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VIA ELECTRONIC MAIL AND OVERNIGHT MAIL

January 28, 2010

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

Re: Docket No. UE-070725

Dear Ms. Washburn:

Please find enclosed the original and (10) copies of the PREFILED RESPONSE TESTIMONY AND **REDACTED** EXHIBITS OF KEVIN C. HIGGINS ON BEHALF OF ITS FRED MEYER STORES AND QUALITY FOOD CENTERS filed in the above-referenced matter. I also enclose the original and (10) copies of the **HIGHLY CONFIDENTIAL** EXHIBIT OF KEVIN C. HIGGINS filed under seal. Those parties who executed the Highly Confidential Agreement have been served via overnight mail.

Please note that we e-filed the **REDACTED** and **HIGHLY CONFIDENTIAL** versions of the above on the same date in two separate transmissions.

Copies have been served on all parties listed on the attached Certificate of Service. Please place this document of file.

very ryary rours

Michael L. Kurtz, Esq

Kurt J. Boehm, Esq.

BOEHM, KURTZ & LOWRY

MLKkew Enclosures

cc: Certificate of Service

CERTIFICATE OF SERVICE

-	I hereby certi	fy that	I have thi	is day s	erved a	a co	py of the	e fore	going	on a	ll partie	s by r	egula	· U.S	. mail
and elec	tronic mail (when a	available)	this 28	th day	of.	January,	2010	upon	the	parties	listed	on th	e att	ached
Certifica	ite of Service.							10 0	~ /	1					

Kurt J. Boehm, Esq.

MASTER SERVICE LIST As of: 01/28/10 Docket: UE-070725 Page: Name: Puget Sound Energy (E012) Comments: In the Matter of the Petition of Puget Sound Energy for an Accounting Order. Original MSL Date: 04/16/07 Status Name and Address..... By. QUALITY FOOD CENTERS, INC. PH: 11/06/09 JH 10116 N.E. 8TH STREET FX: BELLEVUE WA 98004 FRED MEYER STORES, INC. PH: Pet 11/06/09 JH 3800 SOUTHEAST 2ND STREET FX: PORTLAND OR 99202 THE KROGER CO. PH: (513)762-4538 11/06/09 JH Pet ATTN: CORPORATE ENERGY MANAGER FX: (513)762-4012 1014 VINE STREET CINCINNATI OH 45202 E-mail: dgeorge@kroger.com TOM DEBOER PH: (425) 462-3272 04/16/07 MS Pet DIRECTOR, RATES & REGULATORY AFFAIRS FX: (425)462-3414 PUGET SOUND ENERGY (E012) PO BOX 97034, PSE-08N BELLEVUE WA 98009-9734 E-mail: tom.deboer@pse.com Pet KARL KARZMAR PH: (425) 456-2797 04/16/07 MS REGULATORY RELATIONS FX: (425)462-3414 PUGET SOUND ENERGY PO BOX 97034 PSE-08N BELLEVUE WA 98009-9734 E-mail: karl.karzmar@pse.com KURT J BOEHM PH: (513)421-2255 PetC 11/06/09 JH ATTORNEY FX: (513) 421-2764 BOEHM, KURTZ & LOWRY Representing The Kroger Co. 36 E. SEVENTH ST. STE 1510 CINCINNATI OH 45202 SHEREE CARSON PetC PH: (425)635-1400 04/16/07 MS PERKINS COIE FX: (425)635-2400 Representing Puget Sound Energy

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MASTER SERVICE LIST

As of: 01/28/10 Docket: UE-070725 Page: 2

Name: Puget Sound Energy (E012)

Comments: In the Matter of the Petition of Puget Sound Energy for an Accounting

Order.

Original MSL Date: 04/16/07

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MASTER SERVICE LIST

As of: 01/28/10 Docket: UE-070725 Page: 3

Name: Puget Sound Energy (E012)

Comments: In the Matter of the Petition of Puget Sound Energy for an Accounting

Order.

Original MSL Date: 04/16/07

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As of: 01/28/10 Docker Name: Puget Sound Energy (E012) Docket: UE-070725 Page: 4

Comments: In the Matter of the Petition of Puget Sound Energy for an Accounting

Original MSL Date: 04/16/07

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EXHIBIT NO. (KCH-1T)
DOCKET NO. UE-070725
WITNESS: KEVIN C. HIGGINS

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Amended Petition of

Docket No. UE-070725

PUGET SOUND ENERGY, INC.,

For an Order Authorizing the Use of the Proceeds from the Sale of Renewable Energy Credits and Carbon Financial Instruments

PREFILED RESPONSE TESTIMONY AND (NON-CONFIDENTIAL) EXHIBITS OF KEVIN C. HIGGINS ON BEHALF OF THE KROGER CO.

January 28, 2010

1	Table of Contents
2	Introduction 1
3	Overview and Recommendations
4	Proceeds from Sales of RECs and CFIs4

RESPONSE TESTIMONY OF KEVIN C. HIGGINS

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In	tro	du	cti	on

- 4 Q. Please state your name and business address.
- Kevin C. Higgins, 215 South State Street, Suite 200, Salt Lake City, Utah,
 84111.
- 7 Q. By whom are you employed and in what capacity?
- A. I am a Principal in the firm of Energy Strategies, LLC. Energy Strategies is a private consulting firm specializing in economic and policy analysis applicable to energy production, transportation, and consumption.
- 11 Q. On whose behalf are you testifying in this proceeding?
- 12 A. My testimony is being sponsored by The Kroger Co. ("Kroger") on behalf
 13 of its Fred Meyer Stores and Quality Food Centers divisions. Kroger is one of the
 14 largest retail grocers in the United States, and operates approximately 150
 15 facilities in the state of Washington, approximately 70 of which are located in the
 16 territory served by Puget Sound Energy ("PSE"). These facilities purchase more
 17 than 165 million kWh annually from PSE, and are served on Electric Rate
 18 Schedules 24, 25, 26, and 40.
- 19 Q. Please describe your professional experience and qualifications.
- A. My academic background is in economics, and I have completed all
 coursework and field examinations toward the Ph.D. in Economics at the
 University of Utah. In addition, I have served on the adjunct faculties of both the
 University of Utah and Westminster College, where I taught undergraduate and

graduate courses in economics. I joined Energy Strategies in 1995, where I assist private and public sector clients in the areas of energy-related economic and policy analysis, including evaluation of electric and gas utility rate matters.

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

Have you previously testified before this Commission?

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Q.

A.

Yes. I testified in the PSE 2009, 2007, 2006 and 2004 general rate cases and participated in the settlement discussions that resulted in partial settlement agreements pertaining to rate spread and rate design issues in those proceedings. I also testified in the interim phase of the PSE 2001 general rate case and participated in the collaborative process that led to the settlement agreement submitted by the parties to that general rate proceeding, which was subsequently approved by the Commission.

