

**EXHIBIT NO. \_\_\_\_ (KCH-1T)  
DOCKET NO. UE-072300/UG-072301  
2008 PSE GENERAL RATE CASE  
WITNESS: KEVIN C. HIGGINS**

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PUGET SOUND ENERGY, INC.,**

**Respondent.**

**Docket No. UE-072300  
Docket No. UG-072301**

**PREFILED RESPONSE TESTIMONY OF  
KEVIN C. HIGGINS  
ON BEHALF OF THE KROGER CO.**

**May 30, 2008**

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1 University of Utah and Westminster College, where I taught undergraduate and  
2 graduate courses in economics. I joined Energy Strategies in 1995, where I assist  
3 private and public sector clients in the areas of energy-related economic and  
4 policy analysis, including evaluation of electric and gas utility rate matters.

5 Prior to joining Energy Strategies, I held policy positions in state and local  
6 government. From 1983 to 1990, I was economist, then assistant director, for the  
7 Utah Energy Office, where I helped develop and implement state energy policy.  
8 From 1991 to 1994, I was chief of staff to the chairman of the Salt Lake County  
9 Commission, where I was responsible for development and implementation of a  
10 broad spectrum of public policy at the local government level.

11 **Q. Have you previously testified before this Commission?**

12 A. Yes. I testified in the PSE 2006 and 2004 general rate cases and  
13 participated in the settlement discussions that resulted in partial settlement  
14 agreements pertaining to electric rate spread and rate design issues in those  
15 proceedings. I also testified in the interim phase of the PSE 2001 general rate case  
16 and participated in the collaborative process that led to the settlement agreement  
17 submitted by the parties to that general rate proceeding, which was subsequently  
18 approved by the Commission.

19 **Q. Have you testified before utility regulatory commissions in other states?**

20 A. Yes. I have testified in more than eighty proceedings on the subjects of  
21 utility rates and regulatory policy before state utility regulators in Alaska,  
22 Arizona, Arkansas, Colorado, Georgia, Idaho, Illinois, Indiana, Kansas,  
23 Kentucky, Michigan, Minnesota, Missouri, Montana, Nevada, New Mexico, New

1 York, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Utah, Virginia,  
2 West Virginia, and Wyoming.

3 A more detailed description of my qualifications is contained in  
4 Attachment A, appended to my response testimony.

5

6 **Overview and Recommendations**

7 **Q. What is the purpose of your testimony in this proceeding?**

8 A. My testimony addresses the following topics: (1) PSE's electric cost-of-  
9 service study; (2) rate spread for PSE's electric service; (3) rate design for  
10 Schedules 25 and 26; and (4) implications of the Domestic Production Activities  
11 Deduction for PSE's revenue requirement.

12 **Q. Please summarize your conclusions and recommendations.**

13 (1) I recommend that the Commission approve PSE's electric cost-of-  
14 service study.

15 (2) Although it would be preferable to set rates closer to cost-of-service  
16 for those rate schedules with high parity ratios, I conclude that PSE's rate spread  
17 proposal still falls within the bounds of reasonableness at the revenue requirement  
18 requested by the Company.

19 (3) If the revenue requirement approved by the Commission is less than  
20 that requested by PSE, then the rate spread proposed by PSE for its requested  
21 revenue requirement should be the starting point for spreading the approved  
22 revenue change. Specifically, the revenue apportionment produced by PSE's rate  
23 spread should be used as the basis for spreading any smaller revenue change.

1                   (4) I support the rate design recommended by the Company for Schedules  
2                   25 and 26 at the revenue requirement requested by the Company, as it represents a  
3                   material step toward aligning rates with cost. However, as demand charges are  
4                   still below demand cost (and energy charges above energy cost), to the extent that  
5                   the Commission reduces the revenue requested by the Company for these rate  
6                   schedules, the demand charges proposed by PSE should be retained, and the  
7                   reduction should be applied to the energy charge.

8                   (5) It appears that the effect of the Domestic Production Activities  
9                   Deduction is not included in the Company's determination of revenue  
10                  requirement. I recommend that the Commission require PSE's revenue  
11                  requirement to be reduced to account for this Federal Income Tax deduction  
12                  which has been in place since 2005. I estimate that if PSE were to receive the full  
13                  revenue requirement increase it is seeking in this proceeding, the tax benefit of the  
14                  Domestic Production Activities Deduction should result in a revenue requirement  
15                  reduction of \$2,474,781. The final amount of the adjustment is dependent on the  
16                  Company's generation-related net income that results from the Commission's  
17                  final decision in this proceeding.

18  
19                  As my recommendations are concentrated on a limited number of issues,  
20                  absence of comment on my part regarding a particular issue does not signify  
21                  support (or opposition) toward the Company's filing with respect to the non-  
22                  discussed issue.

1            **Cost of Service**

2            **Q.    What is the purpose of cost-of-service analysis?**

3            A.            Cost-of-service analysis is conducted to assist in the determination of  
4            appropriate rates for each customer class. It involves the assignment of revenues,  
5            expenses, and rate base to each customer class, and includes the following steps:

- 6            • Separating the utility’s costs in accordance with the various *functions* of its  
7            system (e.g., production, transmission, distribution);  
8            • *Classifying* the utility’s costs with respect to the manner in they are incurred by  
9            customers (e.g., customer-related costs, demand-related costs, and energy-related  
10           costs); and  
11           • *Allocating* responsibility for causing the utility’s costs to the various customer  
12           classes.

13           **Q.    What basic approach to cost-of-service analysis does PSE utilize?**

14           A.            PSE’s electric cost-of-service analysis is presented in the direct testimony  
15           of David W. Hoff. To classify production and transmission costs into demand and  
16           energy, PSE uses the peak credit methodology adopted in PSE’s 1992 rate design  
17           case. Over time, the Company has introduced some refinements to the 1992  
18           calculation that have improved its application.

19           **Q.    How has the Company improved its application of this method?**

20           A.            One example is the derivation of demand and energy-related costs. The  
21           peak credit method used by PSE classifies all electric production costs as either  
22           demand or energy based on the ratio of the cost of a simple cycle turbine (“CT”)  
23           to a combined cycle combustion turbine (“CCCT”). In some past years, only half

1 of the capital and fixed O&M costs of the CT were included in the numerator of  
2 the ratio. This exclusion was arbitrary and resulted in a substantial understatement  
3 of the costs of a CT relative to a CCCT, undermining the logical basis of the  
4 derivation of capacity costs via this methodology. As a result, the classification of  
5 demand-related costs was significantly understated. In this case, PSE calculates  
6 the ratio based on 100 percent of the capital and fixed costs of the CT, producing  
7 a more accurate representation of demand and energy costs within the framework  
8 of this method.

9 Another improvement is the determination of peak generation  
10 requirements based upon the top 75 generation-demand hours of the year, rather  
11 than the top 200 hours of the year. This change provides a more useful measure of  
12 class contribution to peak demand. As described by Mr. Hoff, the generation  
13 demand in the top 75 hours of the year is within 90 percent of the system peak  
14 measured over a ten-year period. This is a good indication that the top 75 hours  
15 provides a reasonable standard of peak demand measurement within the  
16 framework of this methodology.

17 **Q. How does PSE allocate distribution system costs?**

18 A. As described by Mr. Hoff, PSE assigns the cost of distribution  
19 underground circuits, overhead circuits, and substation based upon allocation  
20 factors constructed from each class's contribution to each feeder's and each  
21 substation's peak, as well as the length of the distribution circuit.

22 For distribution feeders, PSE uses its customer and distribution databases  
23 to associate each customer with a feeder. Each class's non-coincident-peak

1 (“NCP”) load factor is then used to determine each class’s contribution to each  
2 feeder’s non-coincident peak. Each class’s contribution to peak is multiplied by  
3 the number of overhead and underground miles on the feeder. These allocators are  
4 then summed across all the feeders to develop the overhead and underground  
5 distribution line allocators.

6 For distribution substations, each class’s contribution to the substation’s  
7 peak is calculated using average hourly consumption of each class’s load on the  
8 substation divided by the NCP load factor of the class.

9 **Q. What is your assessment of PSE’s approach to allocating distribution system**  
10 **costs?**

11 A. I have reviewed many distribution cost-of-service studies from numerous  
12 jurisdictions and, in my opinion, PSE’s approach to distribution cost allocation is  
13 among the most robust I have seen. The robustness of PSE’s approach stems from  
14 its intelligent use of databases to allocate costs at a very granular level. PSE’s  
15 approach produces a much more accurate measurement of cost causation than  
16 alternative approaches that rely exclusively on high-level allocation factors.

