

EXHIBIT NO. _____ (CEL-2)
DOCKET NO. UE-92 _____
WITNESS: C.E. LYNCH

**BEFORE THE
WASHINGTON UTILITIES & TRANSPORTATION
COMMISSION**

COMPLAINANT

VS.

PUGET SOUND POWER & LIGHT COMPANY

RESPONDENT

EXHIBIT

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
UE-920499 3✓

USE OF COST OF SERVICE RESULTS

1. To attribute costs to different categories of customers based on how those customers cause costs to be incurred.
2. To determine how costs should be recovered from customers within each customer class.
3. To calculate costs of individual types of service based on the costs each service requires the utility to expend.
4. To determine the revenue requirement for the monopoly services offered by a utility operating in both monopoly and competitive markets.
5. To separate costs between different regulatory jurisdictions.

SOURCE: NARUC Draft Electric Utility Cost Allocation Manual (Feb. 1991), p. 14.

Puget Sound Power & Light Company
Methods of Classifying Functionalized Costs

Number A	Functional Area B	Classification Method C	Classification Components		
			Demand D	Energy E	Customer F
1	Production	Peak Credit	X (CP DEMAND)	X	
2	Transmission				
	Non Generation Related	100% Demand	X (CP DEMAND)		
3	Generation Related	Peak Credit	X (CP DEMAND)	X	
4	Distribution				
	Meters and Service	Basic Customer	<i>all</i> X (CP DEMAND)		X
5	All Other Accounts	100% Demand	X (CP DEMAND)		
6	Customer Service, Billing and Facilities	Customer and Wtd Customer	X (CP AND NCP DEMAND)	X	X
7	General	Results of Above Classifications	X (CP AND NCP DEMAND)	X	X

METHODS TO CLASSIFY PRODUCTION PLANT

1. **Peak demand methods.** This method classifies all production costs on the basis of demand. The costs are allocated to each class based on the contribution of each class to system peak. This method assumes that all production costs are incurred in response to the total system peak demand. This method requires class level load research data for each hour included in the associated allocation factor. This method is not appropriate for the Company inasmuch as our planning considerations are biased towards meeting energy requirements as opposed to demand requirements.

2. **Energy weighting methods,** including average and excess, equivalent peaker, base and peak, weighted energy. These methods recognize that a utility's energy requirements play a key role in the decision to buy or build production facilities. As a result, this method classifies some of the production costs to energy. The methods require class and system level energy, coincident peak and non-coincident peak information and system planning data. Even though the Company is predominantly energy constrained in its resource acquisition decisions, it does consider the cost of capacity in its avoided costs, its integrated resource planning and its competitive bidding evaluations. An energy only classification factor is therefore not entirely appropriate. For instance, the Company recently negotiated a contract to provide capacity during the winter period. Also, as the Company's resource profile changes from being a hydro-based system to being more of a thermal based system, the need for capacity considerations becomes more important when acquiring new resources.

3. **Time differentiated methods.** This method allocates production costs to baseload and peak hours. This category includes production stacking, base-intermediate-peak (BIP), loss of load probability LOLP production cost, and probability of dispatch (POD) methods. These methods assign the various types of resources available to the utility according to the expected time of dispatch or rating periods of the utility. These methods require load duration and system dispatch data for each resource, as well as load profiles for each class of customer. The LOLP and POD methods require extensive loss-of-load probability data and hourly load dispatch data by resource. The Company's proposed method, the peak credit method, is a hybrid of this category of classification approaches.

METHODS TO CLASSIFY TRANSMISSION PLANT

One approach, the rolled in method, mimics the methods used to classify production plant, while a second classifies costs based on use of the transmission system. The two approaches are described in relationship to the functionalization methodology to which they are most often linked.

The rolled in functionalization method refers to the situation when all transmission is assumed to consist of highly integrated facilities designed to deliver bulk power supply from point to point on the system. When the rolled in functionalization methodology is used, the transmission costs are often classified on the basis used to classify production related costs. The classification methods used in this case are often the same as described previously regarding production cost classification methods.

The other broad category is the sub-functional or unbundled method of transmission cost functionalization. Under this method, the transmission costs are functionalized on the basis of line configuration, geographic circumstances and voltage level, etc. The main distinction made by utilities is usually between plant that interconnects production resources and all other transmission plant.

METHODS TO CLASSIFY DISTRIBUTION PLANT

1. **Minimum grid method** - including both the minimum sized system and the minimum intercept method. In the former, the classification begins by assuming that a minimum sized distribution system can be built which will serve only the minimum load requirements of a particular customer. The utility's distribution system is re-constructed (on the drawing board) to serve only the minimum loads of such customer, using the smallest available (in inventory) plant items. The total cost of the minimum sized system, which is essentially providing access but no discretionary load, is classified as being customer-related. The difference between the cost to build this minimum system and the cost of the actual system (in today's costs) is classified as demand-related.

Under the minimum intercept method, the hypothetical no load or zero intercept cost is identified by preparing a regression analysis of the installed cost of a component of the system to its nameplate capacity rating. The cost associated with the zero intercept is referred to as customer-related. The difference between these costs and the total distribution costs is classified as demand-related.

2. **The basic customer method** - including the new business or facilities method (modified basic customer). Under this method, the only costs which are directly classified as being customer-related are the costs of metering (including the service drop), meter reading and billing. The modified basic customer includes the cost of the secondary line transformer in the customer classification. All other costs in the distribution function are generally classified as being demand-related.