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

Yes. I have testified in approximately one hundred twenty proceedings on the subjects of utility rates and regulatory policy before state utility regulators in Alaska, Arizona, Arkansas, Colorado, Georgia, Idaho, Illinois, Indiana, Kansas, 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	Over	view and Recommendations						
7	Q.	What is the purpose of your testimony in this proceeding?						
8	A.	My testimony addresses the joint proposal by PSE, the NW Energy						
9		Coalition, the Renewable Northwest Project, and The Energy Project						
10		(collectively, "Settling Parties") regarding the treatment of revenues from the sale						
11		of Renewable Energy Credits ("RECs") and Carbon Financial Instruments						
12		("CFIs").						
13	Q.	Please summarize your conclusions and recommendations.						
14		The proposal from the Settling Parties to allocate the proceeds from REC						
15		sales fails to give adequate priority to the crediting of REC sales to PSE's						
16		customers, who provide the underlying cost recovery for the assets that make the						
17		REC sales possible.						
18		As a threshold matter, it is appropriate for 100 percent of the proceeds						
19		from REC sales to be credited to customers. At the same time, I believe there is						
20		room for Commission discretion regarding the crediting of REC sales to the						
21		special purposes proposed by the Settling Parties.						
22		Specifically, I recommend adopting a mechanism that would place the						
23		share of REC revenues accruing to customers in a REC Revenue Tracking						

1		Account ("RRTA") that would be paid out to customers monthly through an
2		RRTA Sur-Credit on customers' bills. The initial amount placed in the RRTA
3		should be no less than 80 percent of the REC revenues that have accrued as of the
4		effective date of the Commission's order in this docket. Going-forward, at least
5		80 percent of each month's new REC revenues should also be booked to the
6		RRTA.
7		For accounting purposes, the RRTA should be treated as a regulatory
8		liability that is amortized on a three-year rolling basis and accrues interest at
9		PSE's authorized after-tax rate-of-return (including equity). Because the benefit
10		of REC sales is attributable to PSE's generation assets, the RRTA Sur-Credit
11		should be applied to the bills of PSE's generation customers, rather than credited
12		against the storm damage regulatory asset as proposed by PSE.
13		
14	Proc	eeds from Sales of RECs and CFIs
15	Q.	Please describe the proposal by PSE and other Settling Parties regarding the
16		disposition of proceeds from sales of RECs and CFIs.
17	A.	In its filing, PSE states that it has negotiated various transactions for the
18		sales of RECs that will significantly increase the funds that PSE will receive over
19		the next few years. PSE and the other Settling parties are proposing to apportion
20		the proceeds from these sales in the following manner:
21		(1) PSE would receive 40% of the REC sales proceeds, not to exceed
22		\$21,062,800, to offset a portion of a receivable carried on PSE's books for a

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disputed energy sale to California parties dating back to 2001;

(2) Renewable energy and energy efficiency programs targeting low-
income households would receive 100% of proceeds from sales of RECs and CFIs
already booked at the time of the filing in this docket (approximately \$10 million)
plus up to 20% of the proceeds from new REC sales, not to exceed \$20 million in
total; and

(3) The remaining balance would be applied as a credit to customers against the regulatory asset currently being carried by PSE for recovery of storm damage costs.

What is your assessment of this proposal?

O.

A.

The sale of RECs and CFIs is a very positive development for PSE and its customers. However, the proposal from the Settling Parties fails to give adequate priority to the crediting of REC¹ sales to PSE's customers, who provide the underlying cost recovery for the assets that make the REC sales possible.

Moreover, PSE customers currently face the prospect of a rate increase pursuant to the Company's general rate case proceeding, which is currently under consideration in Docket No. UE-090704; the reasonable likelihood of a general rate increase makes consideration of rate relief to customers all the more timely.

The first priority in allocating the proceeds from REC sales should be the recognition of revenue credits to customers. The proposal of the Settling Parties fails to recognize this priority, but rather, it is a vehicle for mutual endorsement of special treatment for the constituencies of the Settling Parties. The interest of customers as a whole is not given appropriate weight in the proposal.

¹ For ease of exposition, I will refer to REC and CFI sales jointly as "REC sales" unless otherwise

Q. What do you recommend?

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2	A.	As a threshold matter, it is appropriate for 100 percent of the net proceeds
3		from REC sales to be credited to customers. REC sales occur from rate-based
1		assets, the costs of which are recovered from customers. In this sense they are
5		comparable to off-system sales margins and wheeling revenues. The proper
5		ratemaking treatment from such sales is to recognize the benefits of these sales as
7		a credit against the rates paid by customers.

- Q. Are you familiar with the ratemaking treatment of REC sales in otherjurisdictions?
- 10 A. Yes. In Utah and Wyoming, 100% of the benefit of PacifiCorp's

 11 projected test period REC sales is credited to ratepayers.
- Q. Are you firmly opposed to any crediting of REC sales to the special purposes proposed by the Settling Parties?
- 14 A. No. I believe there is room for Commission discretion in this regard;
 15 however, the prioritization and timing should be modified to give more weight to
 16 rate relief to customers as a whole.

Q. Please explain.

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I will begin with the proposal to credit a portion of REC revenues to PSE to offset its 2001 receivable. Although there is a strong argument that 100% of the proceeds from such a sale should accrue to customers, there are certain ratemaking situations in which some portion of off-system sales margins, e.g., 10%, are retained by a utility as an incentive (or reward) for pursuing such sales

indicated. In addition, my references to "REC revenues" are intended to refer to REC proceeds net of prudent sales expense.

1		opportunities. It can be argued that in executing a REC sales strategy, PSE acted
2		in its stakeholders' best interest and is deserving of some revenue recognition. If
3		the Commission is persuaded by such an argument, then some set aside for PSE
4		may be appropriate. However, rather than setting aside 40% of REC revenues for
5		PSE as proposed by the Settling Parties, I recommend that no more than 10% of
6		annual REC revenues be reserved for PSE. I further recommend that this
7		crediting cease when the \$21,062,800 requested by PSE, or any lesser amount
8		otherwise approved by the Commission, is accrued.
9	Q.	Under your proposed treatment, should any carrying charges be earned by
10		PSE on the unrecovered balance applicable to its receivable?
11	A.	No. Carrying charges would not be appropriate. Customers do not owe
12		payment to PSE for the receivable; it is owed by California parties. If it takes
13		some time for the receivable to be retired, that is not a burden imposed by
14		customers.
15	Q.	If the Commission approves special funding from REC sales for low-income
16		programs, how should this funding be structured?
17	A.	If the Commission approves special funding from REC sales for low-
18		income programs, the prioritization of such funding should be appropriately
19		balanced with the need to recognize revenue credits for customers as a whole.
20		Specifically, I recommend that no more than 10% of REC sales annual revenue –
21		including revenues from past sales – be set aside for special program funding.
22		When the cumulative program funding reaches the \$20 million recommended by

the Settling Parties, or some lesser amount approved by the Commission, this special earmarking of REC revenues for low-income programs would end.

