T-686

Errata and corrections for Jim Lazar Rate Design Testimony and Exhibits

Exhibit 697 JL-RD-1 should be replaced with the figures contained in Exhibit 698

Exhibit 690 JL-RD-4 should be replaced with the figures contained in Exhibit 699

Corrections to testimony:

Page 2, line 17	"*recovered*" should read "**reflected**"
Page 2, line 18:	*$3.82* should read **$4.59**, and the remainder of the sentence deleted.
Page 3, line 13	*$3.82* should read **$4.59**
Page 11, line 27	The figures under the three columns should read **$.035, $.049, and $.039**
Page 18, line 25:	*$2.03* should read **$2.82**
Page 18, line 26:	*$2.68* should read **$3.87**
Page 20, line 11:	*$1 million* should read **$25 million**, and the parenthetical comment should be deleted.
Page 21, Line 30	*$2.03* should read **$2.82**
Page 21, Line 31	*$2.68* should read **$3.87**
Page 23, line 14:	*$3.82 per month* should read: **$3.75 per month, which is a 25% increase in the current rate. This is the amount of increase the Commission determined was reasonable to apply to a customer charge in a single increase in Cause U-86-02. This will move towards full cost recovery, but prevent rate shock to small-use customers.**

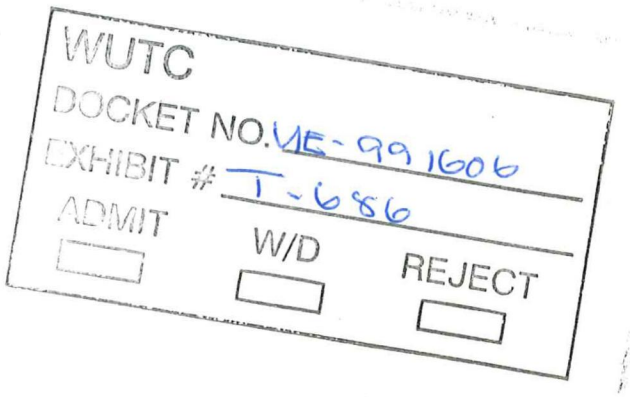

Exhibit ___(JL-T-RD)
Rate Design Testimony

Before the
Washington Utilities and Transportation Commission

Docket Nos.
UE-991606
UG-991607

Direct Testimony of

Jim Lazar
Consulting Economist

On Behalf of
Public Counsel

Rate Design Issues

May 5, 2000

Dockets UE-991606 / UG-991607
Direct Testimony of Jim Lazar
Rate Spread and Rate Design Issues

I. INTRODUCTION AND QUALIFICATIONS

Q. Are you the same Jim Lazar who has submitted evidence in the revenue requirement phase of this proceeding?

A. Yes, and my qualifications are addressed in that testimony, Exhibit ___(JL-T-RR).

Q. What is the purpose of this testimony?

A. In this testimony, I address rate design issues contained in the testimony of Avista witness Hirschkorn. My recommendations on rate spread are contained in the Joint Testimony of WUTC Staff, Public Counsel, and Northwest Industrial Gas Users.

II. COST OF SERVICE - ELECTRIC

Q. Should the Commission rely on the Company's electric cost of service study in spreading the rate adjustment in this proceeding?

A. No. The Commission should rely on the Joint Testimony of WUTC Staff, Public Counsel, and the Industrial Customers of Northwest Utilities, and should spread any change in overall electric revenue requirements in accordance with the exhibit to that testimony.

III. RATE DESIGN - ELECTRIC

Q. What issues do you address in electric rate design?

A. There are two issues, both dealing with residential rate design. First, I recommend that the customer charge be increased from the current $3.00 per month to $3.82 if a significant rate increase is granted, rather than the $5.00 level the Company has requested. Second, I recommend that the current three-block rate structure be retained. If any increase or decrease in rates is approved, it should be applied on a uniform basis to each rate block.

A. Customer Charge

Q. Begin with the customer charge issue. How do you respond to the Company's assertion that the cost of meter reading and billing is $5.18/month, and therefore the monthly customer charge should be raised to $5.00?

