BEFORE THE WASHINGTON

UTILITIES & TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

V.

PUGET SOUND ENERGY,

Respondent.

DOCKETS UE-190529 & UG-190530 (*Consolidated*)

CROSS-ANSWERING TESTIMONY OF GLENN A. WATKINS ON BEHALF OF THE WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL, PUBLIC COUNSEL UNIT

EXHIBIT GAW-13CT

January 15, 2020

Shaded Information is Designated Confidential per Protective Order in Dockets UE-190529 and UG-190530 (*Consolidated*)

REDACTED VERSION

DOCKETS UE-190529 and UG-190530 (*Consolidated)*

CROSS-ANSWERING TESTIMONY OF GLENN A. WATKINS

EXHIBIT GAW-13CT

TABLE OF CONTENTS

DOCKETS UE-190529 and UG-190530 (*Consolidated)*

CROSS-ANSWERING TESTIMONY OF GLENN A. WATKINS

EXHIBIT GAW-13CT

TABLES

DOCKETS NOS. UE-190529 and UG-190530 (*Consolidated)*

CROSS-ANSWERING TESTIMONY OF GLENN A. WATKINS

EXHIBIT GAW-13CT

EXHIBITS LIST

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Glenn A. Watkins. My business address is 6377 Mattawan Trail, Mechanicsville, Virginia 23116.

Q. Have you previously filed testimony in this proceeding?

A. Yes. I pre-filed direct testimony on behalf of Public Counsel on November 22, 2019, which is designated as Exhibit GAW-1T.

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

A. The purpose of this testimony is to respond to FEA witness Ali Al-Jabir and Kroger witness Kevin Higgins on issues pertaining to class cost of service and rate spread. I will also respond to Staff's witness Jason Ball's proposal for the Commission to potentially allow the Company to utilize deferred accounting for costs associated with his recommended pilot programs.

II. CLASS COST OF SERVICE

Q. Does FEA witness Ali Al-Jabir recommend alternative class cost allocation studies to the one conducted by Puget Sound Energy (PSE)?

A. Yes. Mr. Al-Jabir's primary recommendation is to use the 4-CP method to allocate production and transmission plant wherein all such plant is classified as 100 percent demand-related. Mr. Al-Jabir's secondary recommendation is to utilize what is known as the Average & Excess ("A&E") method to allocate production and transmission plant.

Q. What rationale does Mr. Al-Jabir provide for his recommendation to allocate all production and transmission plant based only on class contributions to the four highest monthly system coincident peak demands?

A. Mr. Al-Jabir's own testimony relating to the cost causation of production and transmission plant is contradictory, as will be explained in more detail later. However, in direct support of his proposal to allocate production and transmission plant based only on class 4-CP demands, Mr. Al-Jabir's rationale stems from his assertions that:

> [1] Once the utility makes an investment in these [production and transmission] facilities, these costs continue to be incurred, irrespective of the number of kilowatt hours generated and sold or the number of customers taking service from the utility.[1]
>
> [2] It is the Company's system peak demands, which occur during the winter months that drive the need for additional generation and transmission capacity. Demands during moderate-load times, whether time of day or month of year, do not cause new generating capacity to be built because there is excess capacity on the system during those times.[2]
>
> [3] Generation and transmission capital costs are fixed, sunk costs that do not vary with the amount of energy consumed by customers. Economic principles dictate that such fixed, sunk costs should be allocated on a demand basis. A coincident peak demand cost allocation method is consistent with cost causation principles because it recognizes the fact that generation and transmission capacity additions are driven by the growth in system peak demand and that these additions must be sized to meet the system peak demand.[3]

As can be observed from Mr. Al-Jabir's statements above, his rationale for allocating production and transmission costs based only on coincident peak demands can be collapsed to two factors: (1) coincident peak demands drive the need for additional capacity such that generation and transmission plant investments are driven by contributions to coincident peak demands; and, (2) capital investments (rate base)

[1] Response Testimony of Ali Al-Jabir, Exh. AZA-1T at 6:19-22.
[2] Al-Jabir. Exh. AZA-1T at 11:23-26.
[3] Al-Jabir, Exh. AZA-1T at 12:1-7.

associated with these facilities represent fixed, or sunk, costs and do not vary with output (energy) or number of customers.