Taken in combination with my recommended treatment of any revenues apportioned by PSE, this approach would ensure that at least 80 percent of previously-collected and future REC revenues would inure to the benefit of customers as a whole.

I note that the Settling Parties seem to anticipate that funds earmarked for low income programs would be spread out over seven years.² Thus, even in the context of the Settling Parties' own proposal, it is not reasonable to front-end load the funding of these programs by reserving 100% of previously-collected REC revenues for special program purposes to the exclusion of rate relief to customers as a whole.

Q. How should REC revenues be passed through to customers?

I recommend adopting a mechanism that would place the share of REC revenues accruing to customers in a REC Revenue Tracking Account ("RRTA") that would be paid out to customers monthly through an RRTA Sur-Credit on customers' bills. The initial amount placed in the RRTA should be no less than 80 percent of the REC revenues that have accrued as of the effective date of the Commission's order in this docket. Going-forward, at least 80 percent of each month's new REC revenues should be booked to the RRTA.

For accounting purposes, the RRTA should be treated as a regulatory liability that is amortized over a reasonable period, taking into account the

A.

² PSE Response to Public Counsel 005.

expectation that REC revenues are likely to accrue over a period of years, but may not be permanent. The amortization period should balance the need for speedy recognition of the REC benefit in customer rates with the desirability of rate stability. I suggest a rolling three-year amortization for this purpose. By "rolling three-year amortization" I mean that each new year's accrual of REC revenues would amortize over three years.

Because the RRTA would be booked as a regulatory liability, it would typically be treated as a deduction from rate base. However, because rate base is being independently determined in the general rate case proceeding, the results of which may not be reconciled with the decision in this docket, it may be more practical for interest accrual on the regulatory liability to be determined on a standalone basis.

Q. Why should the RRTA accrue interest?

Α.

Prior to being distributed to customers, the share of the RRTA funds apportioned to customers represents capital that is available to PSE for corporate purposes. For this reason, regulatory liabilities (such as the proposed RRTA) are typically deducted from rate base. When a regulatory liability is deducted from rate base, customers effectively earn a return on the regulatory liability equal to the utility's after-tax rate-of-return. In lieu of deducting the RRTA from rate base, the RRTA balance should earn interest equal to PSE's authorized after-tax rate-of-return (including equity).

Q. How should the RRTA Sur-Credit be calculated?

In the initial year, the RRTA Sur-Credit should be established at a level that amortizes one-third of the RRTA balance that is placed into the account on Day 1, as well as one-third of the amount projected to be booked into the RRTA for the upcoming year ("Vintage 1"). The RRTA Sur-Credit would be reset each year. In the second year, the RRTA Sur-Credit should be established at a level that amortizes the second year of the Day 1 and Vintage 1 RRTA funds, plus one-third of the amount projected to be booked into the RRTA for the upcoming year ("Vintage 2"). In addition, the RRTA Sur-Credit would be adjusted to reflect interest accruals on monthly balances, as well as true-up any over or under-collections or mis-projections of revenues from the prior year. The RRTA Sur-Credit for subsequent years would be structured similarly to the second year. If, in the future, REC sales (or their equivalent) were to cease, the RRTA Sur-Credit would gravitate to zero as the last of the amortizations rolls off.

Q. What rate design should be applied to the RRTA Sur-Credit?

A.

A.

Because the benefit of REC sales is attributable to PSE's generation assets, the RRTA Sur-Credit should be applied to the bills of PSE's generation customers. Ideally, this revenue credit would be allocated in accordance with each customer class's allocated cost responsibility for PSE's generation plant. However, in the current general rate case, rate spread was resolved by stipulation with no concurrence on cost-of-service methodology. Consequently, it may be more practical to allocate the RRTA Sur-Credit on a flat kilowatt-hour basis to all PSE retail generation customers.

1	Q.	Have you prepared an exhibit demonstrating how your proposed rolling
2		three-year amortization proposal would work?
3	A.	Yes. I have prepared such an exhibit. To best reflect the situation at hand
4		the exhibit incorporates PSE's previously-collected and projected REC revenues,
5		which are classified as Highly Confidential. The illustrative example of my
6		rolling three-year amortization proposal, including example RRTA Sur-Credit
7		rates for the first three years, is presented in Exhibit No(KCH-2HC). For
8		illustrative purposes, the calculation assumes that 10% of REC proceeds are
9		earmarked for PSE up to \$21,062,800, and 10% are earmarked for low-income
10		programs up to \$20,000,000.
11	Q.	Do the results in Highly Confidential Exhibit No(KCH-2) represent your
12		proposal for a specific RRTA Sur-Credit at this time?
13	A.	No. The results in Highly Confidential Exhibit No(KCH-2) are
14		presented as a illustration of how the rolling three-year amortization would work,
15		given the projected REC sales at this time. If the Commission approves this
16		approach, I would expect that actual RRTA Sur-Credit rates would be calculated
17		by PSE in a compliance filing.
18	Q.	PSE has proposed that the proceeds credited to customers be applied to the
19		regulatory asset booked for recovery of storm damage costs. What is your
20		assessment of this proposal?
21	A.	Application of this credit to the storm damage regulatory asset is not
22		appropriate for several reasons. First, storm damage costs more closely
23		correspond to the costs of Company's power delivery system, whereas REC sales

are attributable to PSE's generation assets. Moreover, the storm damage regulatory asset is included in rate base as part of PSE's working capital, which is computed using the balance sheet method. In accordance with this method, if, as part of a general rate proceeding, the storm damage regulatory asset is offset using REC proceeds, the revenue requirement would be reduced for both the electric and gas utilities; thus, this approach would transfer part of the benefit of REC sales to PSE's gas rates, creating a mismatch between costs incurred and benefits received. To avoid such mismatches, the RRTA Sur-Credit should be designed to apply only to PSE's retail generation customers.

A second reason to set up a separate tracking mechanism for the RRTA is timing: the storm damage regulatory asset is scheduled to be amortized over a ten year period, whereas a shorter, rolling three-year amortization period for the REC revenues is more appropriate. Tying recognition of the REC proceeds in rates to the storm damage regulatory asset would unduly delay the pass-through of REC revenues to customers.

