

Exhibit No. __ (JRS-8T)
Docket Nos. UG-040640, et al
Witness: Joelle Steward

BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

DOCKET NOS. UE-040641 and
UG-040640 (Consolidated)

CROSS-ANSWERING TESTIMONY OF

JOELLE STEWARD

STAFF OF THE WASHINGTON UTILITIES
AND TRANSPORTATION COMMISSION

November 3, 2004

1 INTRODUCTION

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

3 A. I am Joelle Steward. My business address is 1300 S. Evergreen Park Drive S.W.,
4 P.O. Box 47250, Olympia, WA 98504.

5
6 **Q. Have you previously offered testimony in this proceeding?**

7 A. Yes, I filed response testimony on behalf of Commission Staff on electric cost of
8 service, rate spread, and rate design, and natural gas rate spread and rate design.

9
10 **Q. What is the purpose of your cross-answering testimony?**

11 A. I respond to the testimony of Donald W. Schoenbeck for the Industrial
12 Customers of Northwest Utilities (ICNU), Northwest Industrial Gas Users
13 (NWIGU) and Cost Management Services (CMS); Theodore S. Lehmann for
14 CMS; James G. Young for Seattle Steam Company; and Kevin C. Higgins for The
15 Kroger Co. (Kroger).

16 Specifically, my cross-answering testimony will address the:

- 17 • Natural gas rate spread proposals of NWIGU, CMS and Seattle Steam
18 • Electric cost of service proposals of ICNU and Kroger
19 • Electric rate design proposal of ICNU for Schedules 46 and 49

- ICNU proposal to create Schedule 40
- Electric rate design proposal of Kroger for Schedules 25 and 26

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Q. Have you prepared exhibits in support of your cross-answering testimony?

A. Yes. They are:

- Exhibit No. __ (JRS-9), Corrected Peak Credit Calculation
- Exhibit No. __ (JRS-10), Demand-Related Revenues to Costs

NATURAL GAS RATE SPREAD

Q. Please summarize the natural gas rate spread positions of NWIGU, CMS and Seattle Steam.

A. As described in the testimony of Mr. Schoenbeck on page 9 of Exhibit No. __ (DWS-1T), NWIGU and CMS recommend a rate spread that moves classes one-third of the way to parity, based on the revenue to cost ratio from the Company's cost of service study, with an upper limit of 150 percent of the average increase. NWIGU and CMS recommend no increase for Schedule 57, transportation service, since the Company's cost of service study shows a revenue to cost ratio of 171 percent.

1 Seattle Steam also argues, in the testimony of Mr. Young, beginning on
2 page 5 of Exhibit No. __ (JGY-1T), that no increase should be given to Schedule
3 57, based on the Company's cost of service study.

4
5 **Q. Do you agree with the position of NWIGU, CMS and Seattle Steam that no**
6 **increase should be given to Schedule 57?**

7 **A.** No. It would be inappropriate to give Schedule 57 no increase based solely upon
8 a cost of service study. While cost of service studies are useful guides for
9 spreading and designing rates, the results should not be mechanically applied.
10 As I discussed in my response testimony on electric cost of service, beginning on
11 page 11, line 14 of Exhibit No. __ (JRS-1T), these studies incorporate a high
12 degree of judgment.

13 For Schedule 57, in particular, the cost of service study may be a moving
14 target because these customers can elect to take service as either a transportation
15 customer under Schedule 57, or as a sales customer under Schedule 87. A few
16 large customers moving from Schedule 57 to Schedule 87, or vice versa, between
17 rate cases, can alter the parity results in a cost study. This ability to migrate
18 between these schedules is why the parties sought to equalize the margin rates in
19 the settlement of Docket Nos. UE-011570 and UG-011571:

1 An offsetting adjustment was made to the increases assigned to
2 Schedules 87 (Large Interruptible Sales) and 57 (Transportation)
3 in order to facilitate equalizing their respective rate margins, as
4 customers are able to migrate between these two schedules.
5

6 * * *

7
8 This will also facilitate the equalizing of the block rates between
9 Schedules 87 and 57, Transportation Service, an important
10 consideration given the relative ease with which customers
11 can migrate between these two schedules.
12

13 (See Joint Testimony of Ronald J. Amen, Merton Lott, Jim Lazar and Donald
14 Schoenbeck in Support of the Natural Gas Rate Spread and Rate Design
15 Settlement at 6 and 13, Exhibit 605T, Docket Nos. UE-011570 and UG-011571.)

