

EXHIBIT NO. T-_____ (DWH-9)
DOCKET NOS. UE-920433, UE-920499 and UE-921262
WITNESS: D.W. HOFF

**BEFORE THE
WASHINGTON UTILITIES & TRANSPORTATION
COMMISSION**

COMPLAINANT

VS.

PUGET SOUND POWER & LIGHT COMPANY

RESPONDENT

REBUTTAL TESTIMONY

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION	
UE-920433, -920499;	
No. -921262	Ex. T-83 ✓

- 1 • The issues of class differentials based on relative
2 risks and growth rates.

3 **THE RATE DESIGN ORDER**

4 **Q. Why is it important to have the rate design order precede**
5 **the orders in the general rate and PRAM proceedings?**

6 A. This will allow time for customers and the Company to
7 implement any required rate design changes. The changes
8 proposed for Schedules 24, 25, 26, 30, 36, 38, 39, and 48
9 and the changes in power factor charges all require
10 adjustments to the Company's billing system and adjustments
11 by customers. Extra time will be useful to help make these
12 changes. Issuance of the rate design order on or about
13 August 16 will allow sufficient time to notify customers and
14 implement the necessary changes to the billing system.

15
16 **Q. Should all rate design issues be resolved in the rate design**
17 **order?**

18 A. No. Obviously, issues involving the exact level of rates
19 must await the determination of the revenue requirement in
20 the general rate and PRAM proceedings. Those orders should
21 contain specific directions as to how the revenue
22 requirement should be allocated to customer classes, and how
23 certain rates--such as customer charges--should be set.

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Q. What should the rate design order contain?

A. Ideally, the rate design order would address issues on two levels. First, the order would include direction on general concepts discussed in the case. Examples of these concepts would be the general use of the peak credit method, the specific calculations to make when following peak credit methodology, the treatment of transmission, and the issue of gradualism. Resolution of these issues would provide guidance for cost of service, rate spread and rate design matters in future rate cases.

Second, the order would contain the resolution of issues specific to individual rates, such as the block structure of Schedule 7, the creation of new schedules, and the additional language in Schedule 43. It is hoped that the order would resolve all the issues necessary to allow printing of the new schedules with the exception of the actual rates, which would be added once the Company receives the orders in the general rate and PRAM proceedings.

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GENERAL RATE DESIGN ISSUES

1. Use of Parity Ratios in Spreading Rates

Q. How would you suggest the Commission address parity in the order?

A. The Commission need not specifically address the question of parity, i.e., the issue of relative equality across rate classes, in the rate design order. This should be done in its order in the general rate proceeding. In that order, the Commission should apportion the increase in revenue requirement among the customer classes, after reviewing all parity ratios offered in this case and taking into account the principle of gradualism. Schedules 2 through 7 of Exhibit No. ___ (DWH-10) demonstrate how this can be done using the methods proposed by the parties. Schedule 1 of the exhibit graphically displays the resulting rate increases. It is interesting to note that the recommended class rate increases range from a low of 2.6% (Schedule 25, WICFUR) to a high of 41.8% (Schedules 46 and 49, Public Counsel).

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Q. How should parity results be used in resolving rate spread issues?

A. The Company's cost-of-service results should be the basis for movement towards parity, and the Company recommends that the movement should eliminate approximately one-third of the disparity. If the Commission eliminates decoupling for the Company, the movement should be much more gradual. In spreading rates, the Commission should not be tied to a mechanical application of the results of any one cost of service model. Such an application would misrepresent the degree of accuracy of any cost of service analysis. As mentioned by Ms. Lynch, a cost of service result is better characterized as a reasonable approximation rather than an exact quantification, even though its results may be stated to many significant digits. Additionally, tying directly into a cost of service result might require the cost of service model to be re-run following a rate order and prior to the compliance filing. This would be extremely difficult to accomplish in a timely manner and could introduce controversy at a very late point in the proceeding.

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Q. If cost of service issues cannot be resolved, should the Commission resort to using an equal percentage rate increase to each class, as recommended by the Federal Executive Agencies?