Q. Please respond to Mr. Al-Jabir's assertions relating to generation plant.

A. With regard to Mr. Al-Jabir's first rationale, I discussed how a utility's portfolio of generating assets is planned, installed, and operated at length in my response testimony filed in this docket.[4] Without reiterating my response testimony, a utility's portfolio of generation assets is comprised of various types of facilities including those base load units that were designed, installed, and used to serve customers' energy requirements throughout the year due to their relatively low variable costs of output. Similarly, utilities generally invest in peaker units, which have relatively low capital costs but relatively expensive variable costs, to meet peak load requirements for only a few hours of the year.

One must also consider the fact that the majority (62.5 percent) of PSE's net investment in total generation plant is comprised of non-dispatchable generating resources (wind and hydro).[5] Because wind generation is only possible when there is sufficient wind velocity to spin these turbines and hydro generation is dependent upon water levels/flows (and other constraints), these types of generation cannot be totally relied upon to meet PSE's load requirements at any point in time; i.e., they are non-dispatchable. However, the Company's wind and hydro generation plant provides zero (fuel) cost energy to customers throughout the year.

With this said, consider Mr. Al-Jabir's rationale and proposed allocation of generation plant investment relating to PSE's wind and hydro generation plant.

[4] Response Testimony of Glenn A. Watkins, Exh. GAW-1T.
[5] Wind and hydro net investment is $1.424 billion and total net plant is $2.276 billion, per Exhibit GAW-7.

Mr. Al-Jabir claims that the only factor to be considered in allocating generation plant investment is class contributions to the four highest monthly system coincident peak demands (4-CP). My Confidential Exhibit GAW-14C provides the generation output and capacity factors of PSE's wind and hydro facilities during each of the four hours utilized by Mr. Al-Jabir in developing his 4-CP allocation factors. As shown in this Exhibit, the Company's wind generation assets had a capacity factor of [redacted] while the Company's hydro generation assets had a capacity factor of [redacted]. On a combined basis, (wind plus hydro), the capacity factor of these facilities was [redacted] during these four hours. In other words, approximately [redacted] of the Company's wind and hydro facilities were not used or relied upon during these peak periods. However, these facilities provided more than [redacted] of zero fuel cost energy to customers throughout the year.[6] It is indisputable, and a matter of fact, that the majority of PSE's net investment is made to provide low cost energy throughout the year and not simply to meet peak load (demand) requirements.

Furthermore, as shown in my Exhibit No. GAW-7, PSE's net investment in its base load Colstrip Plant is about $412 million, or about 18.1 percent of PSE's total generation net plant investment. Colstrip is a baseload plant that was designed, built, and is utilized to provide low cost energy throughout the year and was not built simply to meet peak load requirements (which could be met with much lower cost peaker facilities). As a result, about 81 percent[7] of the Company's total net investment in generation plant was made primarily to provide low cost energy throughout the year and

[6] Calculated per PSE response to Public Counsel Data Request No. 163.
[7] 62.5 percent wind and hydro plus 18.1 percent Colstrip.

not to simply meet peak load demands. However, Mr. Al-Jabir advocates that all of PSE's investment in generation plant should be allocated on class contributions to four hours of coincident peak demand even though these investments were predominately made to provide low cost energy throughout the year.

With regard to Mr. Al-Jabir's second rationale that capital investments reflect fixed costs and do not vary with output or number of customers, this statement is factually true. However, this tells us nothing about cost causation or why costs are incurred. Indeed, once a capital investment is made, it is a sunk cost. While Mr. Al-Jabir notes that these sunk costs will not vary with changes in energy usage or number of customers, he fails to consider that they will also not change with changes in demand. Yet, he asserts that class contributions to peak demand somehow represent an appropriate method to assign these sunk costs.

Q. On page 11, lines 11 through 13 of his response testimony, Mr. Al-Jabir states: "The amount of energy produced by those [generation and transmission] resources does not drive the incurrence of fixed generation and transmission costs, which are properly classified as entirely demand-related." Do you agree with Mr. Al-Jabir's opinion in this regard?