17 **Q. What is your recommendation to the Commission with respect to PSE’s**  
18 **electric cost-of-service method presented in this proceeding?**

19 A. I recommend that the Company’s approach to electric cost-of-service be  
20 adopted by the Commission.

1 **Rate Spread**

2 **Q. What general guidelines should be employed in spreading any change in**  
3 **rates?**

4 A. In determining rate spread, or revenue apportionment, it is important to  
5 align rates with cost causation, to the greatest extent practicable. Properly aligning  
6 rates with the costs caused by each customer group is essential for ensuring  
7 fairness, as it minimizes cross subsidies among customers. It also sends proper  
8 price signals, which improves efficiency in resource utilization.

9 At the same time, it can be appropriate to mitigate the impact of moving  
10 immediately to cost-based rates for customer groups that would experience  
11 significant rate increases from doing so. This principle of ratemaking is known as  
12 “gradualism.” When employing this principle, it is important to adopt a long-term  
13 strategy of moving in the direction of cost causation, and to avoid schemes that  
14 result in permanent cross-subsidies from other customers.

15 **Q. What general approach to electric rate spread does PSE recommend?**

16 As described by Mr. Hoff, PSE is proposing to move in the direction of  
17 cost-of-service, but not all the way at this time. Mr. Hoff suggests that classes  
18 should receive rate increases within a range of 50 percent to 125 percent of the  
19 average percentage increase based on each class’s parity ratio.

20 **Q. What is your assessment of PSE’s proposed approach to rate spread?**

21 A. I would prefer to see a stronger step in the direction of cost-of-service for  
22 the classes with parity ratios significantly divergent from 1.00. That reservation  
23 notwithstanding, I have concluded that the Company’s proposal falls within the

1 bounds of reasonableness at the revenue requirement requested by the Company.  
2 Consequently, if the Company's requested revenue requirement is adopted by the  
3 Commission, then I would support the rate spread proposed by PSE.

4 **Q. What do you recommend if the revenue requirement approved by the**  
5 **Commission is less than that requested by PSE?**

6 A. If the revenue requirement approved by the Commission is less than that  
7 requested by PSE, then the rate spread proposed by PSE for its requested revenue  
8 requirement should be the starting point for spreading the approved revenue  
9 change. Specifically, the revenue apportionment produced by PSE's rate spread  
10 should be used as the basis for spreading the smaller revenue change. This means  
11 that PSE's proposed range of 50 percent to 125 percent of the average percentage  
12 increase should not set the boundaries for an overall smaller rate increase than the  
13 9.78 percent being proposed by the Company.

14 **Q. Please explain your recommendation further.**

15 A. When I refer to the "revenue apportionment produced by PSE's rate  
16 spread" I am referring to each class's percentage share of total revenue  
17 requirement that results from that spread. For example, under PSE's proposed  
18 spread, Residential customers would pay 54.7 percent of the total revenue  
19 requirement. If the Commission agrees that PSE's proposed rate spread is  
20 reasonable, then by extension, the corresponding revenue apportionment is  
21 reasonable as well.

22 My recommendation is to retain the percentage revenue apportionment  
23 that results from PSE's rate spread and to apply this revenue apportionment to

1           whatever final revenue requirement is approved by the Commission.<sup>1</sup> This type of  
2           approach (determining a reasonable revenue apportionment first, then applying it  
3           to the resulting revenue requirement) is standard in some jurisdictions such as  
4           Minnesota. The advantage of this approach is that it balances the application of  
5           gradualism with moving toward cost-of-service. If there is agreement (or a  
6           determination) that a given revenue apportionment reasonably accomplishes this  
7           balance, then this balance should be retained for a range of different revenue  
8           requirements. My recommendation accomplishes this objective.

9           **Q.    Please explain why it is not reasonable to use PSE’s proposed range of 50**  
10           **percent to 125 percent of the average percentage increase for a significantly**  
11           **smaller rate increase than the 9.78 percent being proposed by the Company.**

12          A.           If PSE’s proposed revenue increase is reduced, a fixed “percentage-of-  
13           average” range does not provide enough opportunity for rates to move *relative to*  
14           *one another* to permit those classes that are paying rates above parity to move  
15           materially closer to their actual costs-of-service. In other words, while a range of  
16           50 percent to 125 percent of the average percentage increase provides for some  
17           relative movement toward cost if a 9.78 percent increase is adopted, a material  
18           movement toward cost all but disappears if this same range is applied to a smaller  
19           overall increase of, say, 2 percent.

20                        In contrast, setting rate spread based on an approved revenue  
21           apportionment will retain the same approximate differentials from the average

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<sup>1</sup> I recognize that, by its terms, Rate 40 is calculated formulaically; consequently, a revenue apportionment approach should not govern rate spread for this rate. Similarly, Transportation service does not use the generation system, and its final revenue requirement may need to be calculated separately from the other classes.

1 system increase for classes over a wide range of revenue requirements. This gives  
2 classes that are consistently well above parity a genuine opportunity to move  
3 toward cost over time.

4 **Q. Do you have an example to illustrate how your approach would work?**

5 A. Yes. An example is presented in Kroger Exhibit No. \_\_ (KCH-1). In this  
6 example, the revenue apportionment associated with PSE's proposed spread is  
7 first determined. Next, we assume that the Commission approves a \$125 million  
8 revenue increase rather than the \$179.7 million increase requested by the  
9 Company. The resulting rate spread is then calculated by holding the revenue  
10 apportionment constant. The results are summarized in Table KCH-1, on the  
11 following page.

12 **Q. Please summarize your recommendation with respect to rate spread.**

13 A. Although it would be preferable to set rates closer to cost-of-service for  
14 those rate schedules with high parity ratios, I conclude that PSE's rate spread  
15 proposal still falls within the bounds of reasonableness at the revenue requirement  
16 requested by the Company. If the revenue requirement approved by the  
17 Commission is less than that requested by PSE, then the percentage revenue  
18 apportionment produced by PSE's rate spread should be used as the basis for  
19 spreading the smaller revenue change.

Table KCH-1

**Kroger Recommended Spread Approach:  
Example Assuming \$125 Million Increase in Revenue Requirement**

	<u>Schedule</u>	<u>PSE Proposed Revenues @ \$179.7M Revenue Increase</u>	<u>PSE Proposed Schedule Share of Total Revenue Requirement</u>	<u>PSE/Kroger Proposed Percent Change @ \$179.7M Increase</u>	<u>Kroger Recommended Percent Change @ \$125.0M Increase</u>
<b>Residential</b>	7	\$ 1,103,321,007	54.7%	12.1%	9.07%
<b>Secondary Voltage</b>					
General Service <= 50 kW	24	\$ 247,346,995	12.3%	9.7%	6.72%
General Service >= 50 kW but <= 350 kW	25 / 29	\$ 273,539,621	13.6%	4.8%	2.00%
General Service >=350 kW	26	\$ 166,771,659	8.3%	4.8%	2.00%
<b>Total Secondary Voltage</b>	24 / 25 / 26 / 29	\$ 687,658,274	34.1%	6.5%	3.65%
<b>Primary Voltage</b>					
General Service	31 / 35	\$ 109,114,153	5.4%	9.7%	6.72%
Interruptible Total Electric Schools	43	\$ 14,094,811	0.7%	9.7%	6.72%
<b>Total Primary Voltage</b>	31 / 35 / 43	\$ 123,208,964	6.1%	9.7%	6.72%
<b>Campus Rate<sup>1</sup></b>	40	\$ 40,993,318	2.0%	5.2%	2.32%
<b>High Voltage</b>					
<b>Total High Voltage</b>	46 / 49	\$ 34,986,288	1.7%	9.7%	6.72%
<b>Lighting</b>	50 - 59	\$ 16,573,040	0.8%	7.3%	4.36%
<b>Total Retail Sales to Customers</b>		\$ 2,006,740,891	99.5%	9.8%	6.79%
<b>Total Firm Resale</b>	005	\$ 1,482,590	0.1%	29.8%	26.26%
<b>Transportation Sales</b>					
<b>Total Transportation Sales</b>	449 / 459	\$ 9,507,955	0.5%	9.7%	6.72%
<b>Total Sales to Customers</b>		\$ 2,017,731,436	100.0%	9.8%	6.80%

**Rate Design for Schedules 25 and 26**

**Q. What has PSE proposed with respect to the rate design of Schedules 25 and 26?**

**A.** As discussed in the direct testimony of Mr. Hoff, PSE is attempting to move the demand charges for these schedules closer to demand cost-of-service. I support this objective, as it better aligns rates with cost. However, as Mr. Hoff notes, the demand charges for Schedule 26 will still recover less revenue than

1 demand-related costs. This causes energy rates to be set above energy costs, to the  
2 disadvantage of higher-load-factor customers. My review of the Company's filing  
3 indicates that this situation is also the case for Schedule 25.

