Christine O. Gregoire
ATTORNEY GENERAL OF WASHINGTON
900 Fourth Avenue #2000 • Seattle WA 98164-1012

July 9, 1993

Paul Curl, Secretary
Washington Utilities and
Transportation Commission
1300 S. Evergreen Park Drive SW
P.O. Box 47250
Olympia, Washington 98504-7250

Re: Puget Sound Power & Light Co.
Cause No. UE-920499 (Rate Design)

Dear Mr. Curl:

Enclosed please find the original plus 19 copies of the Brief of Public Counsel in the above proceeding.

Thank you for your assistance.

Respectfully,

CHARLES F. ADAMS
Assistant Attorney General
Public Counsel Section

CFA/ljb
Encs.
cc: Parties

CERTIFICATE OF SERVICE

I hereby certify that I have this day served one copy of the foregoing document upon all parties of record in this proceeding, as shown on the attached service list, by hand delivery or by mail properly addressed and prepaid.

Dated this 9th day of July, 1993.

Charles F. Adams
Assistant Attorney

SERVICE LIST

WUTC v. Puget Sound Power & Light Company

Docket No. UE-920499

Donald T. Trotter
Assistant Attorney General
1400 S. Evergreen Park Dr. S.W.
Olympia, WA 98504

Carol S. Arnold
Preston Thorgrimson
Shidler Gates & Ellis
5000 Columbia Center
701 Fifth Avenue
Seattle, Washington 98104

Norma J. Furuta
Associate Counsel (Code 09C2)
Office of General Counsel
Department of the Navy
Naval Fac. Eng. Commd.
P.O. Box 727
San Bruno, CA 94066-0720

James Van Nostrand
Perkins Coie
Suite 1800
One Bellevue Center
411 - 108th Avenue N.E.
Bellevue, WA 98004

Mark P. Trinchero
Grant E. Tanner
WICFUR
c/o Wright, Davis, & Tremaine
2300 First Interstate Tower
1300 SW Fifth Avenue
Portland, OR 97201-5682

Linda K. Williams
1744 N. E. Clackamas St.
Portland, OR 97232

Arthur R. Butler
1201 Third Avenue, Suite 2850
Washington Mutual Tower
Seattle, WA 98101

Barry Bennett
Office of General Counsel
905 N.E. 11th Street
Portland, OR 97208

ORIGINAL

WASHINGTON UTILITIES AND

TRANSPORTATION COMMISSION

vs.

PUGET SOUND POWER AND LIGHT COMPANY

CAUSE NO. UE-920499

Brief of
Public Counsel Section
Office of the Attorney General
July, 1993

Cause UE-920499
Brief of Public Counsel

CONTENTS

BRIEF OF PUBLIC COUNSEL
PUGET UE-920499 RATE DESIGN

I. INTRODUCTION AND PROCEDURAL HISTORY

This proceeding resulted from a Commission direction to Puget Sound Power and Light Company (Puget) in it's 3rd Supplemental Order in Cause UE-901183/84, wherein the Commission directed Puget to prepare and file a revenue-neutral proceeding to address cost allocation and rate design issues.

Prior to making its rate design filing, Puget convened two separate work groups to assist it in identifying and possibly resolving issues related to cost allocation and rate design. A Rate Design Task Force chaired by James Young was comprised of selected members of Puget's Consumer Panels. A Rates Collaborative was comprised of participants in Puget's rate proceedings and the company's Technical and Policy Collaboratives. Members of the Task Force attended some meetings of the Collaborative, and vice versa. The process was very helpful in focusing and narrowing issues, although it was obviously not successful in resolving certain major class revenue allocation issues.

Each group prepared a final report on its work, which are presented by Mr. Hoff in Exhibits 10 and 11. Puget's rate design and cost of service filings do not rigorously follow the recommendations of either group, but Puget claims to have taken all of the recommendations from the Rate Design Task Force and the Rates Collaborative into account in preparing its proposals. Some of the issues which were not consensus items among the participants in the Rates Collaborative have been addressed by various parties to this proceeding. In addition, certain intervenors such as the Department of the Navy (Navy) and the Skagit and Whatcom Area Processors (SWAP) did not participate in the Rate Design Task Force or the Rates Collaborative, but have participated in this proceeding.

Although a number of important rate design and cost of service issues remain to be resolved in this proceeding, the Collaborative and Task Force efforts greatly simplified and focused the hearing process. Public Counsel commends Puget and all of the participants for their efforts.

II. THE IMPORTANCE OF RATE DESIGN AS PART OF INTEGRATED LEAST COST PLANNING

Accurate cost allocation and forward-looking rate design are essential elements of an effective, cost-minimizing integrated resource planning effort. If rates for each class of customers are set to recover the costs and risks of serving that class, then all customers are treated equitably. If the costs of serving growth in the use of power by customers within each class are recovered from the growing loads through efficient rate design, consumers can rationally choose between consuming additional power or investing in conservation, alternative fuels, self-generation, or renewable resources. However, this Commission has consistently considered other factors, such as perceptions of fairness, gradual change over time, and simplicity in allocating costs and designing rates. Public Counsel believes that these judgmental factors are at least as important as any of the computer analyses which have been presented in this proceeding.

A. Rates Should Reflect Current Costs of New Resources.

It is crucial that rates reflect the current costs of new resources. This policy was adopted by the Commission in Cause U-78-05, where it directed that "forward-looking" costs be used for cost allocation purposes, and that policy remains true today. Unfortunately, "forward-looking" costs have only been applied to the residential class, although the results for this class are very impressive. As Mr. Lazar testified (T-43, P.25), Puget now serves about 50% more residential customers than it did in 1980, but their combined electricity usage has increased by only 12%. On the other hand, usage by Secondary, Primary, and High-Voltage customers has grown by 88%, 55%, and 33% respectively over this same period.

One goal of this proceeding should be to implement the same kind of creative rate philosophy for the other customers that has worked so well in the residential sector. In order to accurately reflect the costs of new resources in rates, the rates must be designed to accurately track the incremental costs of providing additional production, transmission, and distribution capability to electric consumers.

1. Production Costs

The parties to the Rates Collaborative were able to agree that production costs should be allocated using the Peak Credit methodology (Ex. 11, P. 6). However, the various parties had different notions of how that methodology should be applied. What is key, however, is the notion that all classes of customers, and all customers, should see a production component of rates which accurately reflects the relatively high cost of new power supply resources. Any approach which fails this test will result in inefficient resource allocation.

2. Transmission/Distribution Costs

Major disagreements exist over the appropriate treatment of transmission and distribution resources. The key for future resource planning is simple. The region is short of transmission capacity, and efficient ratemaking can help to ensure that rates accurately reflect the incremental costs being paid to augment the existing transmission system. Distribution costs are incurred to meet the expected loads of new customers and are ultimately reflected in rates. To the extent that those loads can be constrained through efficiency or alternative fuels, the required investment in distribution facilities can be mitigated. Therefore it is important to fully reflect incremental transmission and distribution costs in rates.

B. Encourage Efficient Use of Power Supply Resources.

Several concepts were presented to encourage more efficient use of power supply resources. These include increased seasonality to rates and modifying demand charges to reflect avoidable on-peak costs.

1. Seasonal Rates.

Puget's loads and power supply costs are higher in the winter than in the summer. In addition, the extra costs of overbuilding the backbone of the system to serve higher peak demands are due to winter peaks. For this reason, Puget's rates should be higher in winter than in summer.

2. Demand Charges Should Be Based on Avoidable On-peak Costs.

The Rates Collaborative agreed that Puget's demand charges should focus as closely as possible on the peak period. Puget has proposed, and Public Counsel agrees, that the costs of serving "demand" should be based on that portion of generating capacity costs which could be avoided if peak demands were lower. That is only a portion of the cost of a peaking generator like a combustion turbine.

C. Ensure Efficient Fuel Choice.

The Washington State Energy Strategy recommends greater emphasis on the direct use of natural gas for space and water heating. Public Counsel has proposed several rate design changes which will enhance this goal, including more sharply seasonal rates, more steeply inverted rates, and special hook-up charges for new electric resistance space and water heating loads.

III. COST OF SERVICE

The most contentious part of this proceeding, as expected, was disagreement between the statutory parties (Puget, Staff, and Public Counsel), who generally support the Commission's past decisions on cost allocation, and the large power user intervenors, who seek to have the Commission adopt policies which are more favorable to their position. Public Counsel supports Puget's proposed cost of service methodology with only two changes. First, we believe that Puget's allocation of production costs should be

refined to reflect the fact that gas is the primary fuel for its combustion turbines. Second, we submit the Commission should reaffirm the position that it has consistently followed with respect to the allocation of transmission costs using the same principles as for production plant. With these refinements, which are all contained in the staff cost of service study [Ex. 81] and the study Puget prepared at the request of the Bench [Ex. 82], Puget's cost of service study is generally reasonable. The corrected studies show that residential and small commercial customers are paying rates which are equitable or above, while industrial customers are paying rates far lower than are equitable.

A. Purpose of Embedded Cost Studies.

Embedded cost of service studies allocate the existing costs of production, transmission, distribution, administration, and conservation among the customer classes. There is no assurance that the entire existing system is optimal (i.e., that costs are as low as they can be) or that customers are fully utilizing that system (i.e., there is no excess capacity). An embedded cost of service study simply allocates all of the costs of the system -- optimal or not, economic or not, and needed or not.

The study allocates different components of the system using different allocation factors. The major contested issues are between the large users, who seek to have more costs allocated on the basis of peak demand and customer count for each class, and the staff, Public Counsel, and Puget, who generally advocate that more costs should be allocated on the basis of kilowatt-hour usage for each class. The primary contested issues are over the calculation of the "peak credit" factor for production plant and the proper allocation of transmission costs. In addition, certain intervenors attempted to revive the long-discredited "minimum system" method for allocating distribution plant.

B. Production Costs

Production costs are those associated with producing or purchasing electricity. These include the rate base associated with generating plant and conservation, the associated operating costs, and purchased power expenses. All parties agree that these

costs should be allocated on the basis of some combination of peak demand and energy usage.

1. Peak Credit Method Should Be Continued.

The Commission has approved the use of the Peak Credit methodology for allocating Puget's production costs for many years, beginning with Cause U-81-41. In the Peak Credit method, the ratio of the cost of a peaking resource to a baseload resource is used to classify production plant between the "demand" and "energy" categories. Witnesses for Puget, Staff, Public Counsel, WICFUR, and SWAP all used different approaches to the Peak Credit method.