And thirdly, it is my understanding that using REC proceeds to offset a regulatory asset in rate base would require coordination with the general rate case. It is also my understanding that the extant docket and the general rate case docket are on separate tracks. Therefore, as a practical matter, it appears that it is necessary to establish a separate tracking and sur-credit mechanism outside the general rate case if the benefits of REC sales are to be passed through to retail customers in a timely manner. My proposal to establish an RRTA would accomplish this objective.

- 1 Q. Does this conclude your response testimony?
- 2 A. Yes, it does.

EXHIBIT NO. (KCH-2HC)
DOCKET NO. UE-070725
WITNESS: KEVIN C. HIGGINS

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Amended Petition of

Docket No. UE-070725

PUGET SOUND ENERGY, INC.,

For an Order Authorizing the Use of the Proceeds from the Sale of Renewable Energy Credits and Carbon Financial Instruments

FIRST EXHIBIT (HIGHLY CONFIDENTIAL) TO THE PREFILED RESPONSE TESTIMONY OF KEVIN C. HIGGINS ON BEHALF OF THE KROGER CO.

HIGHLY CONFIDENTIAL PER PROTECTIVE ORDER IN DOCKET NO. UE-070725

(REDACTED)

January 28, 2010

Sur-Credit Summary

Yr 5 Jul. 1, 2014 - Jun. 30, 2015 (Mills/kWh)	TBD	+ TBD
Yr 4 Jul. 1, 2013 - Jun. 30, 2014 (Mills/kWh)	TBD	+ TBD
Yr 3 Jul. 1, 2012 - Jun. 30, 2013 (Mills/kWh)		
Yr 2 Jul. 1, 2011 - Jun. 30, 2012 (Mills/kWh)		The state of the s
Yr 1 Jul. 1, 2010 - Jun. 30, 2011 (Mills/kWh)		
Vintage 1	Vintage 3 Vintage 3 · · · · · · · · · · · · · · · · · ·	Total
Ln. No. 1	(N N Y W O	

Derivation of REC/CFI Regulatory Liability by Vintage (\$900s).

Line No.

Source PSE Response to WUTC Data Request No. 5	See PSE Responses to PC Nos. 30 & 37 [HIGHLY CONFIDENTIAL] See PSE Responses to PC No. 30 & 37 [HIGHLY CONFIDENTIAL] See PSE Response to PC No. 37 [HIGHLY CONFIDENTIAL] See PSE Response to PC No. 31 [CONFIDENTIAL] See PSE Response to PC No. 31 [CONFIDENTIAL] See PSE Response to PC No. 31 [CONFIDENTIAL] = Ln. 7 - Ln. 8	= 19% x Ln. 9 = Sum (Ln. 10) = 19% x Ln. 9 = Sum (Ln. 12) = Ln. 9 - Ln. 10 - Ln. 12	= La. 18 from prior month = La. 14 = ROR + 12 x (La. 15 + La. 16) = La 15 + La. 16 + La. 17	Source See FSE Response to PC No. 37 [HIGHLY CONFIDENTIAL] See FSE Response to PC No. 37 [HIGHLY CONFIDENTIAL] See FSE Response to PC No. 37 [HIGHLY CONFIDENTIAL] See FSE Response to PC No. 31 [CONFIDENTIAL] See FSE Response to PC No. 31 [CONFIDENTIAL] See FSE Response to PC No. 31 [CONFIDENTIAL] = Ln. 24 - Ln. 25	= 10% x Ln. 26 = Sum (Ln. 27) = 10% x Ln. 26 = Sum (Ln. 29) = Ln. 26 - Ln. 27 - Ln. 29	= Ln. 35 from prior mouth = Ln. 31 = ROR + 12 x (Ln. 32 + Ln. 33) = Ln 32 + Ln. 33 + Ln. 34
	Dec-09			Dec-10		
	Nov-09			Nov-10		
	00:100			Oct-10		
	Sep-09			Sep-10		
	<u>Aug-09</u>			Aug-10		
	<u> Jul-09</u>			Jul-10		
	7nn-03			Jun-10		
	May-09			May-10		
	<u>Apr-09</u>			Apr-10		
	Mar-09			Mar-10		
	Fcb-09			Fcb-10		
8.25%	Jan-09			Jan-10		
Description Assumed PSE After Tax Rate of Return (%);	Revenue Month Monthly Historical California REC Sales Revenue (excluding cost of sale) Monthly Other REC Sales Revenue (including cost of sale) California Forceast REC Sales Revenue (excluding cost of sale) Monthly CFI Sales Revenue Total Sales Revenue Total Sales Revenue Net REC/CFI Sales	PSE Share @ 10% (subject to cap) ² PSE Share Cumulative Low-Income Share @ 10% (subject to cap) ³ Low-Income Share @ 10% (subject to cap) ² Customer Share @ 80% (100% after caps satisfied)	Beginning Regulatory Balance Add Monthly Net REC/CFI Sales Revenue (Customer Share) Carrying Cost Ending Regulatory Balance	Revenue Month Monthly Bistorical California REC Sales Revenue (excluding cost of sale) Monthly Other REC Sales Revenue (including cost of sale) California Forecast REC Sales Revenue (excluding cost of sale) Monthly CFI Sales Revenue Total Sales Revenue Cost of CFI Sales Net REC/CFI Sales	PSE Share @ 10% (subject to cap) ² PSE Share Cumulative Low-Income Share @ 10% (subject to cap) ³ Low-Income Share @ 80% (100% after caps satisfied)	Beginning Regulatory Balance Add Monthly Net REC/CFI Sales Revenue (Customer Share) Carrying Cost Ending Regulatory Balance