4 **Q. What is your assessment of PSE's proposed rate design for Schedules 25 and**  
5 **26?**

6 A. I support the design recommended by the Company at the revenue  
7 requirement requested by the Company, as it represents a material step toward  
8 aligning rates with cost. However, as demand charges are still below demand cost,  
9 (and energy charges above energy cost), to the extent that the Commission  
10 reduces the revenue requested by the Company for these rate schedules, the  
11 demand charges proposed by PSE should be retained, and the reduction should be  
12 applied to the energy charge. In the case of Schedule 25, the same mills/kWh  
13 reduction should be applied to the initial block as to the tailblock.

14

15 **Domestic Production Activities Deduction**

16 **Q. What is the Domestic Production Activities Deduction?**

17 A. The Domestic Production Activities deduction was introduced as part of  
18 the American Jobs Creation Act of 2004 and became effective for taxable years  
19 beginning in 2005. For electric utilities, the deduction reduces the amount of the  
20 utility's net income associated with electric power generation that is subject to  
21 Federal Income Tax. In 2006, this deduction was 3 percent of taxable net income.  
22 In 2007, the deduction increased to 6 percent. In 2010, the deduction will increase  
23 to its permanent level of 9 percent. At this permanent level, the deduction will

1 effectively reduce the marginal Federal Income Tax rate on generation-related  
2 activities to 31.85 percent.

3 **Q. Does the Domestic Production Activities Deduction apply to distribution and**  
4 **transmission service?**

5 A. No. For that reason, taxable income must be separately calculated for  
6 generation-related activities.

7 **Q. How should the Domestic Production Activities Deduction be treated for**  
8 **ratemaking purposes?**

9 A. The benefit should be passed on to customers to reflect the reduced tax  
10 burden attributable to the deduction. Since the amount of the deduction is a  
11 function of the utility's taxable income attributable to generation, the final amount  
12 of the deduction for ratemaking purposes is a function of the final revenue  
13 requirement determined by the Commission. In this sense, it is similar to the  
14 income tax gross-up factor – except it is smaller, applies only to generation, and  
15 works in the opposite direction.

16 **Q. Did PSE reflect the tax reduction associated with the Domestic Production**  
17 **Activities Deduction in its determination of revenue requirement?**

18 A. It appears that the effect of the Domestic Production Activities Deduction  
19 is not included in the Company's determination of revenue requirement.  
20 Certainly, PSE does not show a partial offset to the 35 percent Federal Income  
21 Tax levied on the incremental revenue it is requesting in this proceeding.

1 **Q. Have you estimated the amount of PSE's Domestic Production Activities**  
2 **Deduction if the Company receives the full revenue requirement increase it is**  
3 **seeking in this proceeding?**

4 A. Yes. I estimate the amount of the deduction would be \$7,070,802. This  
5 calculation is shown in Kroger Exhibit No. \_\_ (KCH-2).

6 **Q. Have you estimated the revenue requirement impact of the Domestic**  
7 **Production Activities Deduction if the Company receives the full revenue**  
8 **requirement increase it is seeking in this proceeding?**

9 A. Yes. I estimate that the revenue requirement impact would be a reduction  
10 of \$2,474,781. To make this estimation I imputed 40.8 percent of PSE's electric  
11 net taxable income to generation. This calculation is also shown in Kroger Exhibit  
12 No. \_\_ (KCH-2).

13 **Q. What is your recommendation to the Commission on this matter?**

14 A. I recommend that the Commission require PSE's revenue requirement to  
15 be reduced to account for the Domestic Production Activities Deduction. The  
16 appropriate deduction for this proceeding is the 6 percent deduction currently in  
17 effect (and which was in effect in 2007). The final amount of the adjustment is  
18 dependent on the Company's generation-related net income that results from the  
19 Commission's final decision in this proceeding.

20 **Q. Does this conclude your response testimony?**

21 A. Yes, it does.



**KEVIN C. HIGGINS**  
**Principal, Energy Strategies, L.L.C.**  
**215 South State St., Suite 200, Salt Lake City, UT 84111**

**Vitae**

**PROFESSIONAL EXPERIENCE**

Principal, Energy Strategies, L.L.C., Salt Lake City, Utah, January 2000 to present. Responsible for energy-related economic and policy analysis, regulatory intervention, and strategic negotiation on behalf of industrial, commercial, and public sector interests. Previously Senior Associate, February 1995 to December 1999.

Adjunct Instructor in Economics, Westminster College, Salt Lake City, Utah, September 1981 to May 1982; September 1987 to May 1995. Taught in the economics and M.B.A. programs. Awarded Adjunct Professor of the Year, Gore School of Business, 1990-91.

Chief of Staff to the Chairman, Salt Lake County Board of Commissioners, Salt Lake City, Utah, January 1991 to January 1995. Senior executive responsibility for all matters of county government, including formulation and execution of public policy, delivery of approximately 140 government services, budget adoption and fiscal management (over \$300 million), strategic planning, coordination with elected officials, and communication with consultants and media.

Assistant Director, Utah Energy Office, Utah Department of Natural Resources, Salt Lake City, Utah, August 1985 to January 1991. Directed the agency's resource development section, which provided energy policy analysis to the Governor, implemented state energy development policy, coordinated state energy data collection and dissemination, and managed energy technology demonstration programs. Position responsibilities included policy formulation and implementation, design and administration of energy technology demonstration programs, strategic management of the agency's interventions before the Utah Public Service Commission, budget preparation, and staff development. Supervised a staff of economists, engineers, and policy analysts, and served as lead economist on selected projects.

Utility Economist, Utah Energy Office, January 1985 to August 1985. Provided policy and economic analysis pertaining to energy conservation and resource development, with an emphasis on utility issues. Testified before the state Public Service Commission as an expert witness in cases related to the above.

Acting Assistant Director, Utah Energy Office, June 1984 to January 1985. Same responsibilities as Assistant Director identified above.

Research Economist, Utah Energy Office, October 1983 to June 1984. Provided economic analysis pertaining to renewable energy resource development and utility issues. Experience includes preparation of testimony, development of strategy, and appearance as an expert witness for the Energy Office before the Utah PSC.

Operations Research Assistant, Corporate Modeling and Operations Research Department, Utah Power and Light Company, Salt Lake City, Utah, May 1983 to September 1983. Primary area of responsibility: designing and conducting energy load forecasts.

Instructor in Economics, University of Utah, Salt Lake City, Utah, January 1982 to April 1983. Taught intermediate microeconomics, principles of macroeconomics, and economics as a social science.

Teacher, Vernon-Verona-Sherrill School District, Verona, New York, September 1976 to June 1978.

## **EDUCATION**

Ph.D. Candidate, Economics, University of Utah (coursework and field exams completed, 1981).

Fields of Specialization: Public Finance, Urban and Regional Economics, Economic Development, International Economics, History of Economic Doctrines.

Bachelor of Science, Education, State University of New York at Plattsburgh, 1976 (cum laude).

Danish International Studies Program, University of Copenhagen, 1975.

## **SCHOLARSHIPS AND FELLOWSHIPS**

University Research Fellow, University of Utah, Salt Lake City, Utah 1982 to 1983.

Research Fellow, Institute of Human Resources Management, University of Utah, 1980 to 1982.

Teaching Fellow, Economics Department, University of Utah, 1978 to 1980.

New York State Regents Scholar, 1972 to 1976.

## EXPERT TESTIMONY

“Verified Petition of Duke Energy Indiana, Inc. Requesting the Indiana Utility Regulatory Commission to Approve an Alternative Regulatory Plan Pursuant to the Ind. Code 8-1-2.5, Et Seq., for the Offering of Energy Efficiency Conservation, Demand Response, and Demand-Side Management Programs and Associated Rate Treatment Including Incentives Pursuant to a Revised Standard Contract Rider No. 66 in Accordance with Ind. Code 8-1-2.5-1 Et Seq. and 8-1-2-42(a); Authority to Defer Program Costs Associated with Its Energy Efficiency Portfolio of Programs; Authority to Implement New and Enhanced Energy Efficiency Programs in Its Energy Efficiency Portfolio of Programs; and Approval of a Modification of the Fuel Adjustment Clause Earnings and Expense Tests,” **Indiana** Utility Regulatory Commission, Cause No. 43374. Direct testimony submitted May 21, 2008.

“Application of Entergy Gulf States, Inc. for Authority to Change Rates and to Reconcile Fuel Costs, Public Utility Commission of **Texas**, Docket No. 34800 [SOAH Docket No. 473-08-0334]. Direct testimony submitted April 11, 2008. Testimony withdrawn pursuant to stipulation.