The witness for the Department of the Navy, Mr. Knobloch, suggested that the Peak Credit method was not a generally recognized method. (T.40, P.4). During cross-examination, it became evident that Mr. Knobloch simply had a problem with terminology; the "Equivalent Peaker" method described in detail in the NARUC Electric Utility Cost Allocation Manual is functionally identical to the Peak Credit method. (Tr. 1579). All of the other cost of service witnesses were familiar with the Peak Credit method.

The dispute between the various parties over the Peak Credit method had to do with the number of hours used to define "peak", the costs which should be used in the numerator of the peak credit equation to represent the cost of a peaking resource, and the fuel that should be assumed to be used during the peak hours. Public Counsel believes that Puget's general approach should be accepted, except that a portion of the fuel to be used during the electrical system peak period will be gas, rather than oil as assumed by Puget. The result is that only 13% of the total costs of Puget's power supply are peak-related, compared with 16% as assumed by Puget. [Ex. T-43, P.8; Ex. 45, P. 6]

2. 200 Hours Is a Reasonable Measure of Peak.

Puget proposed that the highest 200 hours of peak demand be used to determine what portion of production costs are demand-related, and how those costs should be divided among the various customer classes. (Ex. T-8, P. 11-14] The more hours used to determine the "peak" period, the lower the amount of costs allocated to lower load factor residential and commercial customers. Puget chose 200 hours because this is the expected peak duration used by the Company's power supply staff in planning peaking resources. [T-2, P. 27] Public Counsel supports Puget's approach, although Mr. Lazar demonstrated that a longer period -- up to 1500 hours -- might be acceptable as well. [T-43, P. 8] A shorter period would not be appropriate; the Commission has consistently favored the use of multiple peaks for determining how demand-related costs should be allocated. [Cause U-81-41, 2nd Supp. Order, P. 23; Cause UG-901459, 3rd Supp. Order, P. 8].

a. Peak Credit Factor Calculation.

Puget computed the peak credit factor by adding up the cost to meet a 200 hour peak load using a peaking resource, and dividing this into the cost to build and operate a baseload resource at the planned capacity factor for a baseload unit. Public Counsel supports this approach.

b. Half of Cost of Turbine is Capacity Cost.

In determining the cost of a peaking resource for this calculation, Puget used one-half of the cost of a new combustion turbine as the proxy for the cost of a peaking resource. Mr. Hoff explained in detail why this was appropriate. A primary consideration is the fact that the Company can obtain peaking power from other utilities for much less than the cost of a combustion turbine, such as the $2/kw/month contract (only $8/kw/year for the four winter months covered by the contract) with San Diego Gas and Electric [Ex. T-8, P. 12].

WICFUR argued against this approach and recommended that 100% of the cost of a combustion turbine be used, about $72/kw/year, rather than only one-half of this cost. In light of the fact that Puget is able to secure winter-only contracts for as little as $8/kw/year, WICFUR's argument is illogical and should be clearly rejected.

The use of one-half of the cost of a CT was intended to recognize that if Puget actually bought a new CT, it would get both peaking capacity and other value, such as the ability to firm up additional hydropower. As Mr. Hoff stated:

> A simple cycle CT, however, would provide much more value than simply providing an ability to meet peak loads on the highest 200 hour loads in each year. For example, the CT could be used to back up the poor performance of other energy resources. It could also be used to help during transmission outages. Such CTs could also be used to make sales to other utilities in periods when the Company did not need them or could help provide summer resources to help accomplish seasonal exchanges, thereby effectively doubling the peaking capability of the CT. For these reasons, the full fixed cost of a CT probably overstates the cost of a 200 hour per year peaking resource. [Ex. T-8, P. 11]

Mr. Hoff's logic has been borne out during the period of this proceeding. First, Puget has used its existing CTs to firm up hydropower during the recent drought. Second, Puget has used its existing CTs to make sales to the Bonneville Power Administration for the benefit of the aluminum smelters. Finally, the CTs have been called on to replace the energy expected to be available from Colstrip 3&4, which have suffered breakdowns and longer-than-expected maintenance outages. [Tr. 861]

c. Fuel for Turbines is Mostly Gas.

The only area where Puget, Staff, and Public Counsel have disagreed on the issue of the peak credit calculation is the fuel type for the combustion turbine. Ms. Lynch assumed that all 200 hours of peaking service would require burning diesel fuel, apparently on the assumption that gas service would be interrupted. That assumption is flawed. In fact, Puget's gas service was not curtailed during any of the highest 200 hours of its load during the test period. [Deposition Request #2; cited in Ex. T-43, P. 25]. If

none of the actual fuel used was higher-cost oil, it makes no sense to assume that all of the fuel to be used in a typical year will be oil.

Since Puget purchases its gas supply on an interruptible basis, it is both logical and reasonable to assume that gas will be unavailable during certain of the peak hours, but will be available for the majority of the 200 hours of system peak demand.

Ms Sorrells proposed that all 200 hours be assumed to be gas [T-33, P. 11; Tr. 65]. Mr. Lazar was in between staff and the Company, proposing that 50 hours of oil and 150 hours of gas be assumed for fuel cost calculations in the peak credit approach [T-43, P. 8]. Mr. Lazar's approach results in 13% of production costs being classified as demand-related, while Ms. Sorrells approach results in 12% of production costs being classified as demand-related. Both are more reasonable than the Company's assumption that all 200 hours would be fueled with oil.

C. Conservation Costs Should Be Allocated In Same Manner as Production Costs.

Puget, Staff, and Public Counsel all proposed that the Company's conservation rate base and operating expenses be allocated among the classes using the peak credit methodology. WICFUR witness Schoenbeck proposed that these costs be allocated on the basis of an imputed usage factor for each class, with the conserved energy factored back into the equation. [T-73, P. 22] Ms. Lynch rebutted this, pointing out that a number of factors would need to be addressed before this approach would be viable, including Free Riders, Load Retention vs. Conservation, Customer Contributions, Verification of Life of Measures, and Cream Skimming. [T-76, P. 17] Particularly in light of the Commission's directive to Puget in Cause U-89-2688-T to reform its load-retention water heater program, Ms. Lynch's comments are well grounded.

D. Transmission Costs.

Perhaps the most important cost allocation issue in dispute is the treatment of non-generation-related (also called "network") transmission costs. Puget proposed that

these costs be allocated 100% on the basis of the highest peak hours of the year; Staff and Public Counsel recommended that these costs be allocated on the same basis as other production and transmission costs, using the Peak Credit methodology. Puget's proposal is conceptually flawed, fails to recognize the cost characteristics of transmission system development, and directly contradicts long-established Commission policy.

1. Transmission Serves All Hours Of The Year

Allocating network transmission solely based on the peak period ignores the fact that transmission facilities are used throughout the year. Puget's argument that transmission lines are sized to meet peak demand does not address the fundamental question of why they are built in the first place. [T-43, P.13] Puget and other utilities only build transmission lines to areas where they expect significant loads throughout the year; if expected usage in a given area was only during the 200 highest peak hours, it is unlikely that the lines would be built at all. [T-43, P. 12]

2. Off-peak Classes Are Entirely Exempt Under Company Proposal.

Under Puget's proposal, a customer class which places its electric load on the system only during off-peak periods would be entirely exempt from paying any part of the costs of the transmission system. In fact, Puget's preferred cost of service study charges nothing to irrigation customers for the network transmission system [Ex. 4, Schedule C, Line 11, far right column]. Since these customers use the system, it is obviously unfair to assign them none of the cost, but that is exactly the effect of Puget's proposal. If a portion of the costs were treated as energy-related, as the Commission has consistently directed, then all customer classes would bear an equitable share of the costs.

3. Economies of Scale.

Another reason why transmission costs are partly energy-related is that there are significant economies of scale in transmission construction. The additional cost of oversizing a transmission line for greater peaking capacity is much lower than the

average cost per kilowatt of capacity to build a transmission line with only enough capacity to serve off-peak loads. Mr. Lazar provided several references to show that these economies of scale were generally recognized in the industry, and even that Puget's own least-cost plan recognized non-peaking benefits of transmission investment [Ex. 46].

4. Past Commission Policy.

The issue of transmission cost allocation has come up in nearly every proceeding in which the Commission has considered electric cost of service. In each of these past proceedings, the Commission has rejected the proposal which Puget has made in this case, that network transmission be treated solely as demand-related:

> We agree with the recommendation of POWER that transmission costs should not be fully allocated to demand but should be allocated to both energy and to demand. [U-81-41, Second Supp. Order at 23]
>
> Classification of transmission system cost should be applied using the same principles as for production plant. [U-82-10, Second Supp. Order at 37]
>
> The Commission requires that the company present in the next proceeding an allocation of these [transmission] costs between energy and demand using the same principles as for production plant. [U-82-12/35, Fourth Supp. Order at 35]
>
> No party other than Counsel for POWER addressed the company's allocation of transmission costs. Counsel for POWER correctly argues that the Commission in the company's previous rate case, Cause U-81-41, ordered the company to allocate all transmission costs to demand and energy using the same principle as for production costs. The Commission also affirmed this principle in the most recent rate cases involving The Washington Water Power Company (U-82-10) and Pacific Power and Light Company (U-82-12). The Company is ordered in its next rate case to present a cost of service study that complies literally with the Commission's directive related to the allocation of transmission costs. The Commission does not intend that remote transmission costs should be allocated differently than total transmission costs. [U-82-38, P. 31]

One goal of this proceeding is to firmly resolve issues of continuing dispute, outside of the usual revenue-requirement driven rate proceeding. We had previously thought that this issue was finally resolved. We request that it be finally resolved in this proceeding.

E. Distribution Costs.

The major issues in distribution cost allocation deal with the distribution "infrastructure" consisting of poles and conductors. The approach used by the Commission to date is known as the Basic Customer / Demand method, in which meters and services are treated as customer-related, and other distribution facilities are treated as demand-related. A method which is more favorable to residential customers, is the Basic Customer / Energy method; the Commission rejected this approach in Cause U-84-28. The method used by the Commission for gas cost of service treats only one-half of the cost of meters and services as customer-related; that method is also more favorable to residential customers than the Basic Customer / Demand method. Finally, the large user intervenors advocated use of the Minimum System or Zero Intercept method, which is more favorable to these large customers than the Basic Customer / Demand method.