Puget Sound Power & Light Company
Comparison of Distribution Plant Classification Methods

		360	361	362	364	365	366	367	368	369	370
1	FERC Account Number:										
2	Minimum Grid Method										
	Percent Classified as Customer Related	0%	0%	0%	78%	39%	26%	54%	74%	63%	100%
	Percent Classified as Demand Related	100%	100%	100%	22%	61%	74%	46%	26%	37%	0%
3	Basic Customer Method										
	Percent Classified as Customer Related	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
	Percent Classified as Demand Related	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%
4	Modified Basic Customer Method										
	Percent Classified as Customer Related	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%
	Percent Classified as Demand Related	100%	100%	100%	100%	100%	100%	100%	0%	0%	0%
5	Industry Composite										
	Percent Classified as Customer Related	88%	95%	97%	60%	70%	73%	70%	67%	15%	2%
	Percent Classified as Demand Related	10%	5%	3%	40%	30%	27%	30%	32%	85%	96%
	Percent Classified as Energy Related	2%	0%	0%	0%	0%	0%	0%	0%	0%	2%

PUGET SOUND POWER & LIGHT COMPANY

TYPICAL CLASS ATTRIBUTES

CUSTOMER CLASS	Revenue per Customer	Adjusted kWh Customer	kW (CP) per Customer	kW (NCP) per Customer	Class Load Factor (CP)	Class Load Factor (NCP)	Delivery Voltage	Meter Costs	Phase	Demand Meter
Residential Water Heat	\$676	13,316	2	3	0.62	0.45	Secondary	\$62	1	No
Residential Space Heat	\$843	16,299	4	5	0.47	0.35	Secondary	\$62	1	No
Residential Lights & Appliance	\$434	8,322	2	3	0.55	0.34	Secondary	\$62	1	No
ALL RESIDENTIAL	\$734	14,254	3	4						
Secondary Demand < 50	\$1,364	26,664	4	6	0.72	0.49	Secondary	\$527	1 or 3	No
Secondary Demand > 50 & < 350	\$21,517	420,592	66	82	0.73	0.59	Secondary	\$1,393	1 or 3	Yes
Secondary Demand > 350	\$124,679	2,620,746	442	663	0.68	0.45	Secondary	\$1,393	3	Yes
Secondary Irrigation	\$1,954	34,567	0	20	n/a	0.20	Secondary	\$1,393	1 or 3	Varies
ALL SECONDARY	\$3,334	66,156	11	15						
Primary General Service	\$118,120	3,164,137	383	500	0.94	0.72	Primary	\$8,470	3	Yes
Primary Irrigation	\$152,826	4,299,563	48,574	1,507	n/a	0.33	Primary	\$8,470	3	Yes
Primary Interruptible	\$44,443	997,423	0	504	n/a	0.23	Primary	\$8,470	3	Yes
ALL PRIMARY	\$94,192	2,460,677	351	503						
High Voltage Interruptible	\$1,974,297	76,515,832	95,819	14,015	0.09	0.62	High Voltage	\$73,108	3	Yes
High Voltage General Service	\$2,956,759	109,891,035	1,221	14,857	10.28	0.84	High Voltage	\$73,108	3	Yes
ALL HIGH VOLTAGE	\$2,838,864	105,886,010	12,572	14,756						
ALL LIGHTING	\$4,646	36,277	4	7	1.18	0.56	Secondary	\$0	n/a	No
ALL FIRM RESALE	\$338,207	9,929,568	1,235	1,427	0.92	0.79	Primary / H. V	\$1,393	1 or 3	Yes
ALL CUSTOMER CLASSES	\$1,201	25,761	5	6						

Puget Sound Power & Light Company
 Cumulative Class Contributions to System Peaks
 Twelve Months ended September 1988

Number of Peak Hours	Total System (Average)	Residential Total (Average)	Secondary Total (Average)	Primary Total (Average)	High Voltage Total (Average)	Lighting Total (Average)	Resale Total (Average)
1	1.00000	0.64172	0.20609	0.06046	0.08691	0.00169	0.00312
12	1.00000	0.60593	0.23614	0.06065	0.09235	0.00151	0.00343
200	1.00000	0.60327	0.23561	0.05721	0.09821	0.00184	0.00386
400	1.00000	0.59964	0.23653	0.05721	0.10063	0.00203	0.00396
600	1.00000	0.59425	0.23859	0.05802	0.10302	0.00210	0.00403
800	1.00000	0.58998	0.24026	0.05858	0.10500	0.00210	0.00408
1000	1.00000	0.58582	0.24221	0.05919	0.10660	0.00207	0.00412
1200	1.00000	0.58168	0.24413	0.05968	0.10828	0.00206	0.00416
1400	1.00000	0.57726	0.24632	0.06023	0.10993	0.00206	0.00420
1600	1.00000	0.57327	0.24833	0.06066	0.11144	0.00205	0.00425
1800	1.00000	0.56922	0.25014	0.06126	0.11303	0.00206	0.00429
2000	1.00000	0.56509	0.25207	0.06177	0.11470	0.00204	0.00434
2200	1.00000	0.56187	0.25327	0.06232	0.11611	0.00206	0.00437
2400	1.00000	0.55878	0.25450	0.06274	0.11749	0.00207	0.00441
2600	1.00000	0.55592	0.25559	0.06311	0.11883	0.00209	0.00445
2800	1.00000	0.55275	0.25684	0.06361	0.12020	0.00211	0.00449
3000	1.00000	0.54951	0.25832	0.06399	0.12150	0.00215	0.00453
3200	1.00000	0.54598	0.25998	0.06443	0.12288	0.00216	0.00457
3400	1.00000	0.54169	0.26233	0.06497	0.12425	0.00215	0.00461
3600	1.00000	0.53734	0.26474	0.06548	0.12566	0.00213	0.00465
3800	1.00000	0.53296	0.26716	0.06601	0.12704	0.00212	0.00470
4000	1.00000	0.52908	0.26935	0.06643	0.12827	0.00211	0.00474