A. No. Controversies over cost of service are not new for this Commission, and should not be used as a basis for not taking action. Additionally, it was the consensus of the rate design collaborative group that the Commission should formally accept and approve a cost of service method and use the results in rate spread and rate design.

Q. Should the Commission accept BOMA's recommendation that the company move to 100% parity over a two year period?

A. No. This would require the Company to change general rates for all of our customers each year for the next three years. Furthermore, the adjustment, motivated by equity considerations, would be too much at odds with the goals of stability and moderation. Additionally, the adjustment implies that cost of service is known with precision, rather than a reasonable approximation.

1 Q. Should differential rates of return be used when assigning
2 rate increases to rate classes, as proposed by Public
3 Counsel?

4 A. No. There is no persuasive evidence to support
5 class-differentiated rates of return. This issue is
6 discussed in greater detail later in my testimony.

7 **2. Establishing a New Rate Class for SWAP Customers**

8 Q. Should the Company be directed to establish a separate rate
9 class for SWAP customers?

10 A. No. The Commission should be very cautious about
11 establishing additional customer classes. It may be
12 appropriate to create a new customer class if a homogeneous
13 group can be identified with a clearly defined usage pattern
14 that sets the cost to serve that group apart from others in
15 the schedule, or if there are compelling arguments that all
16 customers would be better off. In the case of SWAP, these
17 conditions have not been demonstrated.

18
19 Q. How has SWAP defined the group which should receive a
20 special rate?

21 A. We asked SWAP for its definition in a data request, and it
22 responded that the group should be composed of "customers
23 involved in frozen food storage and food processing that
24 have loads that tend to peak in the summer and fall rather

1 than the winter like other Puget customers." (SWAP response
2 to the Company's data request number 501.)

3 **Q. Is this group homogeneous?**

4
5 A. No. Frozen food storage and food processing are not
6 considered homogeneous enough by the Federal Government to
7 be assigned the same Standard Industrial Classification,
8 even at the summary two digit level.

9 **Q. Does the group have a unique usage pattern?**

10
11 A. No. The fact that these customers peak in the summer and
12 fall is not unique. I have conducted an analysis which
13 shows that fully 38% of Schedule 31 customers and 65% of
14 Schedule 49 customers peak during the summer and fall period
15 included in SWAP's definition. This analysis is shown in
16 Exhibit No. ____ (DWH-11).

17 **Q. Do you have any other problems with SWAP's customer**
18 **definition?**

19 A. Yes. SWAP's definition of the summer-fall season is
20 arbitrary and does not correspond to the Company's power
21 supply situation. For instance, the Company buys peaking
22 capacity during November.
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1 Q. Will SWAP customers benefit from your rate design proposal
2 even though you do not create a separate schedule for them?

3 A. Yes. Due to the increased seasonality of the rates in our
4 proposal, the average rate increase for SWAP customers will
5 be 3% lower than the average rate increase for others in
6 their schedules, according to usage data supplied us by SWAP
7 in response to the Company's data request number 504.

8 **3. Misuse of Seasonal Cost Estimates**

9
10 Q. How do you respond to SWAP's concerns that the Company has
11 incorrectly seasonalized energy and demand rates?

12 A. SWAP overstates the precision of our estimates of seasonal
13 cost differences. Unfortunately, these cost differences are
14 only rough approximations. It is very difficult to
15 differentiate embedded costs by season in a combined hydro
16 and thermal system. The seasonality of energy and demand
17 charges which the Company proposes is reasonable, given our
18 generation mix. If the Commission eliminates decoupling for
19 the Company, however, it is recommended that the existing
20 levels of seasonality be maintained.
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1 Q. Do you have any comments on SWAP's proposal for seasonalized
2 energy and demand charges?

3 A. SWAP maintains that the seasonal energy differential should
4 be based on the absolute difference between the long-term
5 marginal rate for energy. In my view, energy rates should
6 be based on the absolute difference only when the absolute
7 level of long-term summer and winter marginal costs is
8 charged. We do this only in the case of residential rates
9 and the experimental marginal cost rate designs. Since all
10 other rates are lower than marginal cost, maintaining
11 proportionality is a more equitable approach.