The Commission has regularly rejected the use of the so-called "minimum system" method for classifying distribution plant. A decade ago, this position was clearly stated:

> The Commission rejects the Company's use of the zero-intercept method. The minimum system method, of which the zero-intercept method is a variant, is also rejected. Both methods are likely to lead to the double allocation of costs to residential customers and over allocation of costs to low use customers.
>
> Washington Utilities and Transportation Commission v. Washington Water Power Company Docket U-83-26 Fifth Supplemental Order, at 33 (1984)

More recently, the Commission was faced with this question again, and reached an even more precise conclusion:

> In this case, the only directive the Commission will give regarding future cost of service studies is to repeat its rejection of the inclusion of the costs of a minimum-sized distribution system among customer-related costs. As the Commission stated in previous orders, the minimum system method is likely to lead to the double allocation of costs to residential customers and over-allocation of costs to low-use customers. Costs such as meter reading, billing, the cost of meters and service drops, are properly attributable to the marginal cost of serving a single customer. The cost of a minimum sized system is not. The parties

should not use the minimum system approach in future studies. [Cause U-89-2688-T, Third Supplemental Order, P. 71]

Puget adhered to this directive in it's filing, instead using the Basic Customer/Demand method which the Commission has accepted in other proceedings. In this approach, only the costs of meter reading, billing, meters and service drops are considered customer-related, and the other distribution costs are considered demand-related. Staff and Public Counsel accepted this approach as reasonable and consistent with past Commission decisions. [T-43, P. 17; T-33, P. 12]. Only the large-use customers have again tried to raise this flawed methodology, since the misallocation of costs to small users works to their benefit. These parties presented no evidence as to why the Commission's previous findings that this method can lead to over allocation of costs to smaller customers and double allocation of costs to residential customers were in error.

1. Basic Customer / Demand Method is a Reasonable Compromise

The Commission has been faced in nearly every rate proceeding with a variety of methods to allocate distribution costs, from an all-energy method to an all-customer method. In Puget's most recent general rate case (Cause U-89-2688-T) it adopted the Basic Customer method. This method is a reasonable compromise among the various methods advocated. It is by no means the most favorable method from the perspective of residential customers, nor is it by any means the most favorable method from the perspective of large-use customers. It is a compromise.

2. "Cascade" Method is Cost-based Given Puget's Line Extension Policy.

Another method which this Commission has frequently approved for allocation of utility distribution plant is the method first accepted for allocation of gas distribution plant in Cause U-86-100 involving Cascade Natural Gas. Mr. Lazar discussed the applicability of that method to the electric utility industry [T-43, P. 19-20]. In response to a Commission bench request, Puget prepared a cost allocation study using the

Cascade methodology, along with the treatment of production and transmission costs recommended by Mr. Lazar. That study showed that residential customers were paying a 100% parity ratio at current rates -- meaning that the residential class should get only an average increase in rates if the Commission determined that 100% parity for each class was appropriate. [Exhibit 82]

3. Minimum System Method Advocated by WICFUR/BOMA is Illogical.

In spite of the Commission's unambiguous treatment of this issue in many past proceedings, WICFUR, BOMA, and the Department of the Navy chose to relitigate this issue. Public Counsel objected unsuccessfully to the relitigation of this issue [Tr. 1698]. We are therefore compelled to (again) explain why this method is fundamentally flawed.

These parties introduced no useful or relevant additional information on why this long-discredited method should be reconsidered. In fact, Mr. Saleba, the BOMA witness, first cited Professor Bonbright as an expert in cost allocation [T-54, P. 6], and then still proposed the minimum system method which Prof. Bonbright so clearly rejected [Ex. 56]. Mr. Saleba was unaware that this Commission had specifically requested that the NARUC Cost Allocation Committee include the basic customer method in its cost allocation manual [Ex. 57].

As Professor Bonbright stated it decades ago:

> ...the inclusion of the costs of a minimum-sized distribution system among the customer-related costs seems to me clearly indefensible... [Ex. 56]

This Commission is not alone in rejecting this methodology. Other commissions have reached the same conclusion:

> The Commission again rejects IP's proposal that costs of the minimum distribution system be included in the calculation of marginal customer costs. The Commission believes that only the cost of meter reading and billings, meters and service drops are properly included in the calculation of marginal customer costs. Primary lines, secondary lines and secondary transformers are not added each time an additional customer comes on the system.
>
> Illinois Commerce Commission v. Illinois Power Company, Docket 87-0695, Order, at 218 (1989)

The state of Iowa has gone one step further, setting forth in its administrative rules what costs will be considered customer-related, and excluding the distribution poles and conductors which are included as customer-related in the minimum-system method approach:

> Customer cost component estimates or allocations shall include only costs of the distribution system from and including transformers, meters and associated customer service expenses.
>
> Iowa Administrative Code, 199-20.10(2)

Frankly, we should not have to spend our time and resources, and the Commission's time and resources, continually relitigating this issue. Puget does not use the minimum system method in building its distribution system. Ms. Sorrells stated the issue as follows:

> The company does not plan distribution lines without expecting customers to use energy. [T-33, P. 13]

Mr. Lazar also testified that the Company does not plan hypothetical minimum sized distribution circuits, or provide service to customers using zero power. As Mr. Lazar pointed out in detail, the Company's line extension policy is based on providing a free line extension based on a two-year expected revenue level, which in turn is primarily dictated by expected energy consumption [T-43, P. 19]. The Company will expend up to $100,000 for distribution lines to serve a large commercial customer expected to use enough energy to have an annual bill of $50,000, but will spend only $1,363 to hook up the typical residential customer [T-43, P. 19]. Puget has not proposed any changes to this aspect of its line extension policy. Nor has Puget or the other parties proposed any method to allocate distribution costs in proportion to the way they are incurred -- $100,000 to the large commercial customer, $1,363 to the residential customer; under the minimum-system method, both would be allocated a similar share of the basic distribution infrastructure. We are not advocating a customer-by-customer method, but raise this issue only in defense of our assertion that the minimum system method is fundamentally flawed, and that the Basic Customer method is a compromise which is not unreasonable for any class.

F. Summary of Cost of Service Recommendations.

The Commission should reaffirm the Peak Credit methodology for classifying production plant.

The Commission should affirm Puget's use of one-half of the cost of a combustion turbine as the appropriate fixed cost associated with meeting increased peak demands.

The Peak Credit factor should be calculated using the 200 highest hours of demand as the "peak" period.

The Commission should decide that either actual test year fuel use, or typical year weather-normalized fuel use should be the basis of fuel assumption for the peak credit calculation. Either Mr. Lazar's 50 hour oil/150 hour gas assumption, which reflects a typical year, or Ms. Sorrells 200 hour gas assumption, which represents actual test-year conditions, should be accepted.

Conservation costs should be allocated in exactly the same manner as production costs, on the basis of test year peak and energy loads.

The Commission should unambiguously reaffirm that network transmission should be classified as partly demand-related and partly energy-related using the same peak credit approach which is used for classifying production costs and generation-related transmission.

The Commission should again reject the minimum system method, and again direct the parties to this proceeding not to relitigate it in the future unless technological changes in the utility industry emerge in the future which may justify reconsideration of this approach. Either the Basic Customer method or the Cascade method should be approved.

IV. IT IS NOT NECESSARILY FAIR FOR ALL CLASSES TO PAY THE SAME RATE OF RETURN

Puget advocated that rates for each class should be adjusted one-third of the way to "parity" with "parity" defined as all classes providing the same rate of return on the facilities serving that class. The record does not support this assumption. In fact, it suggest that different customer classes, and different types of utility plant impose different risks. Perhaps most important, the classes are growing at different rates and therefore not all classes are causing the need for rate increases equally.

This Commission has long rejected the concept that cost of service studies are the final answer to rate spread decisions. In nearly every proceeding since Cause U-78-05, the generic cost of service proceeding, the Commission has found that other factors, including perceptions of equity and fairness, gradual change over time, economic conditions, conservation goals, and other factors. In light of this history, we found it surprising that Puget proposed mechanical application of the results of its cost of service study.

A. Not All Classes Impose the Same Risks.

This Commission has regularly approved rate spread proposals which do not result in equal rates of return for all classes. We submit that one justification for this may be that not all classes impose the same risk. Large industrial customers may impose loads which force Puget to acquire resources to serve them, but if they close their business on short notice, Puget and its remaining customers are left "holding the bag." Mr. Lazar proposed two alternative ways to address this potential problem. One choice is to require a higher rate of return from large-use customers. The other is to require long-term contracts for service at otherwise equitable tariff rates.

Mr. Lazar identified the high voltage and primary classes as being most susceptible to the business cycle [T-43, P. 23]. He pointed out that decoupling may protect shareholders from risks of lost sales to these customers, but that it clearly does not protect the remaining ratepayers, who under decoupling would pick up any lost revenue.

B. Not All Types of Property Impose the Same Risks.

Puget's cost of service study does not differentiate between the different types of property used by different classes. Residential customers use a high proportion of distribution plant; high-voltage customers use only production and transmission facilities.

For a variety of reasons, distribution plant is less risky, and the investment needed to serve secondary-voltage customers, therefore, is less risky and should require a lower rate of return than the investment needed to serve high-voltage and primary voltage customers.

This Commission has been faced with a large number of contested proceedings involving disallowances of investment by electric utilities. In each case, these involved disallowances of failed production plant investments: Skagit (U-83-54, U-84-65, U-84-28); Pebble Springs (U-82-38; U-82-12); Kettle Falls (U-83-26); WNP-3 (U-89-2688-T; U-86-99). In each case, utilities had made significant commitments to acquiring production resources which either were never finished, or cost more than was prudent. On the other hand, we are not aware of any cases in which the Commission has imposed a significant disallowance for distribution plant. Clearly production plant is a riskier investment, and the classes which use a higher-than-average proportion of production plant should pay higher rates of return.

As Mr. Lazar pointed out, the overall rate of return is a melding of the different risks faced by the utility. If the cost of service study computed a revenue requirement for production plant at a higher than average rate of return, and one for distribution plant reflecting a lower than average rate of return, residential and small commercial classes would pay less, and large user high voltage and primary classes would pay more [T-43, P. 29]. The differences in risk are very real, and it is inappropriate for Puget to recommend that all classes pay the same "parity ratio" when that ratio is calculated without consideration of the alternative risks of different classes.