“Central Illinois Light Company d/b/a AmerenCILCO Proposed General Increase in Electric Delivery Service Rates, Central Illinois Public Service Company d/b/a AmerenCIPS Proposed General Increase in Electric Delivery Service Rates, Illinois Power Company d/b/a/ AmerenIP Proposed General Increase in Electric Delivery Service Rates, Central Illinois Light Company d/b/a AmerenCILCO, Proposed General Increase in Gas Delivery Service Rates, Central Illinois Public Service Company d/b/a AmerenCIPS Proposed General Increase in Gas Delivery Service Rates, Illinois Power Company d/b/a/ AmerenIP Proposed General Increase in Gas Delivery Service Rates, **Illinois** Commerce Commission, Docket Nos. 07-0585, 07-0586, 07-0587, 07-0588, 07-0589, 07-0590. Direct testimony submitted March 14, 2008. Rebuttal testimony submitted April 8, 2008.

“In the Matter of the Application of Public Service Company of Colorado for Authority to Implement an Enhanced Demand Side Management Cost Adjustment Mechanism to Include Current Recovery and Incentives,” **Colorado** Public Utilities Commission, Docket No. 07A-420E. Answer testimony submitted March 10, 2008. Cross examined April 25, 2008.

“An Investigation of the Energy and Regulatory Issues in Section 50 of Kentucky’s 2007 Energy Act,” **Kentucky** Public Service Commission, Administrative Case No. 2007-00477. Direct testimony submitted February 29, 2008. Supplemental direct testimony submitted April 1, 2008. Cross examined April 30, 2008.

In the Matter of the Application of Tucson Electric Power Company for the Establishment of Just and Reasonable Rates and Charges Designed to Realize a Reasonable Rate of Return on

the Fair Value of Its Operations throughout the State of Arizona, **Arizona** Corporation Commission, Docket No. E-01933A-07-0402. Direct testimony submitted February 29, 2008 (revenue requirement) and March 14, 2008 (rate design).

“Commonwealth Edison Company Proposed General Increase in Electric Rates,” **Illinois** Commerce Commission, Docket No. 07-0566. Direct testimony submitted February 11, 2008. Rebuttal testimony submitted April 8, 2008.

“In the Matter of the Application of Questar Gas Company to File a General Rate Case,” **Utah** Public Service Commission, Docket No. 07-057-13. Direct testimony submitted January 28, 2008 (test period), March 31, 2008 (rate of return), and April 21, 2008 (revenue requirement). Surrebuttal testimony submitted May 12, 2008 (rate of return). Cross examined February 8, 2008 (test period) and May 21, 2008 (rate of return).

“In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations, Consisting of a General Rate Increase of Approximately \$161.2 Million Per Year, and for Approval of a New Large Load Surcharge,” **Utah** Public Service Commission, Docket No. 07-035-93. Direct testimony submitted January 25, 2008 (test period) and April 7, 2008 (revenue requirement). Surrebuttal testimony submitted May 23, 2008 (revenue requirement). Cross examined February 7, 2008 (test period).

“In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Authority to Increase Rates for Distribution Service, Modify Certain Accounting Practices and for Tariff Approvals,” Public Utilities Commission of **Ohio**, Case Nos. 07-551-EL-AIR, 07-552-EL-ATA, 07-553-EL-AAM, and 07-554-EL-UNC. Direct testimony submitted January 10, 2008.

“In the Matter of the Application of Rocky Mountain Power for Authority to Increase Its Retail Electric Utility Service Rates in Wyoming, Consisting of a General Rate Increase of Approximately \$36.1 Million per Year, and for Approval of a New Renewable Resource Mechanism and Marginal Cost Pricing Tariff,” **Wyoming** Public Service Commission, Docket No. 20000-277-ER-07. Direct testimony submitted January 7, 2008. Cross examined March 6, 2008.

“In the Matter of the Application of Idaho Power Company for Authority to Increase Its Rates and Charges for Electric Service to Electric Customers in the State of Idaho,” **Idaho** Public Utilities Commission, Case No. IPC-E-07-8. Direct testimony submitted December 10, 2007. Cross examined January 23, 2008.

“In The Matter of the Application of Consumers Energy Company for Authority to Increase Its Rates for the Generation and Distribution Of Electricity and Other Relief,” **Michigan** Public Service

Commission, Case No. U-15245. Direct testimony submitted November 6, 2007. Rebuttal testimony submitted November 20, 2007.

“In the Matter of Montana-Dakota Utilities Co., Application for Authority to Establish Increased Rates for Electric Service,” **Montana** Public Service Commission, Docket No. D2007.7.79. Direct testimony submitted October 24, 2007.

“In the Matter of the Application of Public Service Company of New Mexico for Revision of its Retail Electric Rates Pursuant to Advice Notice No. 334,” **New Mexico** Public Regulation Commission, Case No. 07-0077-UT. Direct testimony submitted October 22, 2007. Rebuttal testimony submitted November 19, 2007. Cross examined December 12, 2007.

“In The Matter of Georgia Power Company’s 2007 Rate Case,” **Georgia** Public Service Commission, Docket No. 25060-U. Direct testimony submitted October 22, 2007. Cross examined November 7, 2007.

“In the Matter of the Application of Rocky Mountain Power for an Accounting Order to Defer the Costs Related to the MidAmerican Energy Holdings Company Transaction,” **Utah** Public Service Commission, Docket No. 07-035-04; “In the Matter of the Application of Rocky Mountain Power, a Division of PacifiCorp, for a Deferred Accounting Order To Defer the Costs of Loans Made to Grid West, the Regional Transmission Organization,” Docket No. 06-035-163; “In the Matter of the Application of Rocky Mountain Power for an Accounting Order for Costs related to the Flooding of the Powerdale Hydro Facility,” Docket No. 07-035-14. Direct testimony submitted September 10, 2007. Surrebuttal testimony submitted October 22, 2007. Cross examined October 30, 2007.

“In the Matter of General Adjustment of Electric Rates of East Kentucky Power Cooperative, Inc.,” **Kentucky** Public Service Commission, Case No. 2006-00472. Direct testimony submitted July 6, 2007. Supplemental direct testimony submitted March 14, 2008.

“In the Matter of the Application of Sempra Energy Solutions for a Certificate of Convenience and Necessity for Competitive Retail Electric Service,” **Arizona** Corporation Commission, Docket No. E-03964A-06-0168. Direct testimony submitted July 3, 2007. Rebuttal testimony submitted January 17, 2008.

“Application of Public Service Company of Oklahoma for a Determination that Additional Electric Generating Capacity Will Be Used and Useful,” **Oklahoma** Corporation Commission, Cause No. PUD 200500516; “Application of Public Service Company of Oklahoma for a Determination that Additional Baseload Electric Generating Capacity Will Be Used and Useful,” Cause No. PUD 200600030; “In the Matter of the Application of Oklahoma Gas and Electric Company for an Order Granting Pre-Approval to Construct Red Rock Generating Facility and Authorizing a Recovery Rider,” Cause No. PUD200700012. Responsive testimony submitted May 21, 2007. Cross examined July 26, 2007.

“Application of Nevada Power Company for Authority to Increase Its Annual Revenue Requirement for General Rates Charged to All Classes of Electric Customers and for Relief Properly Related Thereto,” Public Utilities Commission of **Nevada**, Docket No. 06-11022. Direct testimony submitted March 14, 2007 (Phase III – revenue requirements) and March 19, 2007 (Phase IV – rate design). Cross examined April 10, 2007 (Phase III – revenue requirements) and April 16, 2007 (Phase IV – rate design).

“In the Matter of the Application of Entergy Arkansas, Inc. for Approval of Changes in Rates for Retail Electric Service,” **Arkansas** Public Service Commission, Docket No. 06-101-U. Direct testimony submitted February 5, 2007. Surrebuttal testimony submitted March 26, 2007.

“Monongahela Power Company and The Potomac Edison Company, both d/b/a Allegheny Power – Rule 42T Application to Increase Electric Rates and Charges,” Public Service Commission of **West Virginia**, Case No. 06-0960-E-42T; “Monongahela Power Company and The Potomac Edison Company, both d/b/a Allegheny Power – Information Required for Change of Depreciation Rates Pursuant to Rule 20,” Case No. 06-1426-E-D. Direct and rebuttal testimony submitted January 22, 2007.

“In the Matter of the Tariffs of Aquila, Inc., d/b/a Aquila Networks-MPS and Aquila Networks-L&P Increasing Electric Rates for the Services Provided to Customers in the Aquila Networks-MPS and Aquila Networks-L&P Missouri Service Areas,” **Missouri** Public Service Commission, Case No. ER-2007-0004. Direct testimony submitted January 18, 2007 (revenue requirements) and January 25, 2007 (revenue apportionment). Supplemental direct testimony submitted February 27, 2007.

“In the Matter of the Filing by Tucson Electric Power Company to Amend Decision No. 62103, **Arizona** Corporation Commission, Docket No. E-01933A-05-0650. Direct testimony submitted January 8, 2007. Surrebuttal testimony filed February 8, 2007. Cross examined March 8, 2007.