A. I believe that a more accurate estimate of the costs which should be recovered in the customer charge is $3.82/month, and I recommend that the customer charge be established at that level if one-third or more of the Company's requested increase is approved. If an increase of less than 3% is granted, or a decrease imposed, the customer charge should remain unchanged. The calculation of $5.18/month, which appears at Page 5 of Mr. Hirschkorn's Exhibit 493, is based on two assumptions which I believe are improper. First, he has used the Company's proposed rate of return, and Mr. Hill has addressed why that is in excess of a fair rate of return. Second, he has assumed that the costs of monthly meter reading and billing should be recovered in the customer charge.

Q. Do you have anything to add to Mr. Hill's analysis on rate of return?

A. Only one thing. Since the customer charge is absolutely stable from month to month, providing the Company with very certain recovery of metering and billing costs, it would seem to pose a lower risk than those elements of cost which are subject to uncertainty, such as fuel or hydro system power costs, weather-related variations in sales levels, or other riskier elements of service. If anything, an even lower rate of return should be applied to meters and services.

Q. Please explain your calculation of the customer-related costs on the Avista electric system.

A. For the residential class, this is approximately $3.82/month, as shown on Exhibit ___(JL-RD-1). In this calculation, I have included the costs of services, meters, meter reading, and billing. I have also included administrative and general expense loading, and general plant loading. These are the customer-related costs as determined by the Commission in Docket U-89-2688-T, and reaffirmed in proceedings to which this Company has been a party since that time such as UE-920499. However, for Avista, I have reduced the meter reading and billing costs by 45%, to reflect that at most, only bimonthly meter reading and billing costs should be considered customer-related. The previous proceedings where the Commission determined the appropriate costs to include in the customer charge were Puget dockets (U-89-2688-T; UE-920499), and at the time of Puget's last general rate case (UE-920499), Puget billed most residential customers on a bimonthly basis.

Q. On what basis do you assert that only bimonthly meter reading and billing costs are customer-related?

A. All customers must pay the customer charge regardless of their usage. Consider an example of a neighborhood association owning a community park with one light fixture and one power outlet, used for occasional group functions. It pays a customer charge for a meter that has registered only one kilowatt-hour in the past two years. Does it really make sense to read this meter every month? If all customers used very little energy, that is, were only "essential use" customers, there would be sales of perhaps 100 kwh/month or so per customer, and there would be no conceivable justification for reading meters and rendering bills every month. It is only because most customers use significant amounts of energy, and the amount that they use varies widely, that there is any conceivable justification for monthly meter reading and billing. Those customers who DO use only small amounts of electricity should not be forced to subsidize the cost of more frequent meter reading and billing which may be justified (if at all) because of the high use of other customers.

Q. Does the Company recognize and accept this logic?

A. Yes. During cross-examination, Mr. Hirschkorn agreed that monthly meter reading and billing was only justifiable due to the large and varying usage of customers. That is a usage-related cost, not a customer-related cost.

Q. Does the Commission have a rule on meter reading and billing frequency?

A. Yes. WAC 480-100-101 requires companies to read meters and render bills no less frequently than bimonthly.

Q. What is the practice of major electric utilities in this state?

A. Most of the other large utilities read meters and render bills bimonthly. These include Seattle City Light, Tacoma City Light, and Snohomish PUD. Puget Sound Energy (Puget) has historically read meters and rendered bills bimonthly; in areas with automated meter reading equipment installed, it has moved to monthly meter reading since the merger, but I believe that decision was driven by short-term profitability. In Puget's last rate case, they were allowed working capital associated with the lag of bimonthly meter reading and billing. By accelerating collections with monthly billing, Puget is enjoying both the benefit of working capital in rate base and the benefit of more rapid cash flow. This was, perhaps, an unintended consequence of the merger rate plan.

Q: How is this customer charge issue different from the bimonthly meter reading and billing cost revenue requirement issue you addressed in your principal testimony on revenue requirement?