C. Residential and Lighting Classes Are Slowest Growing.

Another important issue in cost allocation is to identify which customer classes are most responsible for the rate increases which are before the Commission. Puget's cost of service study does not differentiate between fast-growing and slow-growing classes. As can be seen by the table extracted from page 25 of Mr. Lazar's testimony, Puget's residential load is its slowest growing major customer class:

TOTAL KWH SALES GROWTH 1980 - 1992

Residential	11.3%
Secondary General Service	87.6%
Primary General Service	54.7%
High Voltage	32.6%
Lighting	4.4%
Resale	38.5%
Total System	33.9%

The secondary general service class has grown nearly eight times as fast as the residential class, while the primary and high voltage classes have grown five and three times as fast. It is obviously unfair to expect all classes to pay an equal share of the cost of new power supply resources, when some classes are far more responsible for the need for those resource acquisitions. As Mr. Lazar testified, the City of Seattle used a "cost of growth" methodology for allocating rate increases during a period when it was suffering from unequal growth rates among different classes of customers [T-43, P. 26].

D. Lazar Proposals for Target Parity Ratios and for Recognizing Class Load Growth in Rate Spread Are Reasonable Options.

Mr. Lazar recommended several methods to incorporate recognition of the different types of risk faced by different customer classes and the differential growth rates of different customer classes.

First, he proposed "target parity ratios" for each class, based upon the specific risks associated with serving each class. His recommendations, based solely on risk factors, are as follows:

Residential	.95
Secondary General Service	1.00
Primary General Service	1.05
High Voltage	1.05
Lighting	.95
Resale	1.05

These recommended parity ratios assume that a separate adjustment will be made to account for differential growth rates between classes, such as our recommended division of any rate increase between a "cost of service" portion and a "cost of growth" portion. If the Commission desires to roll the growth issue in with cost of service and differential risk, he recommended a target parity ratio for the secondary class of 1.05.

E. Summary of Relative Risk Recommendations

The Commission should expect a higher rate of return from large-use customer classes than from the classes made up of small individual customers, or else require that such customers execute long-term contracts for service.

The Commission should find that production investments and long-term purchased power contracts are riskier than distribution plant investments, and direct Puget to incorporate this fact in future cost of service studies. Any proposal to move rates toward equal parity ratios should be modified to reflect the lower risk of smaller-use customers.

The Commission should adopt class-specific target parity ratios to reflect differential risk by customer class.

V. ALLOCATION OF ANY ALLOWED REVENUE INCREASE

Having discussed in detail the various considerations which should go into the rate spread decision, we now turn to the practical issue of how to allocate any allowed rate increase resulting from the general rate proceeding and the Periodic Rate Adjustment Mechanism (PRAM) which are expected to take effect on October 1, 1994.

Public Counsel submits that it is **critical** that the Commission use the revised methodology resulting from this proceeding to allocate the PRAM III rate adjustment. The previous two PRAM increases were allocated using the demand and energy allocation factors from Cause U-89-2688. It would be a mistake to use those factors in this proceeding. First, they reflect out-of-date loads and result in too much cost being allocated to the residential class, simply because it has grown more slowly than the other classes. Second, the Cause U-89-2688 factors were based upon a 12-hour definition of

"peak" which the Company no longer supports and which would result in excess costs being allocated to the low load-factor classes.

Further, we believe it is essential to look at the actual magnitude of any proposed increases in cents/kwh terms. The Company proposal would impose the highest cents/kwh increase on the residential class, which already pays the highest rates and is fully covering its cost of service as measured by either Mr. Lazar's proposed "target" parity ratio or even Puget's proposed 1.00 class parity ratio. [Ex. 82] The Company proposal would impose the second smallest cents/kwh increase on the high-voltage class, which is currently paying the lowest overall rates and is the furthest from covering its cost of service. The table below shows this effect, taken from Exhibit T-43, Exhibit 82, and Mr. Lazar's proposed parity ratios (without the effect of a separate adjustment for differential growth factors).

Puget Power Average Rates and Proposed Increase

Class	U-89-2688-T Rates	Proposed Rates	Proposed Increase	Proposed Parity	Current Parity
Residential	$.0555	$.0695	$.0140	.95	1.00
Secondary	$.0543	$.0636	$.0093	1.05	1.10
Primary	$.0398	$.0511	$.0113	1.05	.90
High Voltage	$.0276	$.0379	$.0103	1.05	.83
Total	$.0496	$.0618	$.0122		

As is clearly evident, Puget's proposed rates would increase the residential rates by the highest amount, even though the residential class is paying at or above the recommended parity ratio, and raise the high voltage rates far less, even though this class is far below the recommended parity ratio.

Mr. Lazar recommended a practical way to fully consider both cost of service information and relative growth in determining fair, just, and reasonable rates [Tr. 1690]. During cross-examination, he proposed that 50% of any allowed rate increase be spread based on the cost of service study using his recommended target parity ratios reflecting risk, and that half be spread based on the growth rate of each customer class. [Tr. 1691]

Our recommendation would move all classes closer to the recommended parity ratios with respect to the portion of the increase which should be spread based on cost of service, and require all classes to contribute a portion of the required increase in rates based on their historical growth.

A. PRAM III should reflect new peak credit factors.

We have above recommended that the PRAM be spread based on a methodology determined in this proceeding, simply because the factors used for PRAM I and PRAM II are both out of date and erroneous. Another reason for treating the two together is the potential that the PRAM may become the major component of any rate increase. The staff recommendation in the general rate case is for a slight decrease in current rates. Even if some of staff's adjustments are not accepted, the general rate adjustment may be very small. However, the $76 million PRAM III filing consists of many less controversial and unrecovered costs.

The power supply portions of the first two PRAM adjustments were spread based on the 80% energy, 20% demand factors used by Puget in its peak credit methodology in Cause U-89-2688. The demand portion was then split between classes based on the contribution to the 12 highest peak hours. In this proceeding, Puget is advocating that a 84% energy / 16% demand classification be used, and that the demand-related portion be split among classes based on their contribution to the 200 highest peak hours. Public Counsel and staff generally agree with Puget's approach in this regard, except that we advocate that only 12% (staff) or 13% (Public Counsel) of production costs be classified to demand based on the fact that gas, not oil, is the primary fuel for Puget's combustion turbines.

B. Largest Increases Should Apply To High Voltage and Primary Classes.

Regardless of whether Puget's cost of service study or that proposed by Public Counsel or Staff are adopted, the high voltage class is providing the lowest ratio of

revenue to revenue requirement (parity ratio) of any retail class, ranging from 83% (Public Counsel proposed approach, Exhibit 82) to 88% (Lynch General Rate Case rebuttal CEL-6). The Company proposed that a parity ratio of 100% would be reasonable for this class; Mr. Lazar advocated a parity ratio of 105%. Current rates for this class are far below either of these ratios. This class currently pays the lowest rates. It has grown three times as fast as the residential class. It should get the largest increase on a cents/kwh basis.

The primary voltage class ratio is only slightly better. The parity ratios at current rates for Primary range from 90% (Public Counsel) to 93% (Puget Rebuttal). Mr. Lazar also advocated a parity ratio of 105% for the Primary class. The Primary class has grown five times as fast as the residential class. This class should also receive a much larger than average increase.

Assuming that the PRAM III adjustment is spread as proposed above (using the new billing determinants, and the revised peak credit classification and allocation factors), it is necessary for the general rate case adjustment to be spread so that this class gets a higher than average cents/kwh increase. Any increase measured in comparative percentage terms will likely not achieve this goal, since this class currently pays rates which are only about half those paid by the residential and secondary customers. Even a large percentage increase, when applied to a small base, will not significantly move these customers towards any reasonable measure of equity.

C. Smallest Increases Should Apply To Lighting and Residential Classes.

The smallest increases should be applied to the lighting, residential, and secondary general service classes.

The lighting class is currently paying the highest parity ratio of all classes (136% in Puget's study; 132% in the Exhibit 82 study reflecting Public Counsel's cost allocation methodology). The lighting class is clearly the least risky. It is the slowest growing of

all classes. It probably should receive no increase at all; at most it should receive one-half the average increase in cents/kwh.

The residential class is currently paying a parity ratio of 100% (Exhibit 82). Mr. Lazar's recommended target parity ratio for this class is 95%. Based solely on the cost of service study and the target parity ratio, this class should get a smaller than average increase. It is also the slowest growing of the major classes. If the Commission accepts the cost of growth methodology proposed by Mr. Lazar, the residential class should receive a significantly lower than average increase.

D. Secondary Should Get An Average Increase.

The secondary general service class is a special situation. All of the cost of service studies (even the one prepared by WICFUR) show this class is paying well above parity. Mr. Lazar recommended a 100% parity ratio for this class if a separate cost of growth adjustment were imposed or if the concept of a growth adjustment is rejected, and a parity ratio of 105% if growth is not considered separately. It is above either of these, ranging from 106% - 110% in the various studies. On the basis of cost of service alone, it should receive a smaller than average increase.

This class, however, is by far the fastest growing class, and in our opinion should receive a significant increase based on the costs of acquiring new resources to fuel this growth. Using a cost of growth methodology, this class would receive a much larger than average increase.

We propose that the Commission apply the proposed increase 50% on the basis of cost of service, and 50% on the basis of growth. Using this approach, this class will receive about an average rate increase.

E. Move Irrigation Customers Onto Seasonalized General Service Rates.

The irrigation customers are subclasses of the secondary and primary general service classes. Puget is proposing that these subclasses receive a much smaller than

average increase. For example, in rebuttal testimony in the general rate case, Puget has proposed an increase of $.0057 for the secondary irrigation class, exactly equal to the system average increase over PRAM II rates. The proposed increase for the primary irrigation subclass is only $.0032/kwh, just over half of the system average proposed increase. Part of the problem, as discussed earlier, is Puget's faulty comparison of rate increases on a percentage basis, rather than a cents/kwh basis. However, the most serious problem is that Puget is not proposing to move these customers towards providing revenues equal to costs in any meaningful fashion.

One issue raised was whether the irrigation rates should remain a separate subclass. In light of the increased seasonality of Puget's rate proposals resulting from this proceeding, Public Counsel submits that it is reasonable to eliminate the irrigation rate as a separate schedule. These customers would then buy power at the same rates as other secondary and primary voltage customers, who in turn will pay much lower rates in summer (i.e., the irrigation season) than in winter.

Public Counsel believes that rates for irrigators should be fair, just, and reasonable. They should not be subsidized as at present.

F. Jurisdictional Allocation Should Be Applied to Resale Class.

Puget provides wholesale power to several port districts which resell it to marina tenants and other customers. The Commission does not set rates for these customers, but sets rates to recover the residual revenue requirement for the retail system after revenue for these customers is known. Puget originally proposed a modest increase for this class which was below the system average and would have left their rates far below the cost of providing service. Several parties proposed alternative treatment for Puget's resale customers, all of which would still have provided far less than the cost of their service.

