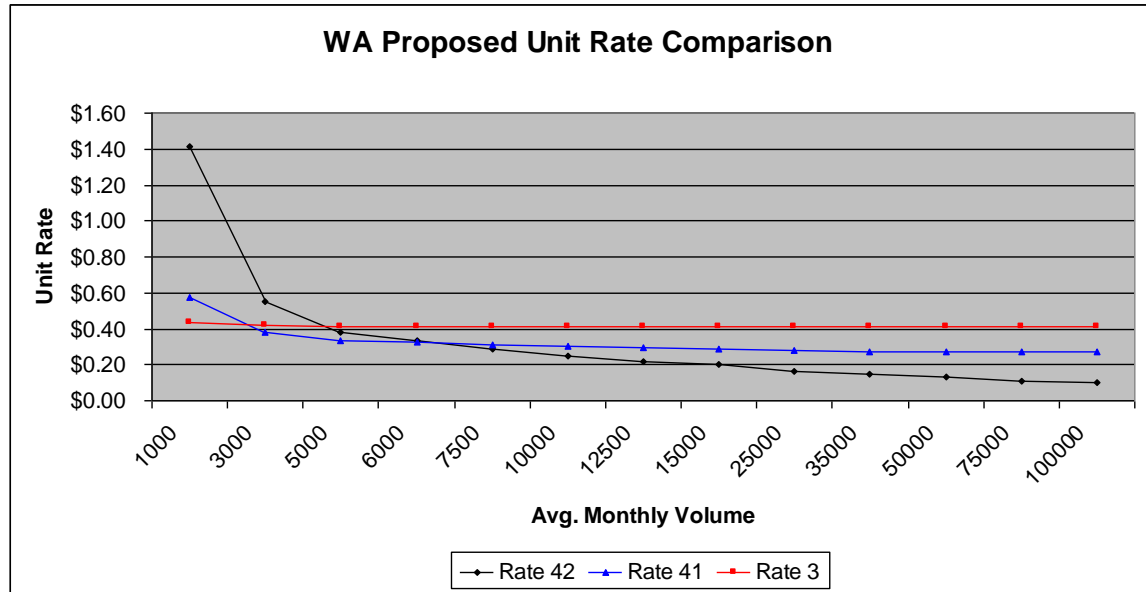
9 **Q. How has this situation improved under the Company's proposed rate**  
10 **design for Rate Schedule 3 and Rate Schedule 41?**

11 A. As you can see from the same set of graphs in Figure 6 below, a more  
12 definitive separation now exists between the average unit costs under the  
13 three C&I rate schedules – Rate Schedule 3, Rate Schedule 41, and Rate  
14 Schedule 42. This unit cost relationship between the C&I rate schedules is



1 now more consistent with those of the Company's corresponding C&I rate  
2 schedules in its Oregon service territory.

3 **Figure 6**



4  
5 **Q. What were the resulting proposed customer migrations from the**  
6 **cancelled Rate Schedule 21 to Rate Schedule 3 and Rate Schedule 41?**

7 A. Of the 173 customers currently served under Rate Schedule 21, 83 were  
8 ultimately transferred to Rate Schedule 3, and 90 were moved to Rate  
9 Schedule 41. The breakeven point for the former Rate Schedule 21  
10 customers in terms of size of annual load is approximately 21,000 therms.

1 **Q. Have you provided bill impacts for the Rate Schedule 21 customers**  
2 **under the respective rate schedules which they will receive service**  
3 **according to the Company's proposal?**

4 A. Yes. Exhibit No. \_\_ (RJA-6), accompanying this testimony, shows the  
5 individual bill impacts for the Rate Schedule 21 customers under Rate  
6 Schedule 3 or Rate Schedule 41, as appropriate.

7 **VII. Concluding Remarks**

8 **Q. Please summarize the benefits to customers and the Company from the**  
9 **customer charge proposals described in your testimony.**

10 A. The Company's monthly customer charge proposals discussed earlier will: a)  
11 reduce customer bill volatility and provide some needed relief from high winter  
12 bills; b) alleviate some of the instability in the Company's margin recovery; c)  
13 are fair to customers within the various customer classes – including low  
14 income customers; d) should be easily understood by consumers; and e)  
15 convey more appropriate price signals with respect to recovery of fixed  
16 distribution costs. Implemented alongside NW Natural's proposed decoupling  
17 mechanism, these rate design proposals will result in customers' annual bills  
18 that more accurately reflect the distribution margin recovery amounts  
19 approved by the Commission in this rate case, while customers will realize the  
20 results of their energy conservation efforts in the amount they pay for the gas  
21 commodity.

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1 **VII. Qualifications**

2 **Q. Please describe your educational and professional background.**

3 A. I have over twenty-nine (29) years of experience in the utility industry, the last  
4 ten (10) years of which have been in the field of utility management and  
5 economic consulting. Specializing in the gas industry, I have advised and  
6 assisted utility management and energy marketers in matters pertaining to  
7 costing and pricing, regulatory planning and policy development, strategic  
8 business planning, organizational restructuring, new business development,  
9 and load research studies. Further background information summarizing my  
10 education, presentation of expert testimony and other industry-related  
11 activities is included in Exhibit No. \_\_ (RJA-7).

12 **Q. Does this conclude your direct testimony?**

13 A. Yes.

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