A. The rate design issue is entirely independent of the revenue requirement issue. The revenue requirement testimony addresses whether monthly meter reading and billing should be performed and those costs allowed in the revenue requirement. If the Commission accepts that recommendation, then the test year costs will be reduced, the calculation of the meter reading and billing costs will go down, and the results shown in my Exhibit ___(JL-RD-1) will be unarguably more appropriate than Mr. Hirschkorn's exhibit.

This testimony shows that, even if monthly meter reading and billing is allowed, and the revenue requirement is NOT decreased, that only about one-half of the cost of this should be considered customer-related and included in the monthly customer charge. Therefore,

even if the Commission rejects my expense adjustment in my revenue requirement testimony, it should rule that monthly meter reading and billing is not a customer-related cost, and that those expenses should be recovered in usage charges.

Q. What does the advent of high-technology meters mean to the inclusion of meter costs in the customer charge?

A. High-tech meters and automated meter reading equipment help to perform multiple functions, including billing, outage location, and load research. These are not customer-related functions. As utilities such as Avista incur additional costs for these non-customer functions, a larger and larger portion of the costs of meters and associated equipment should be treated as a usage-related cost.

Q. What is the basis of the 45% reduction to meter reading and billing costs you have applied?

A. While I recommend that only half as frequent meter reading and billing be considered customer-related, I have not reduced these costs by 50% because certain costs, such as those associated with reading meters at the time of move in and move out, are not directly related to billing frequency. Therefore I have applied only a 45% reduction in meter reading and billing costs.

B. Residential Rate Blocks

Q. What is the Company's recommendation with respect to the current three-block residential rate design?

A. The Company is proposing to modify the existing rate design from three blocks to a two-block rate design, and to actually reduce the rate it charges customers for usage over 1300 kwh/month.

Q. Is the Company's proposal justified?

A. No. The current three-block rate design serves two separate functions, both of which are still relevant. First, this rate design corresponds with the costs of the Company's power resources, effectively assuring every customer a fair share of the Company's low-cost hydroelectric energy resources and a fair share of the company's mid-cost thermal resources. It then allows customers using higher amounts of electricity than average (i.e., over 1300 kwh/month) to pay the full cost of additional energy resources. Second, this rate design recognizes that space heat customers have much lower load factors, and therefore higher distribution costs, than other residential customers.

Q. What is the history of the three-block rate design.

A. Prior to 1980, Washington Water Power had a two-block rate design, with usage over 1300 kwh priced at a higher level. This was intended to reflect the lower load factor, and consequently higher cost of service for space heat usage.

In Cause U-78-05, the generic rate design proceeding, I recommended, and the Commission adopted, the principle of "Baseline Rates" in which each customer received

an initial allocation of low-cost power to meet basic needs.[1] In testimony in that proceeding, my colleague Dr. Teasley concluded that WWP could reserve up to 957 kwh/month of low-cost hydro power per residential customer (without affecting the share of hydropower used to serve other classes) and had 586 kwh/month of medium-cost thermal power available per month for residential customers (again, without affecting the share of medium-cost power used to serve other classes).

Following the generic rate design proceeding, in Cause U-80-13, WWP proposed continuing the two-block rate. The WUTC Staff recommended moving to a three-block rate with the blocks at 0 - 600 kwh, 600 - 1300 kwh, and over 1300 kwh. This is the same electric rate structure that currently exists today. The Commission ordered establishment of a three-block baseline rate, with an increase to the first block one-half the size of the increases to the tail block.

Q. Does Avista still have low-cost resources, mid-cost resources, and high-cost resources, consistent with the three-block rate design?

A. Yes. The Company's hydro resources have costs of less than 1.5 cents/kwh. The older thermal resources and certain purchased power contracts have costs of 1.5 cents to 3.0 cents/kwh. Finally, there are high cost resources like Kettle Falls, Colstrip 3/4, and Rathdrum, which have average costs in excess of 3.0 cents/kwh. My Exhibit ___(JL-RD-2), Page 1, shows this breakdown in general terms.

[1] Testimony of Jim Lazar and Howard Teasley on behalf of Fair Electric Rates Now, Washington Utilities and Transportation Commission Cause U-78-05.

Q. What would the appropriate rate blocks be if the blocks were set to reflect the availability of low-cost and mid-cost power resources?