12 The demand rate differential reflects the fact that
13 production demand costs are the result of winter peaks. The
14 rate design recognizes the impracticality of collecting
15 those costs only over the top 200 hours, so it spreads
16 collection of the costs collection over the entire six
17 month winter period. This results in the 50% seasonal
18 differential.

19
20 Q. Why is it impractical to collect demand costs over the top
21 200 hours?

22 A. From the cost assignment perspective, it would be impossible
23 to know in advance--or even concurrently--the 200 hours over
24

1 which the costs should be spread. In addition, the
2 assignment could create significant revenue recovery risk.

3
4 **4. The Basis for a Separate Irrigation Rate Schedule**

5 **Q. Why is it necessary to have separate irrigation rate**
6 **schedules if the Company has correctly applied seasonality**
7 **to rates?**

8 A. As noted during cross-examination (page 182 of the
9 transcript), the Company proposes to maintain the separate
10 rate for Schedule 29 due to equity and gradualism
11 considerations. Moving Schedule 29 customers to Schedule 25
12 would mean those customers would be paying more than their
13 allocated costs, and would subject these customers to a
14 significant rate increase.

15 **5. The Need for Experimental Rates and the Evaluation Process**

16 **Q. Should the rates the Company proposes as experimental be**
17 **made mandatory?**

18 A. No. As I mentioned in my prefiled testimony (Exhibit T-8,
19 page 21), the Company is proposing rates on an experimental
20 basis in order to gain experience with customer acceptance,
21 to evaluate the impact on the Company's resources, and to
22 determine the capability of the Company to administer the
23 rate. Making the rates mandatory creates a very large, and
24

1 wholly unnecessary, risk. This risk is magnified if the
2 decoupling feature is eliminated from the Company's rates;
3 if that were to occur, the experimental rates should not be
4 approved.

5 **Q. Would you please explain how the conditions of the**
6 **experiment will provide meaningful results for evaluating**
7 **the rates?**

8 **A.** The Company is proposing two types of experimental rates:
9 interruptible rates (Schedules 36, 38, and 39), and marginal
10 cost rates with customized blocking for primary and high
11 voltage customers (Schedules 30 and 48). The Company is
12 proposing four major evaluation criteria for the
13 experiments: customer acceptance, cost of administration,
14 ability to deliver a cost-effective "resource," and impact
15 on consumption. Exhibit ___ (DWH-12) explains the Company's
16 evaluation plan.

17 **Q. Can the evaluation of the marginal cost rates be meaningful**
18 **if only those customers who expect to lower their**
19 **consumption volunteer for the rate?**

20 **A.** Yes, for a number of reasons. First, our ability to
21 evaluate billing procedures and administrative requirements
22 is not affected by the customer's expectations. Second,
23 although the customer may expect to reduce consumption, such
24 an expectation may not be accurate. Third, it is not a

1 problem if a customer expects to lower consumption due to
2 conservation motivated by larger savings under a rate that
3 is set at marginal cost. Finally, customized blocking of
4 energy and demand is an innovative approach that requires
5 field testing even if there is a sample selection bias.

6 **ADJUSTMENTS TO SPECIFIC SCHEDULES**

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8 **1. Schedule 7**

9
10 **Q. Are you proposing to update the Schedule 7 rates to reflect**
11 **marginal costs based upon the January 1993 Schedule 83**
12 **filing?**

13 **A. No. It is not necessary to update the Schedule 7 rates.**
14 **The new marginal costs would result in slightly lower winter**
15 **rates and slightly higher summer rates, and the net effect**
16 **of an update would be small. Moreover, it should be kept in**
17 **mind that estimates of long-run marginal costs are not**
18 **exact, and updating the rates would be a mechanical**
19 **application of an approximation.**

20 **Q. Do you agree with Public Counsel's proposal to set the**
21 **second block at 600 kWh in the Company's proposed two block**
22 **rate?**

23 **A. No. As explained in my direct testimony, the blocking we**
24 **originally proposed in our rate design filing was modified**
because of rate impact concerns. I agree with Staff witness

1 Sorrells that the move towards a lower tail block should be
2 introduced gradually in order to mitigate individual
3 customer bill impacts.