“In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company’s Missouri Service Area,” **Missouri** Public Service Commission, Case No. ER-2007-0002. Direct testimony submitted December 15, 2006 (revenue requirements) and December 29, 2006 (fuel adjustment clause/cost-of-service/rate design). Rebuttal testimony submitted February 5, 2007 (cost-of-service). Surrebuttal testimony submitted February 27, 2007. Cross examined March 21, 2007.

“In the Matter of Application of The Union Light, Heat and Power Company d/b/a Duke Energy Kentucky, Inc. for an Adjustment of Electric Rates,” **Kentucky** Public Service Commission, Case No. 2006-00172. Direct testimony submitted September 13, 2006.

“In the Matter of Appalachian Power Company’s Application for Increase in Electric Rates,” **Virginia** State Corporation Commission, Case No. PUE-2006-00065. Direct testimony submitted September 1, 2006. Cross examined December 7, 2006.

“In the Matter of the Application of Arizona Public Service Company for a Hearing to Determine the Fair Value of the Utility Property for Ratemaking Purposes, to Fix a Just and Reasonable Rate of Return Thereon, To Approve Rate Schedules Designed to Develop Such Return, and to Amend Decision No. 67744, **Arizona** Corporation Commission,” Docket No. E-01345A-05-0816. Direct testimony submitted August 18, 2006 (revenue requirements) and September 1, 2006 (cost-of-service/rate design). Surrebuttal testimony submitted September 27, 2006. Cross examined November 7, 2006.

“Re: The Tariff Sheets Filed by Public Service Company of Colorado with Advice Letter No 1454 – Electric,” **Colorado** Public Utilities Commission, Docket No. 06S-234EG. Answer testimony submitted August 18, 2006.

“Portland General Electric General Rate Case Filing,” Public Utility Commission of **Oregon**, Docket No. UE-180. Direct testimony submitted August 9, 2006. Joint testimony regarding stipulation submitted August 22, 2006.

“2006 Puget Sound Energy General Rate Case,” **Washington** Utilities and Transportation Commission, Docket Nos. UE-060266 and UG-060267. Response testimony submitted July 19, 2006. Joint testimony regarding stipulation submitted August 23, 2006.

“In the Matter of PacifiCorp, dba Pacific Power & Light Company, Request for a General Rate Increase in the Company’s Oregon Annual Revenues,” Public Utility Commission of **Oregon**, Docket No. UE-179. Direct testimony submitted July 12, 2006. Joint testimony regarding stipulation submitted August 21, 2006.

“Petition of Metropolitan Edison Company for Approval of a Rate Transition Plan,” **Pennsylvania** Public Utilities Commission, Docket Nos. P-00062213 and R-00061366; “Petition of Pennsylvania Electric Company for Approval of a Rate Transition Plan,” Docket Nos. P-0062214 and R-00061367; Merger Savings Remand Proceeding, Docket Nos. A-110300F0095 and A-110400F0040. Direct testimony submitted July 10, 2006. Rebuttal testimony submitted August 8, 2006. Surrebuttal testimony submitted August 18, 2006. Cross examined August 30, 2006.

“In the Matter of the Application of PacifiCorp for approval of its Proposed Electric Rate Schedules & Electric Service Regulations,” **Utah** Public Service Commission, Docket No. 06-035-21. Direct testimony submitted June 9, 2006 (Test Period). Surrebuttal testimony submitted July 14, 2006.

“Joint Application of Questar Gas Company, the Division of Public Utilities, and Utah Clean Energy for the Approval of the Conservation Enabling Tariff Adjustment Option and Accounting Orders,” **Utah** Public Service Commission, Docket No. 05-057-T01. Direct testimony submitted May 15, 2006. Rebuttal testimony submitted August 8, 2007. Cross examined September 19, 2007.

“Central Illinois Light Company d/b/a AmerenCILCO, Central Illinois Public Service Company d/b/a AmerenCIPS, Illinois Power Company d/b/a AmerenIP, Proposed General Increase in Rates for Delivery Service (Tariffs Filed December 27, 2005),” **Illinois** Commerce Commission, Docket Nos. 06-0070, 06-0071, 06-0072. Direct testimony submitted March 26, 2006. Rebuttal testimony submitted June 27, 2006.

“In the Matter of Appalachian Power Company and Wheeling Power Company, both dba American Electric Power,” Public Service Commission of **West Virginia**, Case No. 05-1278-E-PC-PW-42T. Direct and rebuttal testimony submitted March 8, 2006.

“In the Matter of Northern States Power Company d/b/a Xcel Energy for Authority to Increase Rates for Electric Service in Minnesota,” **Minnesota** Public Utilities Commission, Docket No. G-002/GR-05-1428. Direct testimony submitted March 2, 2006. Rebuttal testimony submitted March 30, 2006. Cross examined April 25, 2006.

“In the Matter of the Application of Arizona Public Service Company for an Emergency Interim Rate Increase and for an Interim Amendment to Decision No. 67744,” **Arizona** Corporation Commission, Docket No. E-01345A-06-0009. Direct testimony submitted February 28, 2006. Cross examined March 23, 2006.

“In the Matter of the Applications of Westar Energy, Inc. and Kansas Gas and Electric Company for Approval to Make Certain Changes in Their Charges for Electric Service,” State Corporation Commission of **Kansas**, Case No. 05-WSEE-981-RTS. Direct testimony submitted September 9, 2005. Cross examined October 28, 2005.

“In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Recover Costs Associated with the Construction and Ultimate Operation of an Integrated Combined Cycle Electric Generating Facility,” Public Utilities Commission of **Ohio**,” Case No. 05-376-EL-UNC. Direct testimony submitted July 15, 2005. Cross examined August 12, 2005.

“In the Matter of the Filing of General Rate Case Information by Tucson Electric Power Company Pursuant to Decision No. 62103,” **Arizona** Corporation Commission, Docket No. E-01933A-04-0408. Direct testimony submitted June 24, 2005.

“In the Matter of Application of The Detroit Edison Company to Unbundle and Realign Its Rate Schedules for Jurisdictional Retail Sales of Electricity,” **Michigan** Public Service Commission, Case No. U-14399. Direct testimony submitted June 9, 2005. Rebuttal testimony submitted July 1, 2005.

“In the Matter of the Application of Consumers Energy Company for Authority to Increase Its Rates for the Generation and Distribution of Electricity and Other Relief,” **Michigan** Public Service Commission, Case No. U-14347. Direct testimony submitted June 3, 2005. Rebuttal testimony submitted June 17, 2005.

“In the Matter of Pacific Power & Light, Request for a General Rate Increase in the Company’s Oregon Annual Revenues,” Public Utility Commission of **Oregon**, Docket No. UE 170. Direct testimony submitted May 9, 2005. Surrebuttal testimony submitted June 27, 2005. Joint testimony regarding partial stipulations submitted June 2005, July 2005, and August 2005.

“In the Matter of the Application of Trico Electric Cooperative, Inc. for a Rate Increase,” **Arizona** Corporation Commission, Docket No. E-01461A-04-0607. Direct testimony submitted April 13, 2005. Surrebuttal testimony submitted May 16, 2005. Cross examined May 26, 2005.

“In the Matter of the Application of PacifiCorp for Approval of its Proposed Electric Service Schedules and Electric Service Regulations,” **Utah** Public Service Commission, Docket No. 04-035-42. Direct testimony submitted January 7, 2005.

“In the Matter of the Application by Golden Valley Electric Association, Inc., for Authority to Implement Simplified Rate Filing Procedures and Adjust Rates,” Regulatory Commission of **Alaska**, Docket No. U-4-33. Direct testimony submitted November 5, 2004. Cross examined February 8, 2005.

“Advice Letter No. 1411 - Public Service Company of Colorado Electric Phase II General Rate Case,” **Colorado** Public Utilities Commission, Docket No. 04S-164E. Direct testimony submitted October 12, 2004. Cross-answer testimony submitted December 13, 2004. Testimony withdrawn January 18, 2005, following Applicant’s withdrawal of testimony pertaining to TOU rates.

“In the Matter of Georgia Power Company’s 2004 Rate Case,” **Georgia** Public Service Commission, Docket No. 18300-U. Direct testimony submitted October 8, 2004. Cross examined October 27, 2004.

“2004 Puget Sound Energy General Rate Case,” **Washington** Utilities and Transportation Commission, Docket Nos. UE-040641 and UG-040640. Response testimony submitted

September 23, 2004. Cross-answer testimony submitted November 3, 2004. Joint testimony regarding stipulation submitted December 6, 2004.

“In the Matter of the Application of PacifiCorp for an Investigation of Interjurisdictional Issues,” **Utah** Public Service Commission, Docket No. 02-035-04. Direct testimony submitted July 15, 2004. Cross examined July 19, 2004.