A. The Company has approximately 800 kwh of hydro power available per residential customer at a power cost of less than 1.5 cents/kwh. In addition, it has approximately 600 kwh of medium-cost energy available from thermal and purchased power resources at prices between 1.5 and 3.0 cents/kwh. Customer usage above 1400 kwh per month forces the Company to rely on higher cost resources such as Colstrip 3/4, Rathdrum, and Kettle Falls, with costs in excess of 3.0 cents/kwh. This breakdown is quite compatible with the current rate design.

Q. If you were to convert these costs into approximate rate blocks, how would they compare to the Company's current rate design?

A. These are costs for power supply only, and average roughly 1.0 cents/kwh for the low-cost hydro, 2.5 cents/kwh for the mid-cost resources, and 4 cents/kwh for the high-cost resources. Transmission and distribution (T&D) costs must be added at an average of about $.025/kwh, as shown in Mr. Knox's cost of service study at Part 3, Page 2. With the inclusion of T&D costs on an average basis, the rate blocks would look something like this:

Avista Rate Blocks Based On Resource Costs

	Resource Cost-Based Baseline Rate Design		Current Rate Design	
	Kwh	$/kwh	Kwh	$/kwh
Block 1	800	$.035	600	$.039
Block 2	600	$.050	700	$.047
Block 3	All add'l	$.065	All add'l	$.056

In my opinion, the current rate design very accurately tracks the relative costs of the resources which Avista uses to provide service to consumers.

Q. In preparing these estimates, how have you divided these resources between Idaho and Washington, and within Washington, between residential and non-residential consumers?

A. I did so in a manner that does not infringe on the amount of low-cost power available to non-residential and non-Washington consumers. First I assigned 67% to Washington, consistent with the Company's interstate allocation formula. Then I assigned 44% of the Washington share to the residential class, since residential consumers use 44% of the total energy on the system.

Q. Is the multi-block rate design justified even without considering the different cost of hydro versus thermal resources?

A. Yes. Residential usage consists of distinct end-uses which have distinct usage patterns. First, there is lights and appliances usage of 400 - 700 kwh/month, which is stable through the day and through the year. Second, there is water heat usage for customers with electric water heaters of 400 - 600 kwh/month which is stable through the year, but imposes relatively sharp peaks during the day. Finally, there is space heat usage, which is extremely peak-oriented and which can range up to 2,000 kwh/month or more in the coldest months.

Because certain of the costs of an electric utility vary with peak demand, those loads which have lower load factors (i.e., higher ratios of peak demand to annual usage) have higher costs of service per kilowatt-hour. If the load factor of the three end uses is considered in

computing rates, even if all the power costs are averaged together, the three-block rate structure is justified.

Q. Does Avista recognize that higher levels of residential usage are associated with lower load factors?

A. Yes. In Mr. Hirschkorn's workpapers at Page 5, he designates all usage in the first residential block as "baseload" usage, and all usage in the third block as "weather-sensitive" usage. The middle block is divided between these two. It appears to me that he has categorized water heat usage as non-weather sensitive in this analysis. While I agree that water heat usage is not weather-sensitive, this usage is more time-sensitive than appliance usage. Because of diurnal water heat usage patterns (people use hot water disproportionately during morning and early evening peak hours), water heat still has a lower load factor than lights and appliances usage.

Q. What did you conclude from your analysis?

A. Based on the unit costs for demand and energy shown in Mr. Hirschkorn's exhibit 493, page 4, I estimated the cost of providing energy for the different end-uses as shown below:

Avista Rate Blocks Based on End-Use Load Factors

Block	Typical End-Use	Cost at Current Rate of Return	Cost at Proposed Rate of Return	Current Rate
0-600	Lights and Appliances	$.035	$.049	$.039
600 - 1300	Water Heat	$.042	$.051	$.047
1300+	Space Heat	$.058	$.074	$.056

Q. What does this analysis suggest to you?

A. This analysis shows that the current rate design underprices the energy provided for space heating and that the Company should be proposing the largest increase for this type of usage. Instead, it has actually proposed a decrease for this usage. I believe the Company's proposal would encourage customers to use more electricity that, in the long run, is more expensive than the proposed rate for space heat usage.