A. No. As previously discussed in this, and my response testimony, electric utilities plan their systems to minimize total costs. In doing so, and in making capital investment decisions, utilities recognize that some units will be built and utilized to serve customers' energy needs throughout the year, while other units will be utilized primarily to meet peak loads for only a few hours, and that other types of generation resources are not totally reliable for dispatch purposes but provide low (or zero) cost energy when

generation output is available. As such, there is absolutely no doubt that energy output is an important criterion within the generation planning process. To further illustrate, consider Georgia Power Company's planning and portfolio of generating assets.

Georgia Power has been realizing significant customer growth and at the same time, much of its generation portfolio is aging such that the Company needed additional generation resources. While Georgia Power's system peak load has been increasing, the Company decided to build two new nuclear units (Vogtle Units 3 and 4). The Company has incurred exceptionally large fixed capital costs per KW of capacity associated with these nuclear units but the planning criteria has been such that these nuclear units will provide extremely low variable fuel costs associated with energy output for many years to come. As a result, the amount of low cost energy that will be produced from these two units was the driving factor in building these expensive plants. Indeed, the fixed costs of capacity (per KW) of Vogtle Units 3 and 4 will undoubtedly be the most expensive generation units ever built in this country.[8] These plants will operate continuously throughout the year and for decades to provide low cost energy. Under Mr. Al-Jabir's rationale, the sunk costs associated with Vogtle Units 3 and 4 should only consider class contributions to peak demand even though these units were designed and are being built to provide low cost energy throughout the year and are not being built simply to meet peak load requirements.

[8] The current estimated total cost (including AFUDC) of Vogtle Units 3 and 4 is $27.650 billion[a] and the capacity of these two units total 2,200 MW, which equates to a net investment cost of $12,568 per KW. *See* Semi-Annual Construction Monitoring Report for Plant Vogtle Units 3 and 4, *In the Matter of Georgia Power Company's Vogtle Units 3 and 4* (Aug. 30, 2019) (Docket No. 29849) https://services.psc.ga.gov/api/v1/External/Public/Get/Document/DownloadFile/178224/61059.

Q. Please respond to Mr. Al-Jabir's assertions relating to transmission plant.

A. While my comments concerning the fact that fixed costs do not vary as a result of changes in peak demand, energy, or number of customers holds true for transmission facilities as well, the issue of how transmission plant should be allocated across classes has long been decided by this Commission. For decades, this Commission has been of the opinion that, by and large, transmission facilities are nothing more than a conduit to move power and energy from distant generation facilities to PSE's service area. As such, investment in transmission plant is related to the Company's investment in generation plant and should follow the same allocation approach as that used to assign such plant investment.[9]

Q. You state that Mr. Al-Jabir's own testimony relating to the cost causation of production and transmission plant is contradictory. Please explain.

A. As noted earlier, Mr. Al-Jabir claims that it is the Company's system peak demands that drive the need for **additional** generation and transmission capacity. While I have already explained that even though additional capacity may be needed to meet growth in system peak load requirements, it tells us nothing about what types of capital investments will be

[9] See for example Cause U-82-10, Second Supplemental Order, where the Commission stated: "Classification of transmission system cost should be applied using the same principles as for production plant … The appropriate distinction between energy and capacity classification is remote production plant. Construction of baseload energy facilities at remote locations creates a need for transmission facilities which are energy rather than capacity cost related, and the classification should be so applied."
Wash. Utils. & Transp. Comm'n v. Washington Water Power Co., Cause U-82-10, Second Supplemental Order at 37 (Dec. 30, 1982).

See also Docket No. UE-920499, Ninth Supplemental Order, where the Commission stated: "Commission Staff's position conforms with our continuing belief that "distribution-related" transmission lines are constructed to deliver energy as well as to meet peak demand. Thus, we reaffirm that transmission network costs should be classified as partly driven by demand and partly by energy, using the approved Peak Credit ratio."
Wash. Utils. & Transp. Comm'n v. Puget Sound Power & Light Co., Docket UE-920499, Ninth Supplemental Order on Rate Design at 10 (Aug. 17, 1993).

utilized to meet these incremental additions to needed capacity. Indeed, this is the theoretical foundation of the Peak Credit method. That is, this approach measures the cost relationship of an incremental addition of capacity with a peaker unit relative to that of the cost of a base load unit. In other words, on an incremental basis, a utility will simply build an inexpensive peaker unit to meet additional capacity needs. Furthermore, consider the realities of additions to PSE's generation capacity. That is, PSE's incremental (additional) invests in generation assets is, and has been, largely related to additional wind resources which are not installed to meet additional peak load requirements.