“In the Matter of an Adjustment of the Gas and Electric Rates, Terms and Conditions of Kentucky Utilities Company,” **Kentucky** Public Service Commission, Case No. 2003-00434. Direct testimony submitted March 23, 2004. Testimony withdrawn pursuant to stipulation entered May 2004.

“In the Matter of an Adjustment of the Gas and Electric Rates, Terms and Conditions of Louisville Gas and Electric Company,” **Kentucky** Public Service Commission, Case No. 2003-00433. Direct testimony submitted March 23, 2004. Testimony withdrawn pursuant to stipulation entered May 2004.

“In the Matter of the Application of Idaho Power Company for Authority to Increase Its Interim and Base Rates and Charges for Electric Service,” **Idaho** Public Utilities Commission, Case No. IPC-E-03-13. Direct testimony submitted February 20, 2004. Rebuttal testimony submitted March 19, 2004. Cross examined April 1, 2004.

“In the Matter of the Applications of the Ohio Edison Company, the Cleveland Electric Illuminating Company and the Toledo Edison Company for Authority to Continue and Modify Certain Regulatory Accounting Practices and Procedures, for Tariff Approvals and to Establish Rates and Other Charges, Including Regulatory Transition Charges Following the Market Development Period,” Public Utilities Commission of **Ohio**, Case No. 03-2144-EL-ATA. Direct testimony submitted February 6, 2004. Cross examined February 18, 2004.

“In the Matter of the Application of Arizona Public Service Company for a Hearing to Determine the Fair Value of the Utility Property of the Company for Ratemaking Purposes, To Fix a Just and Reasonable Rate of Return Thereon, To Approve Rate Schedules Designed to Develop Such Return, and For Approval of Purchased Power Contract,” **Arizona** Corporation Commission, Docket No. E-01345A-03-0437. Direct testimony submitted February 3, 2004. Rebuttal testimony submitted March 30, 2004. Direct testimony regarding stipulation submitted September 27, 2004. Responsive / Clarifying testimony regarding stipulation submitted October 25, 2004. Cross examined November 8-10, 2004 and November 29-December 3, 2004.

“In the Matter of Application of the Detroit Edison Company to Increase Rates, Amend Its Rate Schedules Governing the Distribution and Supply of Electric Energy, etc.,” **Michigan** Public Service Commission, Case No. U-13808. Direct testimony submitted December 12, 2003 (interim request) and March 5, 2004 (general rate case).

“In the Matter of PacifiCorp’s Filing of Revised Tariff Schedules,” Public Utility Commission of **Oregon**, Docket No. UE-147. Joint testimony regarding stipulation submitted August 21, 2003.

“Petition of PSI Energy, Inc. for Authority to Increase Its Rates and Charges for Electric Service, etc.,” **Indiana** Utility Regulatory Commission, Cause No. 42359. Direct testimony submitted August 19, 2003. Cross examined November 5, 2003.

“In the Matter of the Application of Consumers Energy Company for a Financing Order Approving the Securitization of Certain of its Qualified Cost,” **Michigan** Public Service Commission, Case No. U-13715. Direct testimony submitted April 8, 2003. Cross examined April 23, 2003.

“In the Matter of the Application of Arizona Public Service Company for Approval of Adjustment Mechanisms,” **Arizona** Corporation Commission, Docket No. E-01345A-02-0403. Direct testimony submitted February 13, 2003. Surrebuttal testimony submitted March 20, 2003. Cross examined April 8, 2003.

“Re: The Investigation and Suspension of Tariff Sheets Filed by Public Service Company of Colorado, Advice Letter No. 1373 – Electric, Advice Letter No. 593 – Gas, Advice Letter No. 80 – Steam,” **Colorado** Public Utilities Commission, Docket No. 02S-315 EG. Direct testimony submitted November 22, 2002. Cross-answer testimony submitted January 24, 2003.

“In the Matter of the Application of The Detroit Edison Company to Implement the Commission’s Stranded Cost Recovery Procedure and for Approval of Net Stranded Cost Recovery Charges,” **Michigan** Public Service Commission, Case No. U-13350. Direct testimony submitted November 12, 2002.

“Application of South Carolina Electric & Gas Company: Adjustments in the Company’s Electric Rate Schedules and Tariffs,” Public Service Commission of **South Carolina**, Docket No. 2002-223-E. Direct testimony submitted November 8, 2002. Surrebuttal testimony submitted November 18, 2002. Cross examined November 21, 2002.

“In the Matter of the Application of Questar Gas Company for a General Increase in Rates and Charges,” **Utah** Public Service Commission, Docket No. 02-057-02. Direct testimony submitted August 30, 2002. Rebuttal testimony submitted October 4, 2002.

“The Kroger Co. v. Dynegy Power Marketing, Inc.,” **Federal Energy Regulatory Commission**, EL02-119-000. Confidential affidavit filed August 13, 2002.

“In the matter of the application of Consumers Energy Company for determination of net stranded costs and for approval of net stranded cost recovery charges,” **Michigan** Public Service Commission, Case No. U-13380. Direct testimony submitted August 9, 2002. Rebuttal testimony submitted August 30, 2002. Cross examined September 10, 2002.

“In the Matter of the Application of Public Service Company of Colorado for an Order to Revise Its Incentive Cost Adjustment,” **Colorado** Public Utilities Commission, Docket 02A-158E. Direct testimony submitted April 18, 2002.

“In the Matter of the Generic Proceedings Concerning Electric Restructuring Issues,” **Arizona** Corporation Commission, Docket No. E-00000A-02-0051, “In the Matter of Arizona Public Service Company’s Request for Variance of Certain Requirements of A.A.C. R14-2-1606,” Docket No. E-01345A-01-0822, “In the Matter of the Generic Proceeding Concerning the Arizona Independent Scheduling Administrator,” Docket No. E-00000A-01-0630, “In the Matter of Tucson Electric Power Company’s Application for a Variance of Certain Electric Competition Rules Compliance Dates,” Docket No. E-01933A-02-0069, “In the Matter of the Application of Tucson Electric Power Company for Approval of its Stranded Cost Recovery,” Docket No. E-01933A-98-0471. Direct testimony submitted March 29, 2002 (APS variance request); May 29, 2002 (APS Track A proceeding/market power issues); and July 28, 2003 (Arizona ISA). Rebuttal testimony submitted August 29, 2003 (Arizona ISA). Cross examined June 21, 2002 (APS Track A proceeding/market power issues) and September 12, 2003 (Arizona ISA).

“In the Matter of Savannah Electric & Power Company’s 2001 Rate Case,” **Georgia** Public Service Commission, Docket No. 14618-U. Direct testimony submitted March 15, 2002. Cross examined March 28, 2002.

“Nevada Power Company’s 2001 Deferred Energy Case,” Public Utilities Commission of **Nevada**, PUCN 01-11029. Direct testimony submitted February 7, 2002. Cross examined February 21, 2002.

“2001 Puget Sound Energy Interim Rate Case,” **Washington** Utilities and Transportation Commission, Docket Nos. UE-011570 and UE-011571. Direct testimony submitted January 30, 2002. Cross examined February 20, 2002.

“In the Matter of Georgia Power Company’s 2001 Rate Case,” **Georgia** Public Service Commission, Docket No. 14000-U. Direct testimony submitted October 12, 2001. Cross examined October 24, 2001.

“In the Matter of the Application of PacifiCorp for Approval of Its Proposed Electric Rate Schedules and Electric Service Regulations,” **Utah** Public Service Commission, Docket No. 01-35-01. Direct testimony submitted June 15, 2001. Rebuttal testimony submitted August 31, 2001.

“In the Matter of Portland General Electric Company’s Proposal to Restructure and Reprice Its Services in Accordance with the Provisions of SB 1149,” Public Utility Commission of **Oregon**, Docket No. UE-115. Direct testimony submitted February 20, 2001. Rebuttal testimony submitted May 4, 2001. Joint testimony regarding stipulation submitted July 27, 2001.

“In the Matter of the Application of APS Energy Services, Inc. for Declaratory Order or Waiver of the Electric Competition Rules,” **Arizona** Corporation Commission, Docket No.E-01933A-00-0486. Direct testimony submitted July 24, 2000.

“In the Matter of the Application of Questar Gas Company for an Increase in Rates and Charges,” **Utah** Public Service Commission, Docket No. 99-057-20. Direct testimony submitted April 19, 2000. Rebuttal testimony submitted May 24, 2000. Surrebuttal testimony submitted May 31, 2000. Cross examined June 6 & 8, 2000.

“In the Matter of the Application of Columbus Southern Power Company for Approval of Electric Transition Plan and Application for Receipt of Transition Revenues,” Public Utility Commission of **Ohio**, Case No. 99-1729-EL-ETP; “In the Matter of the Application of Ohio Power Company for Approval of Electric Transition Plan and Application for Receipt of Transition Revenues,” Public Utility Commission of **Ohio**, Case No. 99-1730-EL-ETP. Direct testimony prepared, but not submitted pursuant to settlement agreement effected May 2, 2000.