Q. What load factors did you use in estimating the effect of load factor on the appropriate rates by rate blocks?

A. For space and water heating, I used load factors of 23% and 40%, respectively. Both of these were taken from a report prepared by the Washington State Energy Office for Public Counsel in 1989.[2] While the analysis was for Western Washington, I believe that the relative load factors are not likely to be significantly different for eastern Washington. If anything, because of the sharper temperature variations in Eastern Washington, I would expect that the Avista space heat customers might have lower load factors, implying an even higher cost of service for space heating energy than I have calculated. For lights and appliances usage, the assumption of 60% was based on the residential subclass analysis presented by Puget Power to the 1992 Rate Design Collaborative; I believe that this data is generally appropriate for the WWP system. Lights and appliances have a more uniform usage pattern than the morning and evening usage of water heat, and the winter peak period usage of space heat will have the most erratic usage pattern.

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[2] Byers, Analysis of Consumer and Marginal Costs for Electric and Natural Gas Space and Water Heat in Single Family Residences in Puget Sound Power and Light Company Service Territory, Exhibit in WUTC Docket U-89-2688-T, September, 1989.

Q. What do you conclude from this analysis of both the baseline rate concept and the load-factor based cost analysis?

A. Regardless of whether the Commission relies on unbundled power supply costs coupled with average delivery costs, or average power supply costs computed using end-use specific load factors, the three-block rate design is justified.

Q. What position has the Commission taken in addressing residential rate design most recently?

A. In the rate design proceeding for Puget, UE-920499 (in which Washington Water Power was an intervenor), the Commission concluded that each rate block should reflect specific resources and end-uses:

> *"The break between the two blocks should occur at 600 kwh per month, as proposed by Public Counsel. The level of 600 kwh will best reflect the actual cost of new resources in the end block, so customers can make economically efficient decisions at the margin. It will also equitably allocate the limited amount of low-cost power on Puget's system."*
>
> [UE-920499, 11th Supplemental Order,. P. 97]

In that Puget docket, there was a justification for only a two-block rate, because Puget simply does not have as large or as distinct pools of low and medium cost resources as does Avista. I believe that the same logic applies to the Avista system as was used for Puget, but as my Exhibit ___ (JL-RD-2) shows, there is a cost-based justification for a three-block rate on the Avista system based on resource costs. There is also a cost-based justification for a three-block rate based on the different load factors of different end uses.

Q. Were there other reasons why a two-block rate was acceptable for Puget, but is less appropriate for Avista?

A. Yes. Discussions within the 1992 Rate Design Collaborative indicated that the majority of Puget's electric heat customers live in multi-family housing, with much lower average usage per customer. Discussions with Avista have indicated that this is less true in the Spokane area.

Q. Are there potential changes on the horizon in the utility industry which you believe further justify the multi-block rate design?

A. Yes, there are a few changes which increase the applicability of a multi-block rate design. First, as the power supply market is changing from a demand / energy pricing scheme to an hourly energy pricing scheme, the fact that water heat and space heat usage take place during high-cost hours is a justification for the multi-block rate design. Second, a number of pricing schemes for transmission service have been discussed, and many of these would have demand-based charges which would be extremely compatible with multi-block rate designs, given the different load factors of different end uses.

Q. Have you estimated the impact on residential usage of the Company's proposed change in the residential rate design?

A. Yes I have. My Exhibit __ (JL-RD-3) shows the effect of a modest estimate of price response to the Company's proposed rate design compared with a uniform percentage increase to the customer charge and rate blocks. Assuming approval of the Company's residential rate design proposals, I would predict that residential usage would increase by about 26 million kwh per year.

Q. Why would you predict usage to increase?

A. The increased usage would be the result of lower prices for electric heat. With the proposed rate decrease to the third block, customers would use more electric heat, and would be less likely to convert to gas heat. I assumed a relatively low elasticity factor of -.2 in this calculation. At a higher or lower elasticity estimate, this result would rise or fall.