Q. On page 12, lines 2 and 3 of his response testimony, Mr. Al-Jabir claims: "Economic principles dictate that such fixed, sunk costs should be allocated on a demand basis." Is Mr. Al-Jabir's understanding of economic principles correct?

A. No. Without explaining the entirety of micro-economic price theory, simply consider the pricing of electricity within developed competitive wholesale markets such as PJM Interconnection and Midcontinent Independent System Operator (MISO). Wholesale market prices are based on what is known as Locational Marginal Prices (LMP) which are based on the incremental (marginal) cost of the last (most expensive) unit being dispatched during any hour. These marginal costs are primarily based upon the fuel (energy) costs of the last unit dispatched. Prices established in competitive electricity markets are not, in any way, developed simply based on an allocation or assignment of total fixed costs.

Q. On pages 13 and 14 of his response testimony, Mr. Al-Jabir agrees with your assessments set forth in your response testimony that capital costs of peakers are generally lower than those for base load units but the operating costs of peaker

plants are higher than those of base load plants such that "it is necessary, therefore, to look at both capital costs and operating costs in light of the expected capacity factor of the plant." Is this exactly what you did in conducting your class cost of service study (CCOSS) utilizing the Probability of Dispatch method?

A. Yes. As described in my response testimony, the Probability of Dispatch method is the most theoretically correct method to allocate generation costs as it considers differences in how each individual generation plant's capital costs are utilized and incurred as well as considers each generating unit's variable fuel costs; i.e., this method reflects the fact that baseload units have higher capacity costs with lower fuel costs and that peaker units tend to have lower capacity costs with higher fuel costs.

Q. Mr. Al-Jabir's secondary recommendation is to allocate PSE's production and transmission plant based on the A&E method. Please explain the concepts and mechanics of the A&E method.

A. The basic concept of the A&E method is that costs are allocated based upon a weighting of each class's "average" use and "excess" demand. Each class's "excess" demand is defined as the difference between that class's peak demand and its average demand; i.e., the excess above average. The conceptual framework of this approach is that cost responsibility should consider both usage (average demand) as well as demand requirements over and above average usage. It is most important to understand that when calculating each class's excess demand, non-coincident peak (NCP) demands must be utilized and not coincident peak (CP) demands.[10] To be clear, suppose Class A's NCP

[10] If system coincident load factor is utilized as a weighting mechanism and if excess demands are based on class contributions to CP demands, the resulting A&E class allocation factors are exactly equal to CP demand. Therefore, class NCPs must be used in calculating "excess" demands.

occurred on a Winter weekday early in the morning, Class B's NCP occurred on a different Winter weekday late in the morning, and Class C's NCP occurred in the Summer during the mid-afternoon. These individual class's average usages (throughout the year) are then subtracted from their respective NCP's to arrive at each class's "excess" demand.

Q. Is there any conceptual merit to the A&E method as applied to PSE's electric operations?

A. No. For public utility industries that are able to store their product, such as the water utility industry, the A&E approach has intuitive appeal particularly as it relates to water production and storage facilities. This is because even though a water utility may design its water treatment facilities to meet its maximum peak day demands, this capacity may not be large enough to meet maximum diurnal (hourly) demands. Because a water utility can produce and treat water during off-peak periods and then store water, it can then have enough resources to meet these peak hour loads. The A&E method (known as the Base Extra Capacity method in the water industry) recognizes class load diversity in that all classes do not peak at the same time and also recognizes that water can be stored such that classes with higher load factors (more consistent usage throughout the year) are not assigned the same level of costs as classes with less consistent usage (low load factors) and demand profiles.

Such is not the case in the electric industry in that, for all intents and purposes, electricity cannot be stored and is consumed instantaneously with production. In other words, diversified class non-coincident demands have absolutely nothing to do with how

electric generation and transmission plant is designed, operated, or how these costs are incurred.