4
5 **2. Schedule 25**

6 **Q. Are you proposing any changes to Schedule 25 based on the**
7 **concerns of parties?**

8 A. I have reviewed their concerns, and share some of them. For
9 instance, I am concerned that the current proposal which
10 includes demand charges in the first energy block results in
11 an effective energy rate that is declining for certain low
12 load factor customers (and an increasing rate for high load
13 factor customers). I have conducted analysis on several of
14 the alternatives presented. Unfortunately, due to customer
15 impact considerations, I cannot propose any changes to the
16 schedule at this time.

17 **Q. What alternative rate designs did you consider?**

18
19 A. I examined rate designs where the first 50 kW are charged at
20 one-half and one-fourth, respectively, of the proposed
21 second block rate. Both of these designs resulted in an
22 unacceptable range of impacts. While nearly one-half of the
23 customers would receive increases of less than 5 percent, a
24 significant number would receive increases in excess of

1 twenty percent, and some customers would receive increases
2 in excess of thirty percent. This would be contrary to
3 analyses by all parties in this case which show that these
4 customers are all currently paying more than their relative
5 cost-of-service. Exhibit No. ____ (DWH-13) shows the
6 customer impacts associated with the alternative rate design
7 which sets the first block demand rate at half the second
8 block demand rate. Public Counsel's proposal of having an
9 energy constrained demand charge has some merit. However,
10 it would create significant complications in its
11 administration.

12 **3. Schedule 43**

13
14 **Q. Are you proposing any changes to the terms of Schedule 43?**

15 A. Based upon the concerns of Staff, the Company is proposing
16 to amend the availability terms. The first modification
17 allows the tariff to be phased out to new customers over a
18 one-year period. This will allow schools on the schedule if
19 their energy plans have already been approved by the
20 Washington Energy Office and they start construction by
21 October 1, 1994. The second change requires schools to
22 install recommended cost-effective conservation by
23 October 1, 1995 to remain on the schedule. The specific
24

1 changes in the availability terms are shown in Exhibit ____
2 (DWH-14).

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4 **4. Large Load Customers**

5 **Q. Do you believe large customers should be required to notify**
6 **the company on any major changes in load?**

7 A. No. First, such a requirement assumes the customers
8 themselves know of these changes with a long lead time, and
9 are willing to make these decisions public. This is not the
10 way businesses typically operate. Second, this requirement
11 further assumes that large customers do not already keep the
12 Company informed to the best of their ability. The reality
13 is these customers currently work very closely with the
14 Company on expansion plans. Third, the economic benefits of
15 a notification policy have not been demonstrated. Finally,
16 such a requirement would seem to be at odds with the
17 Company's public service obligations, which require us to
18 provide service when requested, not when it is convenient
19 for us to do so.

1 RATE CLASS DIFFERENTIALS BASED ON RISKS AND GROWTH RATES

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3 1. Risk-Based Differentials

4 Q. Do you agree with Mr. Lazar's statement on page 22 of his
5 testimony that differential risk is one of the factors that
6 should be considered in spreading costs between customer
7 classes?

8 A. No. His arguments supporting class-differentiated rates of
9 returns are flawed for four reasons. First, Mr. Lazar has
10 offered no quantification of risk differentials. Second, he
11 has offered no proof that financial markets view specific
12 customer classes as more or less risky than other classes.
13 Third, he has offered no proof that any perceived risks
14 associated with serving individual customers are in any way
15 correlated with the Company's definition of customer
16 classes. Fourth, Mr. Lazar's conceptual application of risk
17 is much too narrow. Most, if not all, risks are not
18 confined to a specific customer class.

19 Q. What are some examples of risks that are not confined to a
20 specific customer class but are inherent in all classes?

21 A. A number of risks are present in all customer classes,
22 including risks related to stranded investment, requirements
23 to provide standby service, and the under-recovery of Base
24 and Resource costs.