During cross-examination in the last phase of the rate design proceeding, the Administrative Law Judge asked several witnesses if a jurisdictional allocation would be an appropriate treatment for these customers. [Tr. 1593, Tr. 1677, Tr. 1831] Public Counsel's witness and several others agreed that a jurisdictional allocation was appropriate. In its rebuttal testimony in the rate design phase, Puget proposed a jurisdictional allocation, with revenue requirement assigned to the resale customers based on a 100% parity ratio. We believe this is a reasonable approach.

G. Summary of Rate Spread Recommendations

The Commission should order that half of any future rate increase be spread based on the results of the cost of service study, and half on the basis of the relative rate of growth in each class of customers.

The Commission should use both the target parity ratios recommended by Mr. Lazar and the cost of growth allocation methodology in determining what share of the rate increase should be assigned to each class in this proceeding.

The Commission should resolve how the peak credit method is to be applied, and then use that methodology to spread the PRAM III increase among customer classes. If it accepts Public Counsel's proposed methodology, 13% of the power supply costs would be classified as demand-related, and these would be spread between classes based on the 200 highest hours of system load.

The Commission should apply a cents/kwh increase to the High Voltage and Primary Voltage classes which is at least one and one half times the system average increase in cents/kwh.

Ideally, the Commission should simply eliminate the irrigation rate, and allow irrigation customers to be treated exactly like other customers with similar usage characteristics in the secondary and primary rate schedules. If a separate rate is maintained, the irrigation subclasses should receive increases equal to one and one-half times the average increase measured in cents/kwh.

The Commission should accept Puget's rebuttal cost allocation proposal, and assign $6.8 million (plus the PRAM III surcharge) to the resale class.

VI. RATE DESIGN

The overall goal of rate design is to promote conservation, efficiency, and equity [PURPA Section 111]. Public Counsel's recommendations in this proceeding attempt to make Puget's rates consistent with these goals.

A. General

The first premise of rate design should be that rates should reflect the cost of new electric power generating resources, plus incremental transmission and distribution costs. Mr. Hoff accepted that principle [T-8, P. 4]. Puget identified a combined-cycle combustion turbine as the "avoidable" baseload generating resource, and either capacity contracts with California utilities or new simple cycle combustion turbines as the avoidable peak resource [T-8, P. 9-13]. Public Counsel concurs with Puget's identification of its avoidable generating cost. Puget did not attempt to quantify incremental transmission or distribution costs in this docket.

A second general issue which was addressed in this proceeding is the importance of seasonal rate designs to accurately reflect the fact that power costs in the Northwest are higher in the winter than in the summer. Puget identified a 6 mill/kwh difference in energy costs between summer and winter. [T-8, P. 12] We agree that this is a reasonable estimate. Puget also identified certain capacity costs which are primarily attributable to the winter period. While Puget has accurately reflected these seasonal costs in rates for residential, primary, and high voltage customers, modifications are needed to Puget's proposed Schedule 24 rate for small commercial customers.

One issue that was discussed briefly was whether a 4 month winter or six month winter is most appropriate. As Mr. Lazar testified, there is no uniformity among utilities in the region on this issue. All 200 hours of Puget's peak demand occurred in the months of December through March [Ex. 19]. We believe that a 4 month definition of winter would accurately track the period when power costs are significantly higher than average. A 6 month definition of winter would be more understandable to consumers. In addition, since Puget only reads residential meters and renders residential bills every

two months, a 6 month definition of winter would ensure that customer usage during the highest-cost months would all be billed at the winter rates.

B. Residential

Puget has proposed that the monthly customer charge be based on the costs of meters, services, bimonthly meter reading and billing, and the associated administrative and general costs. Puget also proposed that a two-block rate design be used in place of the current three-block rate design. Public Counsel generally supports Puget's proposals, with some important refinements.

1. Amount of customer charge

Puget has proposed that the residential customer charge be increased from $4.55/month to $5.00/month. That increase is based upon Puget's proposed rate base, expenses, and rate of return for its meter reading, billing, meters, and services costs as directed by the Commission in Cause U-89-2688-T. Based on its proposed revenue level, Ms. Lynch computed this cost as $5.15/month [Ex. 566, P. 2.] While we generally agree with the method of calculation Puget has proposed, there are some refinements needed.

First, Puget failed to deduct from the Customer Accounts expense the portion of these costs which are paid by customers in the form of an Account Service Charge imposed by Puget when customers move into or out of a residence. Since these costs, which are paid directly by customers who move, are recorded in the same accounts as customer billing expenses, it is important to remove them so they are not double-counted when the customer charge is calculated. The Account Service Charge produces $1 million in revenues from the residential class each year [Ex. 565, P. 3, L. 13], which should be subtracted from the Customer Accounts expense in computing the residential customer cost. This correction reduces the cost from $5.15 to $5.03 per month.

Second, Public Counsel and staff argue in the general rate proceeding that a different capital structure and rate of return be applied. Puget's calculation of $1.77/month for plant should be updated to reflect the Commission's ultimate decision on capital structure and rate of return. Applying Public Counsel's proposed Cost of Capital of 8.60% [Ex. SGH-1, Schedule 12] would reduce this to $1.26 per month. Taken together, these adjustments reduce the residential customer costs to $4.52 per month.

During cross-examination, the Bench asked several questions regarding the applicability of the "Cascade" methodology approved by the Commission in Cause U-86-100, and reaffirmed in several other gas rate proceedings, to the electric system. Mr. Lazar indicated that the primary difference was that only half of the cost of meters and services are considered customer-related on the gas utility systems, in part because the gas utilities have minimum-use requirements in their service extension tariffs [Tr. 1681]. Adoption of the gas methodology would slightly reduce customer costs from the calculation used by Puget. At the opposite end of the spectrum, BOMA advocated use of the minimum system method which would greatly increase customer costs. Public Counsel believes that the Basic Customer methodology used by Puget, including the refinements identified above, is a reasonable method for determining customer costs.

Mr. Lazar identified a number of reasons why a basic charge of any magnitude may be undesirable. These include forcing the rate per kwh down, which discourages conservation, and the fact that in the competitive sector, customer charges are seldom found, and to the extent that regulation is intended to mimic the results of competition, they should not be allowed. [T-43, P. 38]

2. Number of rate blocks

Puget's current residential rates have three inverted blocks. Puget proposed to reduce this to two blocks, to reduce the rate for the initial block, and to set the point of inversion between the two blocks at 800 kwh/month. Public Counsel supports the reduction of the number of blocks and the reduction in the rate for the initial block, but submits that an initial block of only 600 kwh would better reflect the amount of low-cost

power on Puget's system. Basically, we advocate a smaller initial block at a lower rate than Puget; the total bill at the 800 kwh level would work out about the same, but the conservation incentive would be greater with our proposal.

The current three block rate may be unnecessarily complex. Puget proposed that the two-block rate be set so that the tail block equals the marginal cost of new resources needed to serve residential water heating load [T-8, P. 33]. We agree that a two-block rate may be reasonable, but the tail block should also take into account the higher costs of serving electric space heat.

3. Size of first block

There are two purposes to an inverted rate. The first is to reflect the actual cost of new resources in the end block, so that consumers make economically efficient decisions at the margin. [T-8, P. 33] Another purpose is to equitably allocate the limited amount of low-cost power on Puget's system. [T-43, P. 39] Puget's proposal satisfies the first goal, but not the second.

Mr. Lazar testified that the tradition definition of "low-cost" power, hydroelectric resources, could provide 460 kwh/month/customer while ensuring an equitable share of hydropower to other customer classes. By adding the lowest-cost thermal resource, Colstrip 1/2, the amount of low-cost power would be sufficient to provide 600 kwh/customer at a power supply cost averaging about $.015/kwh. [T-43, P. 43-44]

The Commission established the initial block of 600 kwh in Cause U-83-54, based in part on the fact that the low-cost hydro resources were sufficient to supply that amount [Cause U-83-54, 4th Supplemental Order, P. 42]. Due to customer growth, that is no longer the case strictly for hydroelectric resources, but it remains a reasonable amount if hydro plus low-cost thermal resources are considered.

The staff was originally concerned about the rate impact of a two-block rate at 600 kwh as proposed by Public Counsel, but after reviewing Puget's revenue requirement on a prospective basis, agreed to support a 600 kwh initial block. [Ex. 81].

4. The First Block Should Be Priced At About $.04/kwh.

Puget originally proposed a rate for the initial block of $.04096/kwh. [Ex. 12, P. 4] By the time of it's general rate filing, Puget had increased this to $060277 [Ex. 572, P. 10]. This was a 47% increase in the proposed initial block rate. Puget's original proposal was reasonable, cost-based, and would result in an overall rate design which rewards those customers who do the best job at conserving electric power. Puget's subsequent revisions to its original proposal constitute a significant retreat.

Mr. Lazar calculated the cost of the low-cost resources to be about $.015/kwh. The average distribution cost on Puget's system to residential customers is about $.025/kwh. [T-43, P. 44]. A rate of $.04/kwh for the initial "hydro" block fully recovers the cost of Puget's low-cost resources, including distribution costs. By allowing each customer an equal share of these low-cost resources, and allowing all customers who want to buy additional electricity the opportunity to do so at a price which recovers the cost of additional power, all customers are treated equitably.

5. Price for tailblock should be based on marginal cost.

Most of the parties agree that the tail block of the residential rate design should reflect marginal costs. There is some disagreement as to which marginal costs should be reflected. Puget's long-run marginal cost for residential lights is $.064/kwh, for water heating is $.074/kwh, and for space heating is $.082/kwh. [T-43, P. 43] Mr. Hoff proposed that the tail block be moved toward the water heating cost (T-8, P. 33] which would be $.074/kwh. Mr. Lazar proposed that the initial block be set based on the cost of low-cost resources, and that the tail block be set between the marginal costs of space and water heating. [T-43, P. 43]

Puget indicated that the end block did not need to reflect space heating costs, since even at the lower cost of water heat, its rates already provide a strong incentive to conserve and to use alternative fuels. While we certainly would acknowledge that

Puget's rates for all customers are high enough already, we are concerned that designing rates to benefit space heat customers may define the issue too narrowly. Puget still has large amounts of space heating load, these loads contribute to the winter peaks, and the Company is continuing to buy resources to serve these loads. Recognizing the cost of serving space heat in the tail block is therefore reasonable.