Q. Can you show and explain how Mr. Al-Jabir's A&E approach does not reflect how PSE's production and transmission costs are incurred?

A. Yes. In developing his A&E class allocation factors, Mr. Al-Jabir utilized each class's four highest monthly NCP demands (4-NCP). As shown on page 1 of my Exhibit GAW-15, the months with the four highest NCPs varies across classes. For example, the four highest class NCPs for the Residential class (Rate 7) were January, February, November and December (highlighted in yellow). However, the four highest NCPs for the High Voltage class (Rate 46) occurred in March, June, July and August. Indeed, as we observe page 1 of Exhibit GAW-15, we see significant diversity in class maximum demands across months. Because electricity cannot be stored and is consumed instantaneously with production, this diversity in class demands tells us nothing and is not correlated in any way to how generation and transmission costs are planned or incurred.

To compound matters, consider page 2 of my Exhibit GAW-15. The following classes all had annual class NCP demands in January 2018: Residential (Rate 7); Firm Resale (Rate 5); Secondary Voltage, Less than 50 KW (Rate 24); and, General Service Primary (Rate 31). However, as shown on page 2 of my Exhibit GAW-15, Rate 7 peaked on January 1, 2018, at 6:00 p.m. while Rate 5 peaked on the same day but at 8:00 a.m. Rate 24 peaked on January 3, 2018, at 10:00 a.m. and Rate 31 peaked on January 17, 2018, at 2:00 p.m. Notwithstanding the fact that these classes peaked on three different days, it is most important to consider the diurnal load patterns of these classes. That is,

Firm Resale peaked early in the morning, Small Secondary Voltage peaked about when retail stores and businesses open at 10:00 in the morning, the General Service Primary class peaked in the middle of the afternoon and the Residential class peaked in the evening when most households are arriving home from their workdays.

PSE's portfolio of generating assets are not operated based on the sum of maximum loads over different days and different hours within each day because electricity cannot be stored. Indeed, the diversification of class demands benefits all customers and customer classes. In short, and at least with respect to PSE, the A&E method results in a distinct bias against low load factor customers (because excess demands are greater for low load factor customers than for high load factor customers) in favor of high load factor customers and is in no way correlated or related to how PSE's generation and transmission systems are operated.

Q. What are your conclusions regarding Mr. Al-Jabir's recommended class cost of service studies?

A. The methods and approaches recommended by Mr. Al-Jabir bear no resemblance to how generation and transmission costs are planned, operated, or incurred and therefore, should be given no weight or consideration in this case.

III. CLASS REVENUE DISTRIBUTION (RATE SPREAD)

Q. Please provide a summary of the various parties' recommended electric rate spreads.

A. In order to provide an apples-to-apples comparison, the following two tables provide the various electric class rate spreads proposed by witnesses in this case. Table 1 provides

each witnesses' dollar increases while Table 2 provides each witnesses' proposed percentage increases.

TABLE 1
Proposed Class Increases
($000)

		Proposed Increase				
Class	Present Revenue	PSE Piliaris[11]	Staff Ball[12]	PC Watkins[13]	Kroger Higgins[14]	FEA Al-Jabir[15]
Residential (Rate 7)	$1,105,897	$84,940	$84,786	$80,181	$90,649	$139,626
Secondary Voltage						
Demand <= 50 kW (Rate 24)	$263,390	$20,230	$20,193	$19,097	$21,590	$0
Demand > 50 kW <= 350 kW (Rate 25/29)	$270,703	$15,594	$15,594	$19,627	$11,095	$0
Demand > 350 kW (Rate 26)	$160,281	$9,233	$9,233	$11,621	$6,569	$0
Total Secondary Voltage	$694,374	$45,057	$45,020	$50,345	$39,253	$0
Primary Voltage						
General Service (Rate 31)	$113,255	$8,699	$8,683	$8,211	$9,283	$0
Irrigation (Rate 35)	$268	$31	$31	$29	$33	$45
Interrup. Electric Schools (Rate 43)	$10,687	$1,026	$1,231	$775	$1,095	$1,564
Total Primary Voltage	$124,210	$9,756	$9,945	$9,015	$10,411	$1,609
Total High Voltage (Rate 46/49)	$40,128	$2,312	$2,312	$2,909	$1,645	$0
Choice/ Retail Wheeling/Special Contract	$15,608	-$998	-$998	-$998	-$998	-$998
Lighting (Rate 50-59)	$16,458	$1,580	$1,580	$1,193	$1,686	$2,408
Total Jurisdictional Sales	$1,996,675	$142,646	$142,645	$142,645	$142,646	$142,645
Firm Resale (Rate 5)	$327	$354	$354	$355	$354	$355
Total Sales	$1,997,003	$143,000	$143,000	$143,000	$143,000	$143,000