	Source	PSE Response to WUTC Data Request No. 5	See PSE Responses to PC Nos. 30 & 37 [HIGHLY CONFIDENTIAL] See PSE Responses to PC Nos. 30 & 37 [HIGHLY CONFIDENTIAL] See PSE Response to PC No. 37 [HIGHLY CONFIDENTIAL] See PSE Response to PC No. 31 [GONFIDENTIAL]	= Sum (Ln. 3: Ln. 6) See PSE Response to PC No. 31 [CONFIDENTIAL] = Ln. 7 · Ln. 8	= 10% x La. 9 = Sum (La. 10) = 10% x La. 9 = Sum (La. 12) = La. 9 - La. 10 - La. 12	= Ln. 18 from prior month = Ln. 14 = [ROR + 12] x (Ln. 15 + Ln. 16) = Ln 15 + Ln. 16 + Ln. 17	See PSE Response to PC No. 37 [HIGHLY CONFIDENTIAL] See PSE Response to PC No. 37 [HIGHLY CONFIDENTIAL] See PSE Response to PC No. 37 [HIGHLY CONFIDENTIAL] See PSE Response to PC No. 37 [CONFIDENTIAL] See PSE Response to PC No. 31 [CONFIDENTIAL] See PSE Response to PC No. 31 [CONFIDENTIAL]	= Ln. 24 - Ln. 25	= 10% x Ln. 26 = Sum (Ln. 27) = 10% x Ln. 26 = Sum (Ln. 29) = Ln. 26 - Ln. 27 - Ln. 29	= Ln. 35 from prior month = Ln. 31 = [ROR + 12] x (Ln. 33 + Ln. 35) = Ln 32 + Ln. 34 + Ln. 34
			1 Dec-11				2 Dec-12			
			1 Nov-11				2 Nov-12			
			1 Oct-11				2 004-12			
			1 Sep-11				2 Sep-12			
			1 Aug-11				2 Aug-12			
			1 Jul-11			П	2 Jul-12			П
			1 Jun-11				2 Jun-12			
			May-11				May-12			
			Apr-11				Apr-12			
			Mar-11				Mar-12			
		\o	Feb-11				Feb-12			
		8.25%	Jan-11				Jan-12			
Derivation of REC/CFI Regulatory Liability by Vintage (5000s)1:	c Description	Assumed PSE After Tax Rate of Return (%):		Total Sales Revenue Cost of CFI Sales Net REC/CFI Sales	PSE Share @ 10% (subject to cap) ² PSE Share Cumulative Low-Income Share @ 10% (subject to cap) ² Low-Income Share @ 10% (100% after caps satisfied)	Beginning Regulatory Balance Add Monthly Net REC/CFI Sales Revenue (Customer Share) Carrying Cost Ending Regulatory Balance	Revenue Month Monthly Historical California REC Sales Revenue (excluding cost of sale) Monthly Other REC Sales Revenue (including cost of sale) California Forecast REC Sales Revenue (excluding cost of sale) Monthly CFI Sales Revenue Total Sales Revenue Cost of CFI Sales		PSE Share @ 10% (subject to cap) ² PSE Share Cunudaire Low-Income Share @ 10% (subject to cap) ³ Low-Income Share Cunudaire Customer Share @ 80% (100% after caps satisfied)	Beginning Regulatory Balance Add Monthly Net REC/CFI Sales Revenue (Customer Share) Carrying Cost Ending Regulatory Balance
	Line No.	-	чидко	r & 0	01 11 11 11	22 22 8	222222	36	3 8 8 3	8 8 8 8

	Source	PSE Response to WUTC Data Request No. 5	See PSE Responses to PC Nos. 30 & 37 [HIGHLY CONFIDENTIAL] See PSE Responses to PC Nos. 30 & 37 [HIGHLY CONFIDENTIAL] See PSE Response to PC No. 37 [HIGHLY CONFIDENTIAL] See PSE Response to PC No. 37 [CONFIDENTIAL] See PSE Response to PC No. 31 [CONFIDENTIAL] See PSE PRESPONSE to PC No. 31 [CONFIDENTIAL]	= Ln.7-Ln.8	= 10% x Ln. 9 = Sum (J.n. 10)	= 10% x Ln. 9 = Sum (La. 12)	= Ln. 9 - Ln. 10 - Ln. 12	= Ln. 18 from prior month = Ln. 14	= [ROR + 12] x (Ln. 15 + Ln. 16) = Ln 15 + Ln. 16 + Ln. 17
			Dec-13						
			Nov-13						
			<u>0ct-13</u>						
			Sep-13						
			<u>Aug-13</u>						
			Jui-13						П
			Jun-13						
			May-13						
			Apr-13						
			Mar-13						
			Feb-13						
		8.25%	Jan-13						
Derivation of REC/CFI Regulatory Liability by Vintage (5000s)!:	Description	Assumed PSE After Tax Rate of Return (%):	Revenue Month Monthly Historical California REC Sales Revenue (excluding cost of sale) Monthly Other REC Sales Revenue (including cost of sale) Monthly CFI Sales Revenue (excluding cost of sale) Monthly CFI Sales Revenue Total Sales Revenue	Cost in Carl Sales Net REC/CFI Sales Revenue	PSE Share @ 10% (subject to cap) ² PSE Share Cumulative	Low-Income Share @ 10% (subject to cap) ³ Low-Income Share Cumulative	Customer Share (4) 80% (100% after caps satisfied)	Beginning Regulatory Balance Add Monthly Not BFC/ICHT Solse Reconnes (Chefomer Share)	Carrying Cost Ending Regulatory Balance

2 C + 4 C + 6 C + 7 C +

Notes:

1. Calculation excludes prior investment interest earned by PSE on REC/CFI sales revenue prior to 11/30/09.

2.

Vintage 1 - Amortization Schedule of REC/CFI Sales Revenue Regulatory Balance as of June 39, 2011 (\$0008);

	From p. 3, La. 18	PSE Response to WUTC Data Request No. 5	= Ln. 7 from prior month = Derived Amount = Ln. 3 · Ln. 4 = ROR + 12 i x (ln. 5) = Ln. 5 + Ln. 6	= Ln. 12 from prior month = Perived Amount = Derived Amount = ROR + 21x (Ln. 10) = Ln. 10 + Ln. 11 = Ln. 17 from prior month = Derived Amount = Rore + Ln. 14 = ROR + 121x (Ln. 15) = Ln. 15 + Ln. 16				
Source	From p.	PSE Res	= Ln. 7 from pr = Derived Amor = Ln. 3 - Ln. 4 = [ROR + 12] x = Ln. 5 + Ln. 6	= Ln. 12 from p = Derived Amo = Ln. 8 - Ln. 9 = [ROW + 12] x = Ln. 10 + Ln. 10 + Ln. 17 from p = Derived Amo = Ln. 15 from 1 = [Row + 12] x = Ln. 15 + Ln. 1				
			Jue-11	Jun-12				
			May-11	May-12				
			Apr-11	APE-13			10705 10705	
			Mar-11	Mar.13			90704/UG-09 90704/UG-09	
			<u>Feb-11</u>	Reb.12 Reb.13			See PSE Reburtal Exhibit No. JKP-28, p. 1 of 1 in PSE GRC UE-090704/UG-090705 See PSE Reburtal Exhibit No. JKP-28, p. 1 of 1 in PSE GRC UE-090704/UG-090705 = Ln. 19 - Ln. 20	
			Jan-11	Year 2 1 Jan-12 Year 3 2 Jan-13			p. 1 of 1 in PS p. 1 of 1 in PS	[00]
			<u>Year I</u> <u>Dec-10</u>	<u>Ver</u> <u>Dec.11</u>			No. JKP-28, No. JKP-28,	= [Ln. 18 x 1000 x 1000] + [Ln. 21 x 1000]
			Nov-10	Nov-11		æ	outtal Exhibit outtal Exhibit n. 20	.000 x 1000l +
			Oct-10	0c+11 0c+12	Source	= Sum (Ln. 4)	See PSE Rebuttal See PSE Rebuttal =: Ln. 19 - Ln. 20	= [La. 18 x 1
			Sep-10	Sep-11	5			
			Aug-10	Aug-11	Kroger Recommended		23,734,956 (2,040,112) 21,694,844	
		8.25%	Jul-10	10-11 10-11	-		,	
			L					
Description	Regulatory Liability Balance as of Jun 39, 2011	Assumed PSE After Tax Rate of Return (%):	Beginning Regulatory Liability Balance [Beg. = Ln. 1] Amortization Adjusted Regulatory Liability Balance Carrying cost @ ROR + 12 x Gross-Up Ending Regulatory Liability Balance	Reginning Regulatory Liability Balance Amortization Adjusted Regulatory Liability Balance Adjusted Regulatory Liability Balance Carrying cost (@ ROR + 12 x Gross-Up Ending Regulatory Liability Balance Amortization Adjusted Regulatory Liability Balance Adjusted Regulatory Liability Balance Ending Regulatory Liability Balance Ending Regulatory Liability Balance Sur-Credit Calculation for Vintage 1	ио	Total REC/CKI Annual Amortization (\$000s)	FSE Total Annual Jurisdictional Retail Energy Sales (MWh) Less Choice/Retail Wheeling Energy Sales - 448/449 (MWh) Net Retail Energy Sales (MWh)	RRTA Sur-Credit (mills/kWh)
	egulatory	ssumed P	Beginning Re Amortization Adjusted Reg Carrying cost Ending Regul	Beginning Re Amortzation Adjusted Reg Carrying cost Ending Regul Reginning Re Amortzation Amortzation Adjusted Reg Carrying cost Ending Regul	Description	otal RE	SE Total ess Choic et Retail	RTA Sun