1 The risk of stranded investment relates to the possibility
2 that a customer will leave the Company's system with a part
3 or all of its load before the investment (i.e. power plants,
4 power contracts, T&D infrastructure, and conservation
5 investments) made to serve that customer is fully amortized.
6 This risk applies to residential space and water heat
7 customers as well as to large industrial customers.

8 The risk of standby service refers to the situation where
9 the Company is required to maintain facilities to serve a
10 load only under emergency or very infrequent conditions.
11 Examples of this risk outside the industrial class include
12 vacation homes and customers who have alternative sources of
13 heat (such as wood), but use electricity on the coldest
14 days.

15
16 The risk of under-recovering Base and Resource costs is also
17 not limited to one class. This risk has been discussed
18 extensively in testimony in the general rate proceeding,
19 Docket No. UE-921262.

20
21 **Q. Mr. Lazar says there are methods other than risk premiums
which could mitigate these risks. Do you agree?**

22
23 **A. There are alternative rate schedules that can mitigate these
24 risks. However, consideration of these methods is premature**

1 in this proceeding, and is best left to future filings. An
2 example of risks that can be reduced through rate design is
3 the risk associated with stranded investment and standby
4 requirements. There could be "exit-fee" charges applied to
5 customers when associated investment is abandoned, or the
6 assets could be charged to the supplier of the replacing
7 source of energy. The rate design collaborative group
8 looked into standby rates briefly, but did not make any
9 conclusions.

10 As another example, the Company could charge the Base cost
11 per customer to each customer through a large base rate.
12 This would not only insure collection of these revenues, but
13 would also eliminate variability in payment of the Base cost
14 portion of customer bills. Customers would no longer pay
15 more for Base costs in cold winters, and less in warm
16 winters.

17
18 **2. Differentials Based on Relative Growth Rates**

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20 **Q. Mr. Lazar suggests that costs should be allocated**
21 **differently by customer class because of differential growth**
22 **rates among customer classes. Do you agree?**

23 **A. No. If growth is to be addressed through rate spread or**
24 **rate design, it is best addressed at an individual customer**
level, not a class level. While it is true that the

1 secondary general service class as a whole is the fastest
2 growing, many commercial customers have not grown for years.
3 Conversely, residential developers add significant costs to
4 the system. The fact that other residential customers are
5 conserving and switching fuels should not excuse residential
6 developers from being allocated their fair share of the
7 costs. The credit associated with conservation and fuel
8 switching could just as easily be applied to the non-
9 residential secondary service class. The cost allocations
10 presented by Ms. Lynch accurately reflect any changes in the
11 cost of serving customers since the last general rate case,
12 and these allocations continue to show that non-residential
13 secondary voltage customers pay more than their allocated
14 costs, and thus should have below-average rate increases.

15 **Q. Is the Company advocating growth charges at the customer**
16 **level?**

17 **A.** No, not at this time. The question of who should pay for
18 growth is complex, with serious public policy ramifications.
19 While growth is a cause of higher rates for the Company's
20 customers, it also can mean job creation and other regional
21 economic benefits. The issue of growth is more
22 appropriately addressed through charges to individual
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1 customers, such as through energy rates that are based on
2 marginal cost.

3 **Q. Mr. Lazar suggests that hook-up fees be charged for new**
4 **space and water heating connections. Do you agree?**

5 **A. No.** While this might be seen as an example of an
6 appropriate customer-based fee mentioned above, in fact it
7 is not because hook-up fees are too restrictive. They would
8 apply to new residential space and water heat, instead of to
9 new load generally. Moreover, hook-up fees appear to be a
10 punitive measure designed to drive residential space and
11 water heat customers to alternative fuel sources which may
12 or may not be more cost effective from the customer's
13 perspective. Finally, such charges do not appear to be
14 cost-based. These charges were discussed with the rate
15 design collaborative group, and they concluded that such
16 charges were not appropriate.

17
18 **Q. Does this conclude your rebuttal testimony, Mr. Hoff?**

19 **A. Yes, it does.**
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