It is important to take the effect of the Residential Exchange Credit, Schedule 94, into account when designing rates. For rates to be economically efficient, consumers must see an effective price for marginal consumption which equals marginal cost. If the "pre-credit" rate is set at marginal cost, then the effective rate will be below marginal cost, and consumers will not choose conservation or other cost-effective alternatives as readily. If, on the other hand, the tailblock rate is set so that after the credit it is equal to marginal cost, consumers will see an efficient price and have an incentive to make an efficient decision.

The current marginal costs for space and water heat average $.078/kwh. The current exchange credit is $.0075. Therefore, in order for the net tailblock to equal the average of the space and water heat marginal costs, the pre-credit rate would need to be set at $.0855. This level should be thought of as a ceiling for the tailblock (subject to future changes in marginal costs and exchange credits), NOT as a rate to be implemented immediately. We believe that the initial block rate should be set based on the cost of low-cost resources, and the tail block should be increased gradually until it reaches the marginal cost ceiling. While this will have a somewhat greater impact on space heat customers than Puget's proposals, it is necessary to ensure all customers a reasonable share of hydro power at hydro cost, and it will provide a great incentive for space heat customers to convert to other fuel sources, which is one goal of the Washington State Energy Strategy.

6. Seasonality of Residential Rates

Puget has proposed that the tailblock energy charges in the residential rates be 10% higher in winter than in summer. We believe this is reasonable. We elsewhere

advocate that both demand and energy charges be seasonalized, to produce a total rate which is about 20% higher in winter than in summer for the general service classes. This is unnecessary for the residential class, because the inverted rate design has a seasonal element to it, since most customers face the tail block in the winter months. Under our proposed rates, the tail block could ultimately reach a level twice as high as the "hydro block."

C. Secondary General Service

Puget has proposed to break the secondary general service class into three separate subclasses. It proposed to increase the seasonality of the larger classes to about 20%, but only applied a 10% seasonality adjustment to the small secondary class. It proposed an unnecessary declining block rate design to the proposed Schedule 25.

1. Proposed breakup of Schedule 24

Puget proposed dividing Schedule 24 into three subclasses. The first is for customers whose usage is below the threshold for separate metering of noncoincident peak demand. The second is for customers with monthly demands greater than 50 kw, and less than 350 kw; the last is for customers over 350 kw peak demand.

2. Proposed Schedule 24 - Small Secondary General Service

Puget's proposal to separate the non-demand customers from the demand-metered customers is eminently reasonable and should definitely be approved. The current rate Schedule 24 has a transitional declining block rate form which is confusing and even deceptive. Puget has numbered the new small use schedule with the traditional schedule number for secondary general service, Schedule 24.

We are concerned about the limited seasonality in this schedule. Puget has proposed for all other general service schedules that the energy charge be 10% higher in winter than in summer and the demand charge be sharply seasonal -- twice as high in

winter as in summer. The net effect of those two seasonal rate characteristics is that overall rates will be about 20% higher in the winter.

For Schedule 24, which has no separately stated demand charge, the Company has rolled the demand charge into the energy charge, but has not reflect the seasonality of the demand charge in the process, leaving the only seasonal feature the 10% difference in the energy charge. In order for this schedule to have the same seasonality as Puget proposes (and we support) for the other schedules, the energy charge (which includes the demand costs) should be approximately 20% higher in winter than in summer.

3. Proposed Schedule 25 - Medium Secondary General Service

Puget's "middle" secondary general service rate design applies to customers with monthly demands between 50 kw and 350 kw. Unfortunately, the proposed rate schedule has retained the transitional, declining block rate design which characterizes the existing Schedule 24 rate. As Mr. Lazar testified, this is unnecessary. [T-43, P. 46-47] It also violates the declining block rate standard of PURPA, which this Commission adopted in Cause U-78-05.

Mr. Lazar proposed that any of three different rate forms be used to eliminate the declining block rate. [T-43, P. 48] The problem is that smaller general service customers with usage under 20,000 kwh/month sometimes have very sporadic use of power, and consequently have poor individual load factors (the ratio of average use to non-coincident peak use). If their use is not entirely on-peak, it is reasonable to assume that usage patterns of individual customers will be balanced out by other similar-sized customers, and that in fact they are not likely to impose unusually high peak demands on the Company as a group. [T-43, P. 47]

The first option Mr. Lazar suggested is to have a separate on-peak and off-peak demand charge, so that those customers whose peak use is off-peak pay less for their non-coincident demands. The second option is what are known as "load factor blocks" which include the demand charge as part of the energy charge for the first 200 kwh per

kilowatt of demand, so that customers with extremely low load factors (say, 50 kwh/kw) do not get overcharged. The third option is an energy constrained demand charge, in which the demand charge is stated in $/kw, but is constrained to no more than a specified rate per kwh.

We note that all three of these rate forms are in use; the state of Arizona and Hawaii have approved off-peak demand charge discounts [Arizona Corporation Commission Order No. 55931; Hawaii PUC Order 11699]; the state of Hawaii uses load factor blocks [Hawaii Public Utilities Commission Order 11699]; the state of Arizona also has energy-constrained demand charges. [Arizona Corporation Commission Order No. 55931]

We believe that the energy-constrained demand charge approach is the most easily understood. The limit should be placed so that the demand charge cannot be more per kwh than it would be at 200 kwh usage per kilowatt of demand.

4. Proposed Schedule 26 - Large Secondary General Service

Puget has proposed a separate schedule for large secondary general secondary general service customers with demands above 350 kw. The rate would be slightly lower than for the proposed Schedule 25. There is little justification for this differentiation, and it is unnecessarily confusing.

There is virtually no difference in cost of service for the customers Puget would classify in Schedule 25 and those in Schedule 26. Exhibit 82, Attachment 1, shows that the average cost/kwh for Schedule 25 is $.0615/kwh, and for Schedule 26 is $.0598/kwh. The load factor for Schedule 26 is significantly higher than for Schedule 25 [Attachment 2, Pages A-1-1 and A-5-1], meaning that with the same demand and energy charge for both groups of customers, the Schedule 26 customers would pay less.

Finally, the Company, Staff, and Public Counsel approaches to cost of service studies all show that Schedule 25 is paying a higher parity ratio than Schedule 26. To apply lower rates to Schedule 26 makes no sense under these circumstances.

We therefore oppose the creation of this separate schedule. All demand metered customers should be served on a single schedule, which should not contain declining blocks.

D. Primary General Service

The primary general service rate design is quite straightforward, with a seasonalized flat demand charge and a seasonalized flat energy charge. No party took exception to the rate design, but SWAP urged a more steeply differentiated seasonal rate, or creation of a separate rate for "summer peaker" customers.

1. Seasonality changes address SWAP proposals

Public Counsel submits that the Company's seasonality proposal -- with the demand charge half as big in the summer as in the winter, and the energy charge 10% lower in summer than in winter -- adequately addresses the concerns raised by SWAP. The Company's current rate design reflects only a 5% seasonality in the energy charge and no seasonality in the demand charge; the net bill for general service customers is about 3-4% larger in winter than summer for the same level os usage. The proposed rate design for Schedules 25, 26, 31, and 49 would all produce a net bill about 20% higher in winter than in summer for the same level of usage. This is an appropriate seasonal rate design for all customers, and will reasonably benefit SWAP's summer-peaker members. There is no justification for creating a separate rate schedule as requested by SWAP.

2. Main issue is level of rates

In our opinion, the major problem with the primary general service rates is the overall level of rates. This schedule pays a parity ratio of only 90%. [Ex. 82, P. 2] Mr. Lazar's target parity ratio, taking into account both class risk and property risk, is 105%. In addition, this class is growing much faster than the system average growth rate, as

previously discussed. In order to adequately recover the cost and risk of serving this class, and the incremental costs its growth imposes on the system, a much larger than average rate increase is required.

E. High Voltage

The same condition exists for the High Voltage customers as for the Primary customers, except to a greater degree. The rate design is simple and straightforward, and we do not propose major changes. The problem is the level of rates. This class is paying about half as much per kwh as the residential class. It is paying a parity ratio of only 83%. [Ex. 82, P. 2] Even in Puget's cost of service study, with which we disagree about the peak credit calculation and transmission costs, this class is paying only a 88% parity ratio [Ex. 79, P. 2] Mr. Lazar's target parity ratio for this class is 105%. In order to raise the rates as much as the residential increase, the percentage increase for this class would need to be twice as large as for residential, simply because the percentage increase is applied to a much lower base rate.

F. Summary of Rate Design Recommendations

The Commission should direct that both energy and demand charges should be seasonally differentiated, and that rate schedules which have only an energy charge should reflect the seasonal costs of both energy and capacity in the energy charge.

The Commission should define "winter" as the six months October through March.

The Commission should approve Puget's proposed method to calculate customer costs. This reflects meters and services, bimonthly meter reading and billing expenses. The Commission should update the cost of capital used in the calculation. Once customer costs are determined, all account service charge revenues should be subtracted from the customer costs to be collected in the customer charge.

The Commission should set the amount of power in the first block of the residential rate at 600 kwh/month.

The Commission should approve an initial block rate of $.04/kwh. The first block should not be increased in general rate proceedings or PRAM proceedings until the tail block reaches a level where the post-credit rate equals the average of space and water heating marginal costs.

The tail block of the residential rate should gradually be raised so that after the residential exchange credit is applied, it is midway between the marginal cost for water heat and space heat. Once it reaches that level, it may be appropriate to increase the initial block above the cost of the low-cost resources.

The Commission should approve Puget's proposal for the residential tail block to be 10% higher in winter than in summer.

The Commission should require that the Schedule 24 energy charge be 20% higher in winter than in summer to accurately reflect seasonal demand costs being rolled into the energy charge.

The Commission should reject Puget's proposed declining block rate for Schedule 25, and require the Company to implement an energy-constrained demand charge in its place.

The design of Schedule 26 is flawed, and should be denied. All demand metered general service customers should be served on a single schedule, and that schedule should have one of the alternatives to a declining block rate form described above.

We reiterate that the Commission should order the rate increases on the basis of a higher cents/kwh increase to Primary and High Voltage than to the rest of the system. Due to the low overall rate levels for these schedules, just requiring a somewhat higher-than-average percentage increase will not produce equitable results.

The design of the Primary and High Voltage rates is not the problem; the level of these rates is simply too low, and other customer classes are forced to bear a portion of their cost of service. The Commission should ensure that rates for these classes are raised by a larger amount, in cents/kwh, than rates for other classes.

VII. MINOR RATE DESIGN ISSUES

In this section, we will briefly address the minor rate design issues raised in this proceeding. Just because they are minor does not make them unimportant. Certain customers are potentially very significantly affected by these issues.