Q. Wouldn't the higher rates for the initial blocks tend to offset that, given any particular level of revenue requirement?

A. No. Only a small portion of this increase would be offset by higher prices in the first block, because nearly every customer has usage in excess of the first block, and does not see that price as their "marginal cost" for any usage-related decision. My analysis, from the Company's Bill Frequency Analysis, shows that 11% of residential usage is by customers whose usage ends in the first block, while 50% of usage is by customers whose usage ends in the tail block over 1300 kwh/month. Therefore only a small amount of usage is subject to additional usage in the early blocks.

Q. How does this increase in usage compare to the effect of the Company's residential conservation effort?

A. Mr. Folsom's exhibit 316 shows that residential conservation efforts have saved a total of 72 million kwh on a cumulative basis since the programs were initiated under the Tariff Rider Program. The Company's proposed rate design would offset about 40% of this cumulative savings through higher usage of high-use customers.

Q. What would the short-run impact of the Company's proposed residential rate design changes be on revenues and net income?

A. In the short run, revenues would rise by the level of retail rates multiplied by the increased sales, while expenses would rise only at the short-term market cost of power. Based on an assumption of a market price for power of $.03/kwh (somewhat above the estimate made by the Company to replace Centralia power; see my Exhibit ___(JL-RR-6)), this would bring additional revenues of about $1.4 million, and additional expenses of about $0.8 million. Therefore, the Company's operating income would be expected to increase by about $646,000. This amount should probably be removed from the revenue requirement. if the Company's rate design changes are accepted.

Q. What would the expected changes in revenues and expenses be in the long run?

A. In the long run, the Company would need to construct additional transmission and distribution capacity to accommodate increased sales levels. The long-run costs, therefore, would be the sum of marginal distribution costs and marginal energy costs. The Company did not prepare a marginal cost study. The embedded costs of older transmission and distribution capacity used in my Exhibit ___(JL-RD-2) show that the cost of meeting space heating load exceeds the revenue from such sales. In the long run, the proposed rate design would lead to increased costs and additional pressure on electric rates. With approximately a $.02/kwh gap between incremental costs and proposed end-block rates, the additional sales would ultimately cause about $0.5 million in additional rate increase pressure.

Q. Please summarize your recommendations on electric rate spread and rate design.

A. Public Counsel has joined with Staff and ICNU in a joint recommendation on electric rate spread. The Commission should reject the Company's cost of service study and adopt the rate spread recommendation contained in the joint testimony.

I recommend that the electric monthly customer charge for the residential class be increased to $3.82 per month if a significant rate increase is granted. This is sufficient to recover the costs of meters, services, and bimonthly meter reading and billing, plus associated general plant and administrative and general support. If a rate increase of less than 3% is granted, or a rate decrease ordered, the customer charge should remain unchanged.

Finally, I recommend a uniform percentage increase or decrease to each of the three residential rate blocks. The Company's proposal to move to a two-block rate is unjustified on the basis of cost, conflicts with the Commission's previous decision to adopt baseline rates, and would cause unnecessary, undesirable, and uneconomic increases in electric heat usage.

Q. What if a rate decrease is ordered?

A. If a rate decrease is ordered, the Commission should hold the customer charge at current levels, and apply the decrease uniformly to the three rate blocks. All customers should share in the decrease.

IV. COST OF SERVICE - GAS

Q. Should the Commission rely on the Company's gas cost of service study in spreading the rate adjustment in this proceeding?

A. No. The Commission should rely on the Joint Testimony of WUTC Staff, Public Counsel, and the Industrial Customers of Northwest Utilities, and should spread any change in overall gas revenue requirements in accordance with the exhibit to that testimony.

V. RATE DESIGN - GAS

Q. What components in the Company's proposed gas rate design do you take issue with?

A. The Company's proposed increase to the monthly customer charge is excessive. The current gas customer charge of $4.00 is adequate, and should not be increased. Any allowed gas rate increase (or decrease) should be applied to the usage charge.