[11] Calculated per Jon. A Piliaris workpaper, WP-JAP06-ELEC-RATESPREAD-RATE DESIGN (Supplemental).
[12] Per Jason Ball's Testimony, Exh. JLB-1T at 17, Table 4.
[13] Per Watkins, Exh. GAW-1T, at 41, Table 7.
[14] Per Kevin C. Higgins' Prefiled Response Testimony at 12, Table KCH-3.
[15] Per Al-Jabir, Exh. AZA-5.

TABLE 2
Proposed Class Percent Increases

	Percent Increase[16]				
Class	PSE Piliaris	Staff Ball	PC Watkins	Kroger Higgins	FEA Al-Jabir
Residential (Rate 7)	7.68%	7.67%	7.25%	8.20%	12.63%
Secondary Voltage					
Demand <= 50 kW (Rate 24)	7.68%	7.67%	7.25%	8.20%	0.00%
Demand > 50 kW <= 350 kW (Rate 25/29)	5.76%	5.76%	7.25%	4.10%	0.00%
Demand > 350 kW (Rate 26)	5.76%	5.76%	7.25%	4.10%	0.00%
Total Secondary Voltage	6.49%	6.48%	7.25%	5.65%	0.00%
Primary Voltage					
General Service (Rate 31)	7.68%	7.67%	7.25%	8.20%	0.00%
Irrigation (Rate 35)	11.52%	11.52%	10.88%	12.30%	16.79%
Interrup. Electric Schools (Rate 43)	9.60%	11.52%	7.25%	10.25%	14.63%
Total Primary Voltage	7.85%	8.01%	7.26%	8.38%	1.30%
Total High Voltage (Rate 46/49)	5.76%	5.76%	7.25%	4.10%	0.00%
Choice/ Retail Wheeling/Special Contract	-6.39%	-6.39%	-6.39%	-6.39%	-6.39%
Lighting (Rate 50-59)	9.60%	9.60%	7.25%	10.25%	14.63%
Total Jurisdictional Sales	7.14%	7.14%	7.14%	7.14%	7.14%
Firm Resale (Rate 5)	108.00%	108.00%	108.42%	108.00%	108.44%
Total Sales	7.16%	7.16%	7.16%	7.16%	7.16%

As can be observed from the tables above, Staff's proposed electric rate spread is very similar to the Company's proposal with the exception of Interruptible Electric Schools (Rate 43) wherein Mr. Ball proposes a somewhat larger increase to this class than that proposed by Mr. Piliaris. Given the similarities between Staff's and PSE's proposed electric rate spread, I will not respond any further to Staff's proposal as I have already addressed my disagreements with PSE's proposed rate spread in my response testimony.

[16] Calculated per Table 1, above

Q. Please respond to the electric rate spread recommendation of Kroger witness Mr. Higgins.

A. Mr. Higgins' recommended electric rate spread is similar in concept to the Company's rate spread methodology except those classes whose calculated Peak Credit parity ratios are greater than 105 percent receive 50 percent of the system average increase as compared to the Company's proposal to increase those classes at 75 percent of the system average percentage increase. As discussed in my response testimony, it is my opinion that the Company's proposal is too narrowly defined in giving less than equal percentage increases to those classes who parity ratios are only slightly above 100 percent. Considering that Mr. Higgins' recommendation is even more aggressive than that proposed by the Company, my opinions and reasoning set forth in my response testimony are also true for Mr. Higgins' recommendation.