16 Furthermore, in the current case, NWIGU and CMS argue that the notice
17 period for switching between sales and transportation service should be reduced
18 from 60 days to 30 days. Mr. Schoenbeck states, "A customer should be allowed
19 to switch from sales to transportation service at any time during the year, upon
20 giving PSE 30 days written notice." (Exhibit No. __ (DWS-1T), page 15, lines 13-
21 14.) Arguing to ease this restriction indicates a willingness and desire for
22 customers to migrate between schedules. Therefore, it would be inappropriate to
23 not give Schedule 57 an increase, based on a cost study done at a single point in
24 time. At a minimum, the class should receive my proposed rate spread of 25
25 percent of the average increase. I believe that this is a fair rate spread based on

1 the current cost studies and the future uncertainty for migration between
2 schedules.

3
4 **ELECTRIC COST OF SERVICE**

5 **Q. Please summarize the electric cost of service proposal of ICNU.**

6 **A.** Mr. Schoenbeck makes four adjustments to the peak credit calculation and
7 proposes allocating demand by the hours within 90 percent of the peak hour.

8 The peak credit calculation is used to allocate production-related costs
9 between energy and demand. The Company followed the methodology
10 approved by the Commission in the 1992 rate case (See Ninth Supplemental
11 Order on Rate Design Issues, Docket No. UE-921262). According to that
12 methodology, production costs are classified as demand and energy by using the
13 ratio of half the current costs of a simple cycle combustion turbine (CT),
14 representing a peaking resource, to the current costs of a combined cycle
15 combustion turbine (CCCT), representing a baseload resource. The Company's
16 peak credit calculation in the current proceeding resulted in 13 percent of costs
17 being classified as demand and 87 percent being classified as energy. (Exhibit
18 No. __ (CEP-10.)

1 Mr. Schoenbeck corrects PSE's calculation by incorporating insurance and
2 property tax into the CT costs. He also gives a 70 percent premium to the gas
3 costs for the CT and higher oil prices (which is the back-up fuel) to the CT,
4 because, he argues, the fuel costs for the winter peaking resource would be much
5 higher than the average annual price used for the CCCT. Next, he argues that
6 the calculation should incorporate the full capacity value of the CT, not half, as
7 ordered by the Commission in 1992. Lastly, he argues that demand costs should
8 be allocated by the top 19 hours, rather than the top 200 hours. He finds the top
9 19 hourly loads are within 90 percent of the peak hour load for the test year. As
10 a result of all of his adjustments, Mr. Schoenbeck's peak credit ratio is 21 percent
11 demand and 79 percent energy.

12
13 **Q. Please summarize the cost of service proposal by Kroger.**

14 **A.** Mr. Higgins generally accepts the cost of service study proposed by the
15 Company. However, he recommends some modifications in the event that the
16 Commission does not accept PSE's methodology. Similar to Mr. Schoenbeck, Mr.
17 Higgins makes some corrections to the peak credit calculation by incorporating
18 insurance and property taxes into the costs of the CT. He, too, argues that the

1 full costs of the CT should be used, rather than half. His modifications also result
2 in a peak credit ratio of 21 percent demand and 79 percent energy.

3
4 **Q. Do you agree with ICNU's and Kroger's adjustments to the peak credit
5 calculation?**

6 A. I agree only with the corrections made by both ICNU and Kroger to incorporate
7 property taxes into the cost of the CT. This correction changes the Company's
8 peak credit ratio to 14/86. However, when I incorporate Staff's recommended
9 capital structure and return on equity, I arrive at a 13/87 ratio, the same as
10 originally filed by the Company. Exhibit No. __ (JRS-9) shows the corrected peak
11 credit calculation.

12
13 **Q. Please explain why the Commission should reject ICNU's adjustment in the
14 peak credit calculation for higher gas and oil prices for the CT.**

15 A. Mr. Schoenbeck provides no evidence or analysis to support his adjustment for
16 higher gas and oil prices for the CT. PSE Data Request No. 3 to Mr. Schoenbeck
17 for all supporting analyses offered no additional insight. A 70 percent premium
18 over the CCCT fuel costs appears to be arbitrary.

1 Moreover, Staff's review of the spot gas price at Sumas for the one-year
2 period June 2003 through July 2004, shows an annual average price of \$4.77 per
3 MMBTU, and an average price of \$5.40 per MMBTU for the winter period
4 December 1, 2003 through January 15, 2004. This is a difference of 13 percent.
5 Incorporating a 13 percent premium for CT gas costs into the peak credit
6 calculation would alter my calculated ratio by only 1 percent--to 14 percent
7 demand and 86 percent energy, which would not affect my recommendations for
8 rate spread or rate design. However, this would also assume that PSE is
9 purchasing gas for the CTs entirely on the spot market. All in all, Mr.
10 Schoenbeck's premium of 70 percent is unreasonable.