Q. What analysis have you prepared in support of your recommendation?

A. Exhibit ___(JL-RD-4) shows my calculation of the required residential customer charge for gas, taking into account the bimonthly meter reading and billing position in my revenue requirement testimony. This exhibit shows that the cost-based customer charge is approximately $2.03/month, calculated on line 44 on page 2. Even with monthly meter reading and billing, it would be only $2.68/month. A further increase above $4.00 is not justified.

Q. How does your calculation differ from Mr. Hirschkorn's calculation of $10.17 in his Exhibit No. 64?

A. There are three principal differences. The most important of these is that Mr. Hirschkorn includes the cost of a service connection pipe in his calculation, and I do not. The second is that I use Mr. Hill's cost of capital, while Mr. Hirschkorn presumably has relied on Dr. Avera's cost of capital. Finally, my analysis relies on bimonthly meter reading and billing costs as what is reasonably appropriate for inclusion in the customer charge.

Q. Why do you exclude the cost of service connection from your calculation?

A. The electric and gas line extension policies are fundamentally different. The Company's electric line extension policy (Schedule 51) provides a minimum $600 allowance of company investment per customer, regardless of usage levels. This is adequate to cover the cost of a service line installation. The natural gas line extension policy (Schedule 151) makes no such allowance and the Company makes investments in services for gas customers only if their anticipated usage justifies the investment.

A very small gas user, for example, a cooking-only customer, would have to pay the cost of installing the service in a Contribution in Aid of Construction (CIAC), and indeed, Ms. Knox, at Page 1 of Exhibit 55 indicates that all of the contribution in aid of construction has been received from the residential class. To include the cost of the service connection pipe in the monthly customer charge (independent of usage), while forcing a small user to pay cash up front to the Company for installation of the service would cause double-counting of this cost to small customers. By including the cost of the service connection pipe in the usage charge, any portion not covered by CIAC will be recovered in usage charges.

The Commission's rules require that a meter be provided at no installation cost to the Customer regardless of expected usage levels (WAC 480-09-131). Since small use customers will not pay this cost in a contribution in aid of construction, it is appropriate that the cost of this be recovered in a customer charge unrelated to usage. The same is not true for services. The Company's investment in services must be justified by expected usage or paid for up front in CIAC, and the cost of services should be recovered on the same basis that it is becomes a component of rate base (as opposed to CIAC), and that is on a usage basis.

The Company's investment in services is huge – some $59 million in total, or over one-third of the total gas distribution plant investment -- compared with only $1 million of investment in electric services (I am suspect of the Company's record-keeping, but have not examined it in sufficient detail to challenge either of these figures). This is the most important difference. Just subtracting the cost of the service from Mr. Hirschkorn's exhibit leaves only $4.12/month. While Mr. Hirschkorn does not show how he derived his figures, even if they are correct they justify only the current customer charge, not an increase.

Q. Is there another reason you feel that service connection costs should be excluded?

A. Yes. The Company has identified some $59 million of distribution investment costs as being service drop related. This is an extraordinarily large amount, and I am frankly suspicious that it may include costs of facilities shared by multiple customers, what are known in the industry as "twins." I was unable to examine that issue in the time available in this case, but the overall amount is so high that my suspicion was aroused. Because Public Counsel has joined with ICNU and WUTC Staff in the joint position on rate spread, this potential error in the cost of service study became unimportant for rate spread analysis.

As I stated above, the line extension policy for gas includes service connection costs, so I did not pursue the issue as I would if it were to affect both rate spread and rate design.

Q. What is the effect of removing services from the customer charge calculation presented by Mr. Hirschkorn?

A. Mr. Hirschkorn's Exhibit 496, Page 5 shows the following costs for meters, meter reading, and billing; for convenience, I have also shown the effect of bimonthly meter reading and billing as I recommend:

Hirschkorn Customer Charge Calculation Without Service Pipes

	Monthly	Bimonthly @ 55%
Meters	$2.20	$2.20
Meter Reading	$ .56	$ .31
Billing	$1.36	$ .75
Total Customer Cost:	$4.12	$3.26
Current Gas Customer Charge:	$4.00	

Thus, even with the cost of capital proposed by Dr. Avera, and the rest of the Company's assumptions, no increase in the monthly gas customer charge should be approved.