As an illustration as to the narrow definitions used by Mr. Higgins (as well as PSE witness Mr. Piliaris and Staff witness Mr. Ball), consider the following classes with parity ratios greater than 100 percent as calculated within the Company's Peak Credit CCOSS:

TABLE 3
PSE As-Filed Peak Credit Parity Ratios

Class	Schedule	Parity Ratios
Sec. Voltage <50 KW	24	105%
Sec. Voltage 50 KW – 350 KW	25/29	106%
Sec. Voltage > 350 KW	26	106%
Gen. Service – Primary	31	102%
High Voltage	46/49	106%

As shown above, Rate 24 produces a parity ratio of 105 percent under the Company's CCOSS while Rates 25/29, 26 and 46/49 all produce a parity ratio one percentage point higher at a level of 106 percent. Although this difference is *de minimis*, Mr. Higgins proposes that the percentage increase to Rate 24 be double that of the other classes; i.e., 8.20 percent increase compared to 4.10 percent increase. My recommendation to assign equal percentage increases to all classes except the Irrigation class (Rate 35)[17] is fair and reasonable to all customers, given the fact that class cost of service studies are not surgically precise and should serve only as a guide in establishing class revenue responsibility as well as the factors set forth by this Commission that should be considered in establishing rate spread as discussed in my response testimony (page 39) and in the response testimony of Staff witness, Mr. Ball (pages 15 and 16). As a result, Mr. Higgins' proposed electric rate spread should be rejected.

Q. Please respond to the electric rate spread recommendation of FEA witness Al-Jabir.

A. Mr. Al-Jabir recommends no revenue increases to those classes whose calculated parity ratios are above 100 percent. Under Mr. Al-Jabir's recommendation, Rates 24, 25/29, 26, 31 and 46/49 would receive no increase in rates as a result of this case. In order to put Mr. Al-Jabir's methodology and recommendation in proper context, consider PSE's calculated parity ratio for Rate 31 of 102 percent. Mr. Al-Jabir proposes no increase in revenue responsibility to this class. At the same time, consider the Residential class whose parity ratio (under the Company's CCOSS) is 97 percent. Even though Rate 31's parity ratio is only ever so slightly above 100 percent and the Residential class is every so

[17] The Irrigation class's contribution to cost of service is clearly substantially inadequate under any cost allocation methodology.

slightly below 100 percent, Mr. Al-Jabir recommends a 12.63 percent increase to Residential revenues and no increase to General Service Primary (Rate 31) revenues.

Mr. Al-Jabir's rationale and opinions are based on what he calls "cost" of service. As discussed in my response testimony and as found by the U.S. Supreme Court, allocated costs are not surgically precise nor a matter for the slide rule. Mr. Al-Jabir's rate spread approach for the High Voltage class (Rate 46/49) to incur no revenue increase is most troubling considering that this class's parity ratio under the Probability of Dispatch approach is only 96 percent and would therefore, incur an increase similar to that of the Residential class's increase if the Commission were to rely solely on the Probability of Dispatch method. As a result, Mr. Al-Jabir's proposed electric rate spread should be rejected.

IV. STAFF'S PROPOSED PRICING PILOTS

Q. Do you have any comments concerning Staff witness, Mr. Ball's recommendation for the Commission to direct PSE to develop various pilot rate programs and for PSE to engage with local resources to evaluate the potential for a real time pricing program?

A. Yes. While I have no objections to PSE offering and implementing various voluntary pilot programs, I am concerned with one of Mr. Ball's recommendations as it relates to these programs. That is, on pages 37 and 68 of his testimony, Mr. Ball recommends that "the Commission entertain deferred accounting treatment for expenses associated with developing and administering these programs."

While I would agree that PSE should have an opportunity to recover its costs, most, if not all, of the expenses associated with developing and administering these

programs would be incurred by PSE employees. These employees' salaries, wages, benefits, and other overheads will already be incorporated and reflected in the Company's revenue requirement. Therefore, if the Commission were to allow deferred accounting on these specific costs, PSE would double-recover most, if not all, of the costs required to develop and administer Mr. Ball's recommended programs. As a result, and absent any special circumstances, I recommend the Commission disregard Mr. Ball's recommendation to "entertain" the notion of deferred accounting associated with these pilot programs.

Q. Does this complete your testimony?

A. Yes.