A. Power Factor Adjustment

The Company proposed reforming the power factor adjustment to more equitably recover the increased capacity requirement created by customers with significant reactive power requirement. SWAP vigorously contested the changes, while staff supported them. The basic issue is whether Puget should charge for the cost of the capacity it

must provide when customers have poor power factors, or should only charge for the cost of installing capacitors to correct the power factor of those customers. It is apparently cheaper to install the capacitors on the high-voltage side of the transformers, but customers do not normally have access to "Puget's side of the meter." We believe that Puget's rate design proposal should be accepted, but that customers should be allowed to pay the cost of having capacity installed to correct their power factors on "Puget's side of the meter" , and be spared the reactive power charge if they do so.

B. Residential Interruptible Water Heat

Puget originally proposed an interruptible water heat program, based on estimated costs and benefits which had been reviewed by the Rates Collaborative. The program provided a significant credit to participating customers. On rebuttal, Puget recanted the underlying economic analysis, and withdrew the proposal. Puget's estimated costs of providing an interruption system were much higher than those cited by Mr. Lazar [T-43, P. 53; Ex. 51] We will not recommend that the Commission direct the Company to implement a program which may be uneconomic. However, Puget should continue to examine the cost and benefits of such a system.

We believe that it is important that residential and small commercial customers be allowed the opportunity currently given to large customers to provide needed capacity to the system in exchange for lower rates and quality of service.

C. Voluntary Large User Rates.

Puget's Rate Design Collaborative could not agree on the appropriate form for rates for primary and high voltage customers to accurately reflect marginal costs. Some parties advocated mandatory universal application of such rates, and others opposed them on any but a voluntary basis. [Ex. 11, P. 15] Puget proposed an optional rate, with a "forecast" base usage to be provided at a rate well below the average cost of service. If customers actual use in the future grew more slowly than past growth, would benefit from the proposed rate design even if they did not conserve at all.

Mr. Hoff was questioned about this forecasting mechanism, and admitted that for a customer like Microsoft, which had grown rapidly in the past, it would not produce realistic estimates of future usage which should be billed at the lower cost first block rate. [Tr. 267]

Public Counsel supports inverted rates for large users, much as we do for residential customers, and the "rolling baseline" concept discussed in the Rates Collaborative was a promising alternative. However, Public Counsel can not support an optional marginal cost rate; the only customers who would likely sign up for such a rate are those expecting their future usage to grow more slowly than their past usage. As such, even a growing company would be entitled to an increasing allocation of cheaper, first-block power, even though that growth creates a need for expensive new resources. Furthermore, allowing a credit for reduced usage at a price which Mr. Hoff testified was equal to the marginal cost of service for these customers, when their rates are providing only 83% - 90% of average cost, is putting the cart before the horse. Such a credit should be available only after rates have been raised to at least a 100% parity ratio. At that point, the question of whether such a tariff should be instituted on an optional or mandatory basis should be reexamined.

D. Proposed Interruptible Rate Options.

Puget proposed three optional interruptible rate schedules on an experimental basis, Schedules 36 (Secondary), 38 (Primary) and 39 (High Voltage). These were recommended unanimously by the Rates Collaborative. They are characterized by relatively small credits ($.75 - $1.25/kw) for relatively infrequent interruptions. Originally, Puget proposed a $66/month customer charge for customers choosing to participate in this program; that would have been so high as to render it unattractive. In rebuttal testimony, Puget corrected this problem. We support Puget's rebuttal proposal.

E. Schedule 43 - All-Electric Schools

Among the more controversial rate schedules is the current Schedule 43 for all-electric schools. The Company acknowledges that this rate schedule does not recover the cost of serving these schools. The evening-only interruption allowed under the schedule does not coincide with Puget's normal morning peak demand periods. [Ex. 19] Public Counsel witness Lazar recommended that the rate be frozen, and that the restriction requiring participants in this schedule to be "all-electric" be lifted. [T-43, P. 52] Staff witness Sorrells also recommended freezing the rate schedule, and conditioning continued service on "doing all conservation investment recommended as cost-effective under Puget's Schedule 83."

On rebuttal, Puget proposed freezing the schedule, and requiring conservation measures as a condition of continued service. During cross-examination, Mr. Hoff agreed to clarify that schools must have an audit done, and install all cost-effective measures as a condition of continued service. [Tr. 1894] All parties seem to agree that the current schedule is uneconomic, but that suddenly requiring all primary voltage schools to move to Schedule 31 would place sudden and large rate impacts on public schools, which is undesirable for non-cost of service reasons. We support Puget's rebuttal proposal.

F. Advance Notice Requirements

Public Counsel witness Lazar advocated advance notice of major changes in load by large customers. [T-43, P. 64] He specifically presented this proposal as an alternative to increasing the required rate of return for large-use customer classes to ensure that the additional risk they impose is fully accounted for in rates. The Bonneville Power Administration requires Puget to give 7 years advance notice of load changes; Puget needs at least 2-4 years to secure additional resources at attractive prices from other sources.

An advance notice requirement for large changes in load as proposed by Mr. Lazar, is entirely reasonable. This proposal only deals with the very largest customers. It is really designed as a "circuit breaker" in case Puget's largest customers seek to leave the system on short notice, after Puget has acquired resources to serve them, or new customers come onto the system. An example of the potential for large additions to / deletions to load are the Direct Service Industrial customers, whose contracts with BPA end in 2001. Those DSI customers located in Puget's service territory (Intalco Aluminum, Port Townsend Paper, and Georgia Pacific) could seek service from Puget at that time. [T-43, P. 65] The DSI customers have imposed erratic loads on BPA, as the price of aluminum has risen and fallen. [T-43, P. 65]

Washington law requires that utilities

> "...shall, upon reasonable notice, furnish to all persons and corporations who may apply therefor and be reasonably entitled thereto suitable facilities for furnishing and furnish all available gas, electricity, and water as demanded." [RCW 80.28.110; emphasis added]

Puget's current rate schedules do not define what is "reasonable notice" as required by the statute. Mr. Lazar proposed a reasoned proposal for defining this notice, as it relates to large load changes, which could adversely affect Puget and its other customers. He proposed that load changes over 10 megawatts require 3 years notice, those over 30 megawatts require 5 years notice, and any over 50 megawatts require 7 years notice. No other party provided any constructive recommendation for advance notice.

G. Summary of Minor Rate Design Recommendations

Puget's proposed reactive power charge should be adopted, but Puget should be directed to establish a program within 180 days allowing low power factor customers to pay the cost of installing capacitors on Puget's side of the transformer in order to correct their power factors, in lieu of paying the power factor surcharge.

Puget should be directed to involve its conservation technical collaborative in an examination of residential water heater interruption options.

The Commission should deny the proposed rate schedules 30 and 48 as proposed, and direct Puget to develop large-user rate schedules which reflect marginal cost without rewarding growing companies with additional allocations of low-cost power.

Rate schedules 36, 38, and 39 should be approved.

The Commission should accept Puget's proposed treatment for Schedule 43 in its rebuttal testimony, with the modification that converting to other fuels for space and water heating loads will not disqualify a school currently served on Schedule 43 from this rate schedule. Puget should plan to move this class up to full cost of service, taking into account an appropriate a target parity ratio which recognizes the low-risk nature of service to schools.

The Commission should approve the requirement that load changes (up or down) of more than 10 megawatts require advance notice. If the Commission does not adopt this notice requirement, it should require that large use customers provide a significantly higher rate of return in their rates than other classes.

VIII. HOOK UP CHARGES

Public Counsel witness Jim Lazar proposed that the Commission adopt a $200 per kilowatt connection charge for new electric resistance space and water heat. [T-43, P. 58] Many other utilities, inside and outside the region, have adopted hook-up charges, with great success at encouraging energy efficiency. [T-43, P. 64] The goal of the hook up fee would be to recover the extra costs of serving electric heat, when it does come on the system, and to encourage builders and developers to choose gas heat where it is cost-effective for the consumer.

A. Electric rates are below marginal cost for heating customers; gas rates fully recover marginal costs.

The primary reason for advocating a hook-up charge for electric space and water heat is that Puget's rates -- even its proposed rates in the general rate case (which Public Counsel submits are not justified) -- fall short of the marginal costs of power to serve these loads. Puget's avoided costs, which do not include all of the transmission and distribution costs associated with serving new customers, are $.074 - $.082/kwh. [T-43, P. 43] Therefore, new customers impose costs on the system in excess of the revenues they provide, and force electric rates up for all participants. By capturing a portion of the cost of serving these new loads in a hook up charge, the Commission can accurately assess the cost of incremental service to the customers using this service, without imposing additional costs on existing customers. A hook-up charge is a means

to provide an accurate price signal about the cost of electric heat at the time that the decision of what kind of heating system to install is made.

B. Electric line extension policy may be a barrier to efficient fuel choice.

One reason advocated by Mr. Lazar for a space and water heat hook up charge is that the current electric line extension policy may be a barrier to efficient fuel choice. Puget provides free line extensions up to a total cost of $1,363 per unit to residential units, regardless of expected usage. [Schedule 85] The gas utilities provide only free line extensions based on expected gas usage, and consequently many developers choose to install electric space and water heat.

The Washington State Energy Strategy recommended that the Commission place emphasis on expanding the direct use of natural gas for space and water heating. [T-43, P. 59] As Mr. Lazar testified, however, the problem is not so much with the gas company's line extension policy, as it is the line extension policy of the electric utilities. The gas system has rates which are at or about equal to marginal cost. A major issue in the current Washington Natural Gas rate proceeding is that many of its line extensions may be uneconomic. [T-43, P. 62]. As Mr. Lazar testified:

> The combination of high construction costs for gas lines, plus low sales of gas per customer in new energy-efficient homes, means that the gas utility loses money on many of its new customers. In effect, for the gas utility, the marginal cost of service is very close to the average rates, and extending lines further than permitted under the current line extension policy would cause further income erosion and/or rate increases for gas ratepayers. [T-43, P. 62]

The problem facing the Commission, therefore, is that if builders choose electric heat, electric rates will go up, but if the gas line extension policy were liberalized to allow free line extensions to more marginal customers, gas rates will go up. This dilemma can be resolved by imposing a hook up charge for space and water heat designed to capture the additional costs imposed by new electric heat customers, but not recovered in electric rates. The alternative way to achieve the goal of the Washington State Energy Strategy -- making the gas line extension policy more generous -- cannot be

economically justified.