“In the Matter of the Application of FirstEnergy Corp. on Behalf of Ohio Edison Company, The Cleveland Electric Illuminating Company, and the Toledo Edison Company for Approval of Their Transition Plans and for Authorization to Collect Transition Revenues,” Public Utility Commission of **Ohio**, Case No. 99-1212-EL-ETP. Direct testimony prepared, but not submitted pursuant to settlement agreement effected April 11, 2000.

“2000 Pricing Process,” **Salt River Project** Board of Directors, oral comments provided March 6, 2000 and April 10, 2000.

“Tucson Electric Power Company vs. Cyprus Sierrita Corporation,” **Arizona** Corporation Commission, Docket No. E-000001-99-0243. Direct testimony submitted October 25, 1999. Cross examined November 4, 1999.

“Application of Hildale City and Intermountain Municipal Gas Association for an Order Granting Access for Transportation of Interstate Natural Gas over the Pipelines of Questar Gas Company for Hildale, Utah,” **Utah** Public Service Commission, Docket No. 98-057-01. Rebuttal testimony submitted August 30, 1999.

“In the Matter of the Application by Arizona Electric Power Cooperative, Inc. for Approval of Its Filing as to Regulatory Assets and Transition Revenues,” **Arizona** Corporation Commission, Docket No. E-01773A-98-0470. Direct testimony submitted July 30, 1999. Cross examined February 28, 2000.

“In the Matter of the Application of Tucson Electric Power Company for Approval of its Plan for Stranded Cost Recovery,” **Arizona** Corporation Commission, Docket No. E-01933A-98-0471; “In the Matter of the Filing of Tucson Electric Power Company of Unbundled Tariffs

Pursuant to A.A.C. R14-2-1601 et seq.," Docket No. E-01933A-97-0772; "In the Matter of the Competition in the Provision of Electric Service Throughout the State of Arizona," Docket No. RE-00000C-94-0165. Direct testimony submitted June 30, 1999. Rebuttal testimony submitted August 6, 1999. Cross examined August 11-13, 1999.

"In the Matter of the Application of Arizona Public Service Company for Approval of its Plan for Stranded Cost Recovery," **Arizona** Corporation Commission, Docket No. E-01345A-98-0473; "In the Matter of the Filing of Arizona Public Service Company of Unbundled Tariffs Pursuant to A.A.C. R14-2-1601 et seq.," Docket No. E-01345A-97-0773; "In the Matter of the Competition in the Provision of Electric Service Throughout the State of Arizona," Docket No. RE-00000C-94-0165. Direct testimony submitted June 4, 1999. Rebuttal testimony submitted July 12, 1999. Cross examined July 14, 1999.

"In the Matter of the Application of Tucson Electric Power Company for Approval of its Plan for Stranded Cost Recovery," **Arizona** Corporation Commission, Docket No. E-01933A-98-0471; "In the Matter of the Filing of Tucson Electric Power Company of Unbundled Tariffs Pursuant to A.A.C. R14-2-1601 et seq.," Docket No. E-01933A-97-0772; "In the Matter of the Application of Arizona Public Service Company for Approval of its Plan for Stranded Cost Recovery," Docket No. E-01345A-98-0473; "In the Matter of the Filing of Arizona Public Service Company of Unbundled Tariffs Pursuant to A.A.C. R14-2-1601 et seq.," Docket No. E-01345A-97-0773; "In the Matter of the Competition in the Provision of Electric Service Throughout the State of Arizona," Docket No. RE-00000C-94-0165. Direct testimony submitted November 30, 1998.

"Hearings on Pricing," **Salt River Project** Board of Directors, written and oral comments provided November 9, 1998.

"Hearings on Customer Choice," **Salt River Project** Board of Directors, written and oral comments provided June 22, 1998; June 29, 1998; July 9, 1998; August 7, 1998; and August 14, 1998.

"In the Matter of the Competition in the Provision of Electric Service Throughout the State of Arizona," **Arizona** Corporation Commission, Docket No. U-0000-94-165. Direct and rebuttal testimony filed January 21, 1998. Second rebuttal testimony filed February 4, 1998. Cross examined February 25, 1998.

"In the Matter of Consolidated Edison Company of New York, Inc.'s Plans for (1) Electric Rate/Restructuring Pursuant to Opinion No. 96-12; and (2) the Formation of a Holding Company Pursuant to PSL, Sections 70, 108, and 110, and Certain Related Transactions," **New York** Public Service Commission, Case 96-E-0897. Direct testimony filed April 9, 1997. Cross examined May 5, 1997.

"In the Matter of the Petition of Sunnyside Cogeneration Associates for Enforcement of Contract Provisions," **Utah** Public Service Commission, Docket No. 96-2018-01; "In the Matter of the

Application of Rocky Mountain Power for an Order Approving an Amendment to Its Power Purchase Agreement with Sunnyside Cogeneration Associates,” Docket Nos. 05-035-46, and 07-035-99. Direct testimony submitted July 8, 1996. Oral testimony provided March 18, 2008.

“In the Matter of the Application of PacifiCorp, dba Pacific Power & Light Company, for Approval of Revised Tariff Schedules and an Alternative Form of Regulation Plan,” **Wyoming** Public Service Commission, Docket No. 2000-ER-95-99. Direct testimony submitted April 8, 1996.

“In the Matter of the Application of Mountain Fuel Supply Company for an Increase in Rates and Charges,” **Utah** Public Service Commission, Case No. 95-057-02. Direct testimony submitted June 19, 1995. Rebuttal testimony submitted July 25, 1995. Surrebuttal testimony submitted August 7, 1995.

“In the Matter of the Investigation of the Reasonableness of the Rates and Tariffs of Mountain Fuel Supply Company,” **Utah** Public Service Commission, Case No. 89-057-15. Direct testimony submitted July 1990. Surrebuttal testimony submitted August 1990.

“In the Matter of the Review of the Rates of Utah Power and Light Company pursuant to The Order in Case No. 87-035-27,” **Utah** Public Service Commission, Case No. 89-035-10. Rebuttal testimony submitted November 15, 1989. Cross examined December 1, 1989 (rate schedule changes for state facilities).

“In the Matter of the Application of Utah Power & Light Company and PC/UP&L Merging Corp. (to be renamed PacifiCorp) for an Order Authorizing the Merger of Utah Power & Light Company and PacifiCorp into PC/UP&L Merging Corp. and Authorizing the Issuance of Securities, Adoption of Tariffs, and Transfer of Certificates of Public Convenience and Necessity and Authorities in Connection Therewith,” **Utah** Public Service Commission, Case No. 87-035-27; Direct testimony submitted April 11, 1988. Cross examined May 12, 1988 (economic impact of UP&L merger with PacifiCorp).

“In the Matter of the Application of Mountain Fuel Supply Company for Approval of Interruptible Industrial Transportation Rates,” **Utah** Public Service Commission, Case No. 86-057-07. Direct testimony submitted January 15, 1988. Cross examined March 30, 1988.

“In the Matter of the Application of Utah Power and Light Company for an Order Approving a Power Purchase Agreement,” **Utah** Public Service Commission, Case No. 87-035-18. Oral testimony delivered July 8, 1987.

“Cogeneration: Small Power Production,” **Federal Energy Regulatory Commission**, Docket No. RM87-12-000. Statement on behalf of State of Utah delivered March 27, 1987, in San Francisco.

“In the Matter of the Investigation of Rates for Backup, Maintenance, Supplementary, and Standby Power for Utah Power and Light Company,” **Utah** Public Service Commission, Case No. 86-035-13. Direct testimony submitted January 5, 1987. Case settled by stipulation approved August 1987.

“In the Matter of the Application of Sunnyside Cogeneration Associates for Approval of the Cogeneration Power Purchase Agreement,” **Utah** Public Service Commission, Case No. 86-2018-01. Rebuttal testimony submitted July 16, 1986. Cross examined July 17, 1986.

“In the Matter of the Investigation of Demand-Side Alternatives to Capacity Expansion for Electric Utilities,” **Utah** Public Service Commission, Case No. 84-999-20. Direct testimony submitted June 17, 1985. Rebuttal testimony submitted July 29, 1985. Cross examined August 19, 1985.

“In the Matter of the Implementation of Rules Governing Cogeneration and Small Power Production in Utah,” **Utah** Public Service Commission, Case No. 80-999-06, pp. 1293-1318. Direct testimony submitted January 13, 1984 (avoided costs), May 9, 1986 (security for leveled contracts) and November 17, 1986 (avoided costs). Cross-examined February 29, 1984 (avoided costs), April 11, 1985 (standard form contracts), May 22-23, 1986 (security for leveled contracts) and December 16-17, 1986 (avoided costs).