Vintage 2 - Amortization Schedule of REC/CFI Sales Revenue Regulatory Balance as of June 30, 2012 (50008):

Linc No. 1

Source	From p. 3, Ln. 35	PSE Response to WUTC Data Request No. 5		The state of the s							RC UE-090704/UG-090705 RC UE-090704/UG-090705	
			Year 1 Sep.11 Oct-11 Nov-11 Dec-11 Jan-12	Vest	Jan-13	Year 3	lan-14		Kroger sommended Source	≈ Sum (Ln. 4)	22.734.956 See PSE Rebuttal Exhibit No. JKP-28, p. 1 of 1 in PSE GRC UE-090704/UG-090708 (2.040.112) See PSE Rebuttal Exhibit No. JKP-28, p. 1 of 1 in PSE GRC UE-090704/UG-090708 = Ln. 19 - Ln. 20	
Description	Regulatory Liability Balance as of Jun 30, 2012	Assumed PSE After Tax Rate of Return (%): 8.25%	Beginning Regulatory Liability Balance [Beg. = Ln. 1] Amortization Adjusted Regulatory Liability Balance Carrying cost @ ROR* 12 x Gross-Up Ending Regulatory Liability Balance		Beginning Regulatory Liability Balance Amortization Affinet Regulatory Liability Balance Carrying cost @ ROR + 12 x Gross-Up Ending Regulatory Liability Balance		Beginning Regulatory Liability Balance Amortization Adjusted Regulatory Liability Balance Carrying cost @ ROR + 12 x Gross-Up Ending Regulatory Liability Balance	Sur-Credit Calculation for Vintage 2	Kroger Description Recommended	Total REC/CFI Annual Amortization (5000s)	PSE Total Annual Jurisdictional Retail Energy Sales (MWh) 23/734,956 Less Choice(Retail Wheeling Energy Sales - 448/449 (MWh) (2,040,112) Net Retail Energy Sales (MWh) 21,694,844	

8 6 2 2 2

e 4 e 9 r

13 14 17 Note: No true-up is assumed in this example.

Vintage 3 - Amortization Schedule of REC/CFI Sales Revenue Regulatory Balance as of June 30, 2013 (8000s):

Source	From p. 4, Ln. 18	PSE Response to WUTC Data Request No. 5	= Ln. 7 from prior month = Derived Amount = Ln. 3 - Ln. 4 = Ln. 5 - Ln. 6 = Ln. 5 + Ln. 6	= Ln. 12 from prior month = Derived Amount = Ln. 2. Ln. 9 = Ln. 19 + Ln. 11 = Ln. 17 from prior month = Derived Amount = Ln. 13 - Ln. 14 = In. 13 - Ln. 16 = In. 15 + Ln. 16 = Ln. 15 + Ln. 16				
<i>51</i> 1			Max-13 Jun-13	May-14 Jun-14 May-15 Jun-15				
			Feb-13 Mar-13 Apr-13	Reb-14 Mar-14 Apr-14 Feb-15 Mar-15 Apr-15			SRC UE-090704/UG-090705 SRC UE-090704/UG-090705	
			Year 1 12 Dec-12 Jan-13	Year 2 Dec-13 Jan-14 Jan-14 Jan-15			See PSE Reburtal Exhibit No. JKP-28, p. 1 of 1 in PSE GRC UE-090704/UG-090705 See PSE Reburtal Exhibit No. JKP-28, p. 1 of 1 in PSE GRC UE-090704/UG-090705 = Ln. 19 - Ln. 20	H = 10 × 1000 × 1000 = [1 = 21 × 1000]
			Sep.12 Oct-12 Nov-12	Sep-14 Oct-14 Nov-14	Source	= Sum (Ln. 4)	See PSE Rebuttal Exi See PSE Rebuttal Exi = Ln. 19 - Ln. 20	0000
		8.25%	Jul-12 Aug-12	Jul-13 Aug-13	Kroger Recommended		23,734,956 (2,040,112) 21,694,844	
Description	Regulatory Liability Balance as of Jun 30, 2013	Assumed PSE After Tax Rate of Return (%):	Beginning Regulatory Liability Balance [Beg. = Ln. 1] Amortization Adjusted Regulatory Liability Balance Carrying cost @ ROR + 12 x Gross-Up Ending Regulatory Liability Balance	Beginning Regulatory Liability Balance Amortization Allarscet Regulatory Liability Balance Carrying cost @ ROR+12 x Gross-Up Ending Regulatory Liability Balance Beginning Regulatory Liability Balance Amortization Adjusted Regulatory Liability Balance Carrying cost @ ROR+12 x Gross-Up Ending Regulatory Liability Balance Carrying cost @ ROR+12 x Gross-Up Ending Regulatory Liability Balance Carrying cost @ ROR+12 x Gross-Up Ending Regulatory Liability Balance	Description	Total REC/CFI Annual Amortization (5000s)	PSE Total Annual Jurisdictional Retail Energy Sales (MWh) Less Choice/Retail Wheeling Energy Sales - 448/449 (MWh) Net Retail Energy Sales (MWh)	Connection of the Connection o
Line No.	-	н	******	8 8 9 9 9 9 11 11 11 11 11 11 11 11 11 11 1		18	19 20 21	22