Q. Did you prepare an independent assessment of the cost of providing metering and billing on the Avista gas system?

A. Yes, and this is set forth in detail in my Exhibit ___(JL-RD-4). That analysis shows that the cost of bimonthly metering and billing is approximately $2.03/month. For monthly service, it would rise to $2.68/month. Based on that analysis, I conclude that no increase to the monthly customer charge is justified.

Q. Do the same principles apply to your assumption of bimonthly meter reading for gas as do for electricity?

A. Yes, and the justification is much stronger for gas. First, the only justification for monthly meter reading and billing for gas, as for electricity, is that customers use significant amounts of gas and incur significant costs. This is a usage-related issue, not a customer-related issue, and even if costs for frequent meter reading and billing are allowed, they are usage-related. Those customers with low usage should not have to subsidize the monthly meter reading costs which, if justified at all, are justified only by the high use of other customers. Thus, even if the Commission determines that monthly meter reading and billing is appropriate for the Avista system, it should not include the costs of more frequent meter reading and billing than is required by rule in the customer charge. Those costs should be recovered in the usage charge.

A second reason is that for about half of the year (May - September), most gas customers have very low usage, and it is a bit absurd to be rendering bills for only a few dollars of usage per month. The average summer usage of residential customers is around 20 therms per month, for a usage charge of around $10.00 per month. To assess an additional $2.00 per month – a full 20% – for meter reading and billing is excessive. Even if monthly meter reading and billing were appropriate in the winter months, during the summer months, when electric and gas usage is down, the Company could revert to bimonthly billing and re-deploy meter readers to support activities associated with connecting new customers to the system during the construction season.

Q. Please summarize your recommendations on gas rate spread and rate design.

A. Any increase or decrease in gas rates should be spread among the classes as set forth in the Joint Testimony of WUTC Staff, Public Counsel, and Northwest Industrial Gas Users.

The customer charge for Schedule 101 should not be increased, and any allowed increase or decrease should be reflected in the usage charge. Finally, the Company should be directed in the future to present the results of cost studies on a revenue to cost ratio basis so that the results can be reviewed on that basis.

VI. SUMMARY AND CONCLUSIONS

Q. Please summarize your conclusions and recommendations with respect to electric rate design issues.

A. First, I recommend that the Commission adopt the electric rate spread proposal jointly sponsored by WUTC Staff, Public Counsel, and ICNU. If this is not adopted, each class should receive a uniform percentage increase. Second, the electric customer charge should be increased to a maximum of $3.82 per month. Any remaining increase (or any decrease) should be applied to the three residential rate blocks on a uniform percentage basis.

Q. Please summarize your conclusions and recommendations with respect to gas rate design issues.

A. The Commission should adopt the joint position of WUTC Staff, ICNU, and Public Counsel on gas rate spread. The gas customer charge, already $4.00/month, should not be increased. Any residual increase (or decrease) should be applied to the usage charge.

Q. Is there additional direction the Commission should provide for future rate filings?

A. Yes. The Company should be directed to present future rate comparisons on the basis of the ratio of revenues at current rates to the revenues needed to produce a uniform rate of

return equal to the current rate of return. By using a revenue-to-cost ratio, the Company would better assist the Commission and parties in examining the fairness of electric and gas rates. The Commission has relied on revenue to cost ratio as a principal guide to measurement of cost of service for many years.

Q. Does this complete your testimony on rate design issues?

A. Yes.

Before the
Washington Utilities and Transportation Commission

Docket Nos.
UE-991606 (Electric)
UG-991607 (Gas)

Exhibits accompanying the
Direct Testimony of

Jim Lazar Consulting Economist
On Behalf of
Public Counsel

Rate Design Portion

May, 2000

Exhibit ___(JL-RD-1)	Cost-Based Customer Charge - Electric
Exhibit ___(JL-RD-2)	Cost-Based Residential Rate Blocks
Exhibit ___(JL-RD-3)	Elasticity Impact of Residential Rate Design
Exhibit ___(JL-RR-4)	Cost-Based Customer Charge - Gas