## **OTHER RELATED ACTIVITY**

Participant, Oregon Direct Access Task Force (UM 1081), May 2003 to November 2003.

Participant, Michigan Stranded Cost Collaborative, March 2003 to March 2004.

Member, Arizona Electric Competition Advisory Group, December 2002 to present.

Board of Directors, ex-officio, Desert STAR RTO, September 1999 to February 2002.

Member, Advisory Committee, Desert STAR RTO, September 1999 to February 2002. Acting Chairman, October 2000 to February 2002.

Board of Directors, Arizona Independent Scheduling Administrator Association, October 1998 to present.

Acting Chairman, Operating Committee, Arizona Independent Scheduling Administrator Association, October 1998 to June 1999.

Member, Desert Star ISO Investigation Working Groups: Operations, Pricing, and Governance, April 1997 to December 1999. Legal & Negotiating Committee, April 1999 to December 1999.

Participant, Independent System Operator and Spot Market Working Group, Arizona Corporation Commission, April 1997 to September 1997.

Participant, Unbundled Services and Standard Offer Working Group, Arizona Corporation Commission, April 1997 to October 1997.

Participant, Customer Selection Working Group, Arizona Corporation Commission, March 1997 to September 1997.

Member, Stranded Cost Working Group, Arizona Corporation Commission, March 1997 to September 1997.

Member, Electric System Reliability & Safety Working Group, Arizona Corporation Commission, November 1996 to September 1998.

Chairman, Salt Palace Renovation and Expansion Committee, Salt Lake County/State of Utah/Salt Lake City, multi-government entity responsible for implementation of planning, design, finance, and construction of an \$85 million renovation of the Salt Palace Convention Center, Salt Lake City, Utah, May 1991 to December 1994.

State of Utah Representative, Committee on Regional Electric Power Cooperation, a joint effort of the Western Interstate Energy Board and the Western Conference of Public Service Commissioners, January 1987 to December 1990.

Member, Utah Governor's Economic Coordinating Committee, January 1987 to December 1990.

Chairman, Standard Contract Task Force, established by Utah Public Service Commission to address contractual problems relating to qualifying facility sales under PURPA, March 1986 to December 1990.

Chairman, Load Management and Energy Conservation Task Force, Utah Public Service Commission, August 1985 to December 1990.

Alternate Delegate for Utah, Western Interstate Energy Board, Denver, Colorado, August 1985 to December 1990.

Articles Editor, Economic Forum, September 1980 to August 1981.

**Kroger Recommended Spread Approach**  
Assumes WUTC Ordered Increase of \$125.0 Million System Average Revenue Increase

<b>Kroger Recommended Spread Approach at Lower Revenue Increase</b>
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	<u>Schedule</u>	<u>Pro Forma kWh Revised<sup>1</sup></u>	<u>Proforma Revenue Revised<sup>1</sup></u>	<u>PSE Proposed Revenues @ \$179.7M Revenue Increase<sup>1</sup></u>	<u>PSE Proposed Schedule Share of Total Revenue Requirement</u>	<u>Kroger Proposed Revenue Increase</u>	<u>Kroger Proposed Revenue</u>	<u>Kroger Proposed Revenue Increase</u>
Residential	7	10,689,229,506	\$ 984,131,415	\$ 1,103,321,007	54.7%	\$ 89,292,421	\$ 1,073,423,836	9.07%
<b>Secondary Voltage</b>								
General Service <= 50 kW	24	2,617,345,843	\$ 225,498,621	\$ 247,346,995	12.3%	\$ 15,145,904	\$ 240,644,525	6.72%
General Service >= 50 kW but <= 350 kW	25 / 29	3,074,814,746	\$ 260,900,409	\$ 273,539,621	13.6%	\$ 5,226,989	\$ 266,127,398	2.00%
General Service >=350 kW	26	2,097,537,996	\$ 159,065,783	\$ 166,771,659	8.3%	\$ 3,186,791	\$ 162,252,574	2.00%
Total Secondary Voltage	24 / 25 / 26 / 29	7,789,698,585	\$ 645,464,813	\$ 687,658,274	34.1%	\$ 23,559,685	\$ 669,024,498	3.65%
<b>Primary Voltage</b>								
General Service	31 / 35	1,375,432,289	\$ 99,476,006	\$ 109,114,153	5.4%	\$ 6,681,434	\$ 106,157,440	6.72%
Interruptible Total Electric Schools	43	166,315,853	\$ 12,849,804	\$ 14,094,811	0.7%	\$ 863,074	\$ 13,712,878	6.72%
Total Primary Voltage	31 / 35 / 43	1,541,748,142	\$ 112,325,810	\$ 123,208,964	6.1%	\$ 7,544,507	\$ 119,870,317	6.72%
Campus Rate <sup>2</sup>	40	616,525,728	\$ 38,977,282	\$ 40,993,318	2.0%	\$ 905,222	\$ 39,882,504	2.32%
<b>High Voltage</b>								
Total High Voltage	46 / 49	559,456,743	\$ 31,895,919	\$ 34,986,288	1.7%	\$ 2,142,330	\$ 34,038,249	6.72%
Lighting	50 - 59	79,343,268	\$ 15,450,314	\$ 16,573,040	0.8%	\$ 673,639	\$ 16,123,953	4.36%
Total Retail Sales to Customers		21,276,001,972	\$ 1,828,245,553	\$ 2,006,740,891	99.5%	\$ 124,117,805	\$ 1,952,363,358	6.79%
Total Firm Resale	005	155,517,683	\$ 1,142,425	\$ 1,482,590	0.1%	\$ 299,991	\$ 1,442,416	26.26%
<b>Transportation Sales</b>								
Total Transportation Sales	449 / 459	2,114,957,127	\$ 8,668,109	\$ 9,507,955	0.5%	\$ 582,205	\$ 9,250,314	6.72%
Total Sales to Customers		23,546,476,782	\$ 1,838,056,087	\$ 2,017,731,436	100.0%	\$ 125,000,000	\$ 1,963,056,087	6.80%

Assumed WUTC Ordered Revenue Increase	\$ 125,000,000
Average Increase Before Schedule 40	6.801%
Difference from PSE Supplemental Filing	-2.975%

Notes:

1. Data Source: PSE Exhibit No. \_\_\_\_ (DWH-9).
2. Campus rate revenue determined by revenue apportionment in this exhibit. In practice, the campus rate will be determined by formula.

**Estimated Revenue Requirement Impact Assuming Domestic Production Activities Deduction  
was Included in PSE's Requested \$179.7 Million Revenue Increase**

Line No.			
1	Operating Revenues with Increase	\$ 2,069,031,283	PSE Exhibit No. ____ (JHS-11) Summary
2	Total Operating Rev. Deduct. (including FIT & DIT)	\$ <u>1,785,355,470</u>	PSE Exhibit No. ____ (JHS-11) Summary
3	Net Operating Income (including FIT & DIT)	\$ 283,675,813	= Ln 1 - Ln 2
4	Plus FIT :& DIT Included in NOI:		
5	Federal Income Taxes (FIT)	\$ 18,692,440	PSE Exhibit No. ____ (JHS-11) Summary
6	Deferred Income Taxes (DIT)	\$ <u>87,728,156</u>	PSE Exhibit No. ____ (JHS-11) Summary
7	Net Operating Income (excluding DIT & FIT)	\$ 390,096,409	Ln 3 + Ln 5 + Ln 6
8	Other Income Deductions:		
9	Pro Forma Interest Expense	\$ 136,226,387	John Story Suppl. WP for FIT Adjustment 11.04
10	Other Pro Forma Income Adjustments	\$ <u>34,948,316</u>	John Story Suppl. WP for FIT Adjustment 11.04
11	Total Other Deductions	\$ 101,278,071	= Ln 8 - Ln 9
12	Federal Taxable Pre-Tax Income	\$ 288,818,338	= Ln 7 - Ln 11
13	Assumed Ratio for Qualifying Production		
14	Activities Income (QPAI) to Total Taxable Income	40.8%	See Note 1.
15	Estimated QPAI for PSE GRC	\$ 117,846,708	= Ln 12 x Ln 14
16	DPAD 2008 Rate	6.00%	
17	Estimated DPAD for PSE GRC at \$179.7M Increase	\$ 7,070,802	= Ln 15 x Ln 16
18	Tax Expense Impact from DPAD @ 35%	\$ (2,474,781)	= -35% x Ln 17

Note:

- Estimated using 2007 GRC PCA-Related NOI ÷ Total 2007 GRC NOI from PSE Exhibit No. \_\_\_\_ (JHS-6), p. 2 of 2.  
Ratio = \$71.7M ÷ \$175.6M = 40.8%.