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Amended Petition of

PUGET SOUND ENERGY, INC.,

Docket No. UE-070725

For an Order Authorizing the Use of the Proceeds from the Sale of Renewable Energy Credits and Carbon Financial Instruments

	AFFIDAVIT OF KEVIN C. HIGGINS
STATE OF UTAH)
)
COUNTY OF SALT LAKE)

Kevin C. Higgins, being first duly sworn, deposes and states that:

- 1. He is a Principal with Energy Strategies, L.L.C., in Salt Lake City, Utah;
- 2. He is the witnesses who sponsors the testimony entitled "Prefiled Response Testimony of Kevin C. Higgins";
 - Said testimony was prepared by him;
- 4. If inquiries were made as to the facts in said testimony and exhibits he would respond as therein set forth; and
- 5. The aforesaid testimony and exhibits are true and correct to the best of his knowledge, information and belief.

Kevin C. Higgins

Subscribed and sworn to or affirmed before me this 27^{11} day of January, 2010, by Kevin C. Higgins.

Notary Public



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

Vitae

PROFESSIONAL EXPERIENCE

<u>Principal</u>, 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 <u>Senior Associate</u>, 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.

<u>Utility Economist</u>, 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.

<u>Acting Assistant Director</u>, 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.

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

<u>Teacher</u>, 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

"Application of Appalachian Power Company for a 2009 Statutory Review of Rates Pursuant to § 56.585.1 A of the Code of Virginia," **Virginia** Corporation Commission, Case No. PUE-2009-00030. Direct testimony submitted December 28, 2009.

"In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Approval of a Market Rate Offer to Conduct a Competitive Bidding Process for Standard Service Offer Electric Generation Supply, Accounting Modifications with Reconciliation Mechanism and Tariffs for Generation Service," Public Utilities Commission of **Ohio**, Case No. 09-906-EL-SSO. Direct testimony submitted December 4, 2009. Deposed December 10, 2009.

"2009 Puget Sound Energy General Rate Case," **Washington** Utilities and Transportation Commission, Docket Nos. UE-090704 and UG-090705. Response testimony submitted November 17, 2009. Joint testimony in support of stipulation submitted January 8, 2010.

"In the Matter of the Application of Rocky Mountain Power for Approval of Its Proposed Energy Cost Adjustment Mechanism," **Utah** Public Service Commission, Docket No. 09-035-15. Direct testimony submitted November 16, 2009. Surrebuttal testimony submitted January 5, 2010. Cross examined January 12, 2010.

"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," **Utah** Public Service Commission, Docket No. 09-035-23. Direct testimony submitted October 8, 2009. Rebuttal testimony submitted November 12, 2009. Surrebuttal testimony submitted November 30, 2009. Cross examined December 15-16, 2009.

"Re: The Tariff Sheets Filed by Public Service Company of Colorado with Advice Letter No. 1535 – Electric," **Colorado** Public Utilities Commission, Docket No. 09AL-299E. Answer testimony submitted October 2, 2009. Surrebuttal testimony submitted December 18, 2009.

"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," **Kansas** Corporation Commission, Docket No. 09-WSEE-925-RTS. Direct testimony submitted September 30, 2009. Cross Answer testimony submitted October 16, 2009.

Attachment A Page 4 of 23

"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. 09-0306, 09-0307, 09-0308, 09-0309, 09-0310, and 09-0311. Direct testimony submitted September 28, 2009. Rebuttal testimony submitted November 20, 2009.

"In the Matter of the Complaint of Nucor Steel-Indiana, a Division of Nucor Corporation against Duke Energy Indiana, Inc. for Determination of Reasonable and Just Charges and Conditions for Electric Service and Request for Expedited Adjudication," **Indiana** Utility Regulatory Commission, Cause No. 43754. Direct testimony submitted September 18, 2009. Rebuttal testimony submitted December 3, 2009.

"In the Matter of PacifiCorp's Filing of Revised Tariff Schedules for Electric Service in Oregon," Public Utility Commission of **Oregon**, Docket No. UE-210. Reply testimony submitted July 24, 2009. Joint testimony in support of stipulation submitted September 25, 2009.

"In The Matter of the Application of Rocky Mountain Power to Establish an Avoided Cost Methodology for Customers That Do Not Qualify for Tariff Schedule 37 – Avoided Cost Purchases from Qualifying Facilities," **Wyoming** Public Service Commission, Docket No. 20000-342-EA-09. Direct testimony submitted July 21, 2009. Cross examined September 1, 2009.

"In the Matter of PacifiCorp, dba Pacific Power, 2010 Transition Adjustment Mechanism," Public Utility Commission of **Oregon**, Docket No. UE-207. Reply testimony submitted July 14, 2009. Joint testimony in support of stipulation submitted September 25, 2009.

"In The Matter of the Application of The Detroit Edison Company for Authority to Increase Its Rates, Amend Its Rate Schedules and Rules Governing the Distribution and Supply of Electric Energy," **Michigan** Public Service Commission, Case No. U-15768. Direct testimony submitted July 9, 2009. Rebuttal testimony submitted July 30, 2009.

"In the Matter of the Investigation of Westar Energy, Inc., and Kansas Gas and Electric Company to Consider the Issue of Rate Consolidation and Resulting Rate Design," **Kansas** Corporation Commission," Docket No. 09-WSEE-641-GIE. Direct testimony submitted June 26, 2009. Cross examined August 17, 2009.

"Illinois Commerce Commission on Its Own Motion vs Commonwealth Edison Company, Investigation of Rate Design Pursuant to Section 9-250 of the Public Utilities Act," **Illinois** Commerce Commission, Docket No. 08-0532. Direct testimony submitted May 22, 2009.

"In the Matter of the Application of Duke Energy Kentucky, Inc. for Approval of Energy Efficiency Plan, Including an Energy Efficiency Rider and Portfolio of Energy Efficiency Programs," **Kentucky** Public Service Commission, Case No. 2008-00495. Direct testimony submitted May 11, 2009.

"In the Matter of the Application by Nevada Power Company d/b/a NV Energy, filed Pursuant to NRS§704.110(3) and NRS §704.110(4) for Authority to Increase Its Annual Revenue Requirement for General Rates Charged to All Classes of Customers, Begin to Recover the Costs of Acquiring the Bighorn Power Plant, Constructing the Clark Peakers, Environmental Retrofits and Other Generating, Transmission and Distribution Plant Additions, to Reflect Changes in Cost of Service and for Relief Properly Related Thereto, Public Utilities Commission of Nevada, Docket No. 08-12002. Direct testimony submitted April 14, 2009 (revenue requirement) and April 21, 2009 (cost of service/rate design). Cross examined May 6, 2009.