Mr. Lazar's proposal will have the following beneficial effects compared with attempting to influence fuel choice through liberalization of the gas line extension policy:

a) Builders will be encouraged to choose gas space and water heat for new multifamily housing developments, where the cost of gas appliances, not the cost of the gas line extension is the barrier to gas use;
b) Puget's rates will rise more slowly;
c) Washington Natural Gas and Cascade Natural Gas rates will rise more slowly;

C. Applying Hook-up Charges to Commercial Loads Should be Explored as a Way of Capturing the Cost of Growth.

Witnesses in this proceeding have expressed concern about the cost of serving new customers and growing loads being a major factor in Puget's rate increases. In particular, Bob Jacobs (the Mayor of Olympia) submitted a personal letter in the public exhibit in which he reiterated previously stated concerns. While the residential space and water heat hook up charge proposed by Mr. Lazar will address this issue with respect to residential loads, the fastest growing portion of Puget's loads is in the commercial sector. No party presented a comprehensive proposal, such as the $200/kw residential space and water hook up charge, for the commercial sector. We believe that the concept of a commercial (and even industrial) hook up charge has merit and should be examined.

The Commission should adopt the $200/kw hook up charge proposed by Public Counsel for new electric space and water heating loads, and direct Puget to examine and propose an appropriate hook up charge for the general service classes which accomplishes the goals of recovering incremental costs in excess of average costs in rates, and encouraging the direct application of natural gas to space and water heating loads.

IX. IMPLEMENTATION

This proceeding was originally filed as a revenue-neutral rate realignment, with rate increases for some classes, and decreases for others. It was subsequently

consolidated with the general rate proceeding (Cause UE-921262), and the new rates for both of these proceedings apparently will take effect on October 1, 1993, at the same time as the PRAM III rate adjustment and the BPA rate adjustment. Without prejudging the outcome of the various proceedings, it seems inevitable that Puget's overall rates will increase at that time. The issue then, is how much should the rates for each class increase, and how should rate design changes be implemented on October 1. We believe that this proceeding offers an excellent opportunity to realign Puget's rates to help achieve the goals of its least cost plan.

We propose that the Commission adopt specific cost of service principles in this proceeding, direct the Company to prepare a cost of service study consistent with that decision as part of its compliance filing after the order in this proceeding, and implement rates on October 1, 1993 which reflect the decisions in this case.

A. Adopt Cost of Service Principles in This Proceeding.

The Commission has been presented with specific recommendations by Puget, Staff, Public Counsel, and the large-user parties in this proceeding. The differences between the statutory parties are relatively small, and we believe that they can be addressed in detail. The large-users propose major differences from the studies presented by the statutory parties, all of which appear designed to produce a desired result, rather than a fair, cost-based, allocation of Puget's revenue requirement. The Commission should adopt the general framework of Puget's cost of service study, together with refinements on the peak credit calculation and transmission costs recommended by staff and Public Counsel.

B. Direct the Utility to Prepare a Cost Study Consistent with the Adopted Principles and the Adopted Revenue Requirement at the Conclusion of the Proceedings.

It is likely that Puget will not receive exactly the revenue requirement it has sought in the general rate proceeding, and that some of Puget's proposed cost of service approach will be rejected in favor of the methods previously approved by the

Commission and advocated by staff and Public Counsel. We think it important at the end of the proceeding that the Company prepare a cost of service study incorporating the approved revenue requirement and the approved cost of service methodology.

C. Adopt Differential Risk and Growth Principles for Cost Allocation.

Public Counsel demonstrated that there are different risks associated with serving different customer classes and that production plant is more risky than other plant. The Commission should adopt specific directives in this regard. In addition, Public Counsel has recommended that a portion of any rate increase be allocated on the basis of growth in usage for each class, rather than conventional embedded cost of service principles.

D. Use New Rate Principles to Allocate the PRAM III Rate Adjustment.

The PRAM I and PRAM II rate adjustments for "resource costs" were allocated between the classes using the cost of service methodology which Puget proposed (but which the Commission did not accept) in Cause U-89-2688-T. That approach used only a 12 hour definition of peak, and assigned 20% of power supply costs classified as demand-related to those 12 hours. In this proceeding, Puget, Staff, and Public Counsel have all recommended that 200 hours (about 3% of the total hours of the year) be used to define the peak period, and that 12% - 16% of the power supply costs be assigned to those hours. It would be unfortunate if the old, repudiated, factors were used for the PRAM III increase.

E. Move One-half of the Way Towards Whatever Definition of "Equity" is Adopted.

Puget's testimony proposed moving one-third of the way from current rates to it's proposed cost of service results. We disagree that the cost of service results should be the only factor considered, and be mechanically applied, as Puget admits was done. [Tr. 1892] We have discussed the need to consider differential class risk, property risk, and growth rates in the determination of the appropriate cost of service for each class. The Commission will accept, modify, or reject these recommendations in its order in this

case. It will likewise accept, modify, or reject the proposed changes to the embedded cost of service methodology. Like Puget, however, we propose that the Commission direct that rates be moved only part of the way toward the Commission's definition of "equity" in order to avoid rate shock for any class. However, as discussed earlier, this should be measured on the basis of class increase in cents/kwh compared with the system average cents/kwh increase; a percentage-based adjustment will not provide a sufficient increase to the large-user classes, which are now heavily subsidized.

F. Summary of Implementation Recommendations

The Commission should adopt the general framework of Puget's cost of service study, together with some of the refinements recommended by Staff and Public Counsel.

Puget should be required to file an updated study consistent with the Commission-approved revenue requirement and cost of service approach as part of the final filing of rates at the end of the general rate proceeding.

The Commission should direct Puget to apply a higher rate of return requirement to the riskier large-user classes, to apply a higher rate of return requirement to production plant than to distribution plant in its cost of service studies, and to allocate a portion of any future rate increases on the basis of class growth, rather than embedded cost of service.

The Commission should direct that the PRAM III Resource Cost increase be allocated on the basis of the cost of service principles adopted in this proceeding.

The Commission should order rates moved one-half of the way toward whatever definition of "equity" it adopts in this proceeding, by changing the rates of customers below parity by a larger cents/kwh amount than it changes rates for classes above that definition of parity.

X. SPECIFIC ACTION ITEMS

This section will simply list the specific decisions we seek from the Commission in this proceeding. The discussion of the appropriateness and rationale for each change has been given in the preceding sections of this brief.

A. Cost of Service
   1. Approve Peak Credit Method;
   2) Use a 200 hour definition of peak
   3) Compute Peak Credit using 50% of the cost of a combustion turbine;
   4) Assume that 50 hours of the CT fuel will be oil, and the balance gas;
   5) Recognize the higher risk of serving large-use classes;
   6) Recognize that production investment is more risky than distribution investment;
   7) Classify all transmission plant between demand and energy using the same principles as for production plant.
   8) Accept the Basic Customer method for determining customer costs, possibly modified to reflect the Cascade methodology of treating only a portion of the cost of services and meters as customer-related.

B. Rate Spread
   1) Adopt target parity ratios reflecting different risks of different classes;
   2) Apply the PRAM III increase using the new demand, energy, and peak credit allocation factors resulting from this proceeding;
   3) Measure inter-class equity on basis of cents/kwh, not percentages;
   4) Apply the highest increases to the High Voltage and Primary classes;
   5) Use a jurisdictional allocation for the Resale class.
   6) Assign a portion of rate increases on the basis of class growth, as contrasted with the results of the embedded cost of service study.
   7) Eliminate the separate irrigation rate, and allow irrigators to take service on sharply seasonal general service schedules.

C. Rate Design
   1) General
      a) Implement 20% seasonality, except for the residential class, where the inverted rate is a part of the seasonal rate design;
      b) Define "winter" as the six months, October to March.
   1) Residential
      a) Set the customer charge no higher than the customer costs;
      b) Net out account service charges before computing the customer cost;
      c) Adopt a 600 kwh initial block, and a two-block rate design;
      d) Hold the rate for the initial block to the cost of Puget's lowest cost generating resources, plus the average distribution cost;
      e) The rate for the initial block should not be increased unless and until the tail block reaches the marginal cost of serving space and water heat.

f) Set a ceiling for the residential tail block based on the marginal cost of space and water heat, after application of the Schedule 94 credit. Currently, the ceiling would be $.0855.

2) General Service
   a) Separate the non-demand metered customers into a separate schedule.
   b) Do not create the proposed Schedule 26; all demand metered customers should be served on a single schedule.
   c) Do not approve a declining block rate for Schedule 25; an energy-constrained demand charge, load factor blocks, or other techniques should be used to provide a flat rate for all customers.
   d) Provide for 20% seasonality in all rate schedules by having a 20% differential in the energy charge for Schedule 24; for Schedule 25, a 50% differential in the demand charge and a 10% differential in the energy charge will accomplish this;
   e) For the Primary and High Voltage classes, the primary issue is the level of rates, not the design of rates;

D. Minor Issues
   a) Approve Puget's proposed power factor modification, but allow customers to pay for power factor correction on Puget's side of the transformer;
   b) Defer consideration of the proposed residential interruptible water heat credit until further studies are complete;
   c) Reject the voluntary large-user "marginal cost " rates;
   d) Approve the general service interruptible rate options;
   e) Freeze the Schedule 43 All-Electric School rate, remove the all-electric requirement, and require customers remaining on the schedule to install all cost-effective conservation measures.
   f) Adopt notice requirements for load increases or decreases of 10 mw or more;

E. Hook-up fees
   1. Adopt a $200/kw for new residential electric space/water heat;
   2. Direct Puget to propose cost-based hook-up fees for general service customers.

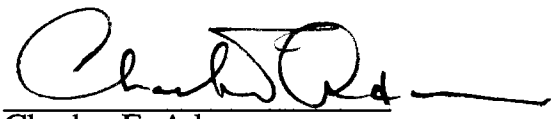
XI. SUMMARY AND CONCLUSIONS

Public Counsel urges the Commission to take decisive action in this proceeding to resolve important cost of service principles which have demanded the attention of the parties and the Commission for over a decade. The Commission should unambiguously

rule that only a minor portion of power supply costs are related to the highest peak hours. The Commission should reaffirm its consistent positions that a major portion of transmission costs should be allocated to all classes for usage during all hours of the year, and that the only costs of the distribution system which are customer-related are services, meters, meter reading, and billing. In addition, we urge the Commission to adopt the rate design modifications proposed in this brief.

Public Counsel thanks the Commission for considering these important cost of service and rate issues in a proceeding which is at least somewhat separated from the revenue requirement issues, which tend to dominate normal rate cases.

Respectfully submitted this 9th day of July, 1993



Charles F. Adams
Assistant Attorney General
Public Counsel Section