11
12 **Q. Please explain why the Commission should reject ICNU's and Kroger's**
13 **proposal that the peak credit calculation should incorporate the full capacity**
14 **value of the CT, not half, as ordered by the Commission in 1992 rate case.**

15 A. In 1992, Staff, Public Counsel and PSE argued that CT's provide a hydro-firming
16 function in addition to peaking functions, which the Commission affirmed.
17 (Ninth Supplemental Order at 9, Docket No. UE-920433.) The use of half of the
18 cost of the CT was admittedly a judgment call, but was within the range of
19 reasonableness. In PSE's most recently filed Least Cost Plan (Docket Nos. UE-

1 030594/UG-030595), it states on page 3 of Chapter IX, that the planning
2 assumptions for CTs include:

- 3 • CTs will be available to serve winter peak load requirements
- 4 • CTs will be used to “back up” lower than normal hydro generation
- 5 • CTs will serve as reserves for unit outages at other facilities
- 6 • CTs provide a potential resource to back up wind generation

7 Therefore, the 1992 Commission decision to use only a portion of the CT costs
8 because they provide energy benefits in addition to capacity is still appropriate,
9 based on PSE’s current planning assumptions for combustion turbines.

10
11 **Q. Please explain why the Commission should reject ICNU’s use of 19 hours for**
12 **allocating demand in the peak credit calculation.**

13 A. In 1992, the Commission stated, “the proper period over which to allocate the
14 demand-related costs of peaking resources is the hours when they are expected
15 to be used.” Further, 200 hours was approved because it was “reasonably
16 representative of the system peak and the actual resources put into place to serve
17 that peak.” (Ninth Supplemental Order at 12, Docket No. UE-920433.)

18 Mr. Schoenbeck’s 19 hours, or the 90 percent threshold, is an
19 inappropriate and arbitrary criterion. For one, 19 hours is too small of a data

1 sample on which to allocate costs and it is based on the data in only one year.
2 For the type of analysis Mr. Schoenbeck was suggesting with his 90 percent
3 threshold, it would be more appropriate to look at the probability of occurrences
4 for high load hours over a number of years.

5 Furthermore, looking at the rate year and Dr. Mariam's Aurora run, the
6 CTs all run for well over 19 hours. Staff's Aurora model results show the CTs
7 running between 85 and 2406 hours, with an average of 803 hours. Excluding
8 Fredrickson 3 and 4, which ran for 2406 hours, the CTs run, on average, 268
9 hours a year.

10 However, I do agree with Mr. Schoenbeck that simply using 200 hours
11 may no longer be the most useful proxy. System planning today has changed
12 considerably from 1992. It is no longer a planning assumption that CTs will run
13 for 200 hours a year. The planning models dispatch plants against the market's
14 price, not a predetermined allocation of time. (The CT hours noted above
15 illustrates this point.) Acquisition decisions are based on analyses to find the
16 lowest net present value of revenue requirements and risk (standard deviation
17 from cost) for a portfolio. Therefore, I recommend that the 200-hour demand
18 allocator should be re-examined for future filings. The Company should
19 convene a collaborative to review the issue. For the present case, however, I

1 recommend retaining the previously accepted method. Afterall, 200 hours was
2 the planning assumption used when the Company's CTs were originally put into
3 service.

4
5 **ELECTRIC RATE DESIGN**

6 **Q. Please summarize ICNU's testimony on electric rate design for the current**
7 **industrial classes.**

8 A. Mr. Schoenbeck's testimony on electric rate design, which begins on page 38 of
9 Exhibit No. __ (DWS-1HCT), covers industrial Schedules 46, 49 and retail
10 wheeling. He recommends applying an equal percentage increase to all
11 Schedule 46 and 49 charges. For the retail wheeling class, he supports PSE's
12 proposal for an equal percentage increase spread to all three categories—449
13 Primary Voltage, 449 High Voltage, and 459 High Voltage. However, he
14 recommends adding a 4th digit to the demand rate, which will allow a more
15 uniform spread.

16
17 **Q. Do you agree with his recommendations for industrial rate design?**

18 A. Not entirely. I am not opposed to Mr. Schoenbeck's proposal to add a digit to
19 the demand charge for retail wheeling rates. Regarding Schedules 46 and 49, I

1 disagree with his proposal to apply an equal percentage increase to all charges. I
2 find that neither the PSE proposed cost of service study nor the Commission-
3 basis model study supports an increase in the demand charges for these classes.
4 (Exhibit No. __ (JRS-10).) Additionally, his application of an equal percentage
5 increase results in different energy rates for the two schedules. The only
6 difference between these two schedules is that Schedule 46 is interruptible
7 service. Therefore, the only appropriate differential between the two should be
8 the lower demand charge for Schedule 46, to reflect a capacity benefit. The
9 energy charges should remain equal.

10
11 **Q. Please summarize ICNU's proposal for creating a new tariff Schedule 40 for**
12 **concentrated load.**

13 **A.** Mr. Schoenbeck proposes a new schedule for customers having concentrated
14 load of 3 MVA on a distribution feeder. (Exhibit No. __ (DWS-16).) He states
15 that feeders are designed to carry and serve about 5 MVA, so the eligible
16 customers would have at least 60 percent of a distribution feeder's capacity.
17 Further, he states that, "the charges would be cost-based from an analysis of the
18 facilities serving the eligible customers." (Exhibit No. __ (DWS-1HCT), page 40,
19 lines 16-17.) Mr. Schoenbeck states that this new schedule is appropriate because

1 he believes “unique customers should be afforded the opportunity to pay the
2 costs of the facilities required to serve their load.” (Exhibit No. __ (DWS-1HCT),
3 page 41, lines 6-7.)

4
5 **Q. Do you agree with Mr. Schoenbeck’s proposal for a new schedule?**

6 **A.** No. I have serious reservations with his proposal. First and foremost, Mr.
7 Schoenbeck fails to differentiate customers with highly concentrated load as a
8 distinct cost class. He provides no evidence to show that there is a significant
9 difference in the average costs between the concentrated load customer and the
10 average customer in the class. Further, he indicates that tariff design has
11 centered around one customer. (Exhibit No. __ (1HCT), page 40, lines 20-21.)
12 Staff does not believe that a class analysis based on one data point is convincing.

13 Second, the proposed schedule in Exhibit No. __ (DWS-16) indicates that
14 the service will be voluntary. If this is a distinct class of customers, then Staff has
15 concerns that it may be discriminatory to offer this as an elective service.

16 Third, it appears that the distribution charges in Section 3 of the proposed
17 schedule are calculated using the distribution cost allocation methodology the
18 Company put forward in its cost of service model. As I discussed in my
19 response testimony, I have reservations with this methodology because I do not

1 believe that it fully captures the diversity benefits of the system. (See Exhibit No.
2 __ (JRS-1T), pages 13-15.)

3 If the Company believes that this is a distinct cost class, then it may make
4 a tariff filing with the Commission. This would allow a more appropriate and
5 thorough opportunity for review and analysis by Staff and other interested
6 parties (who may not be interveners in the current proceeding), as well as
7 allowing a proper notice period. I strongly recommend that the Commission not
8 approve this rate concept, as requested by ICNU, in this proceeding.

9
10 **Q. Please summarize Kroger's testimony on electric rate design.**

11 A. Mr. Higgin's testimony, beginning on page 13 of Exhibit No. __ (KCH-1T),
12 discusses the commercial class Schedules 25 and 26. He recommends setting
13 Schedule 26's energy charge and Schedule 25's tailblock energy charge at the
14 energy cost of service, and adding the deficiency to the demand charges.

15
16 **Q. Do you agree with Mr. Higgins recommendations for Schedules 25 and 26?**

17 A. Not entirely. In my response testimony, I recommended that, for Schedule 26, a
18 higher proportional increase be given to the demand charge than the energy
19 charge, based on the cost of service. (Exhibit No. __ (JRS-1T), page 31, lines 8-14.)

1 I did not make this same recommendation for Schedule 25 in that testimony.

2 While I will now agree with Mr. Higgins that a higher proportional increase is
3 appropriate for Schedule 25 as well, I believe that Mr. Higgins's proposal goes
4 too far in shifting costs from the current energy charge to the demand charge.

5
6 **Q. Please explain.**

7 **A.** In my response testimony, I recommended that the Commission not allow an
8 increase in one rate component that will result in a decrease in the current
9 volumetric charge for any schedule. (Exhibit No. ___ (JRS-1T), page 2, lines 17-19.)

10 Mr. Higgins's proposal, as seen on pages 3 and 6 in Exhibit No. ___ (KCH-5),
11 results in a 5.7 percent decrease in the current tailblock energy rate for Schedule
12 25, and a 42 percent increase in the demand rates, based on the Company's full
13 revenue request. This will result in a sharp shift in costs within the schedule
14 between customers of different load factors.

15 The Commission has generally pursued a policy of gradualism in moving
16 classes to parity. This policy of gradualism also applies to shifting costs within a
17 class with rate design, which is why we look at bill impacts for rates. Therefore, I
18 recommend that the Commission not adopt Mr. Higgins's full proposal, but
19 instead, allow a higher proportional increase to demand charges than energy

1 charges for Schedules 25 and 26, with the limitation that it not result in a
2 decrease in the current volumetric energy rates.

3

4 Q. Does this conclude your cross-answering testimony?

5 A. Yes.