"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 Implementation of an Electric Distribution System "SmartGrid" and Advanced Metering Infrastructure, Distribution Automation Investments, and a Distribution Renewable Generation Demonstration Project and Associated Accounting and Rate Recovery Mechanisms, Including a Ratemaking Proposal to Update Distribution Rates Annually and a "Lost Revenue" Recovery Mechanism, in Accordance with Ind. Code 8-1-2-42(a) and 8-1-2.5-1 *Et Seq.* and Preliminary Approval of the Estimated Costs and Scheduled Deployment of the Company's SmartGrid Initiative," **Indiana** Utility Regulatory Commission, Cause No. 43501. Direct testimony submitted February 27, 2009.

"In The Matter of the Application of Duke Energy Ohio for an Increase in Electric Distribution Rates," Public Utilities Commission of **Ohio**, Case No. 08-709-EL-AIR; "In the Matter of the Application of Duke Energy Ohio for Tariff Approval," Case No. 08-710-EL-ATA; "In the Matter of the Application of Duke Energy Ohio for Approval to Change Accounting Methods," Case No. 08-711-EL-AAM. Direct testimony submitted February 26, 2009.

"In The Matter of the Amended Application of Rocky Mountain Power for Approval of a General Rate Increase of Approximately \$28.8 Million per Year (6.1 Percent Overall Average Increase)", **Wyoming** Public Service Commission, Docket No. 20000-333-ER-08. Direct testimony submitted January 30, 2009. Summary of cross answer testimony submitted February 27, 2009. Settlement testimony submitted March 13, 2009. Cross examined March 24, 2009.

"In the Matter of the Application of Dayton Power and Light Company for Approval of Its Electric Security Plan," Public Utilities Commission of **Ohio**, Case No. 08-1094-EL-SSO; "In the Matter of the Application of Dayton Power and Light Company for Approval of Revised Tariffs, Case No. 08-1095-EL-ATA; "In the Matter of the Application of Dayton Power and Light Company for Approval of Certain Accounting Authority Pursuant to Ohio Rev. Code §4905.13," Case No. 08-1096-EL-AAM; In the Matter of the Application of Dayton Power and Light Company for Approval of Its Amended Corporate Separation Plan, Case No. 08-1097-EL-UNC. Direct testimony submitted January 26, 2009. Deposed February 6, 2009. Testimony withdrawn pursuant to stipulation filed February 24, 2009.

"Application of Oncor Electric Delivery Company LLC for Authority to Change Rates," Public Utility Commission of **Texas**, SOAH Docket No. 473-08-3681, PUC Docket No. 35717. Direct testimony submitted November 26, 2008. Cross examined February 3, 2009.

"In the Matter of the Application of Columbus Southern Power Company for Approval of Its Electric Security Plan; An Amendment to Its Corporate Separation Plan; and the Sale of Certain Generating Assets", Public Utilities Commission of **Ohio**, Case No. 08-917-EL-SSO; "In the Matter of the Application of Ohio Power Company for Approval of Its Electric Security Plan; and an Amendment to Its Corporate Separation Plan," Case No. 08-918-EL-SSO. Direct testimony submitted October 31, 2008. Cross examined November 25, 2008.

"Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Base Rates," **Kentucky** Public Service Commission, Case No. 2008-00252. Direct testimony submitted October 28, 2008.

"Application of Kentucky Utilities Company for an Adjustment of Base Rates," **Kentucky** Public Service Commission, Case No. 2008-00251. Direct testimony submitted October 28, 2008.

"In the Matter of the Application of Idaho Power Company for Authority to Increase its Rates and Charges for Electric Service," **Idaho** Public Utilities Commission, Case No. IPC-E-08-10. Direct testimony submitted October 24, 2008. Rebuttal testimony submitted December 3, 2008. Cross examined December 19, 2008.

"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," **Utah** Public Service Commission, Docket No. 08-035-38. Direct testimony submitted October 7, 2008 (test period) and February 12, 2009 (revenue requirement). Cross examined October 28, 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 Establish a Standard Service Offer Pursuant to R.C. § 4928.143 in the Form of an Electric Security Plan," Public Utility

Commission of **Ohio**, Case No. 08-935-EL-SSO. Direct testimony submitted September 29, 2008. Deposed October 13, 2008. Cross examined October 21, 2008.

"In the Matter of the Application 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**, Docket No. 08-WSEE-1041-RTS. Direct testimony submitted September 29, 2008. Cross Answer testimony submitted October 8, 2008.

"In the Matter of Appalachian Power Company's Application for Increase in Electric Rates," **Virginia** State Corporation Commission, Case No. PUE-2008-00046. Direct testimony submitted September 26, 2008.

"In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Approval of a Market Rate Offer to Conduct a Competitive Bidding Process for Standard Service Offer Electric Generation Supply, Accounting Modifications with Reconciliation Mechanism and Tariffs for Generation Service," Public Utility Commission of **Ohio**, Case No. 08-936-EL-SSO. Direct testimony submitted September 9, 2008. Deposed September 16, 2008.

"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," **Arizona** Corporation Commission, Docket No. E-01345A-08-0172. Direct testimony submitted August 29, 2008 (interim rates), December 19, 2008 (revenue requirement), January 9, 2009 (cost of service, rate design), and July 1, 2009 (settlement agreement). Reply testimony submitted August 6, 2009 (settlement agreement). Cross examined September 16, 2008 (interim rates) and August 20, 2009 (settlement agreement).

"Verified Joint Petition of Duke Energy Indiana, Inc., Indianapolis Power & Light Company, Northern Indiana Public Service Company and Vectren Energy Delivery of Indiana, Inc. for Approval, if and to the Extent Required, of Certain Changes in Operations That Are Likely To Result from the Midwest Independent System Operator, Inc.'s Implementation of Revisions to Its Open Access Transmission and Energy Markets Tariff to Establish a Co-Optimized, Competitive Market for Energy and Ancillary Services Market; and for Timely Recovery of Costs Associated with Joint Petitioners' Participation in Such Ancillary Services Market," **Indiana** Utility Regulatory Commission, Cause No. 43426. Direct testimony submitted August 6, 2008. Direct testimony in opposition to Settlement Agreement submitted November 12, 2008. Testimony withdrawn pursuant to stipulation.

"In The Matter of the Application of The Detroit Edison Company for Authority to Increase Its Rates, Amend Its Rate Schedules and Rules Governing the Distribution and Supply of Electric Energy, and for Miscellaneous Accounting Authority," **Michigan** Public Service Commission, Case No. U-15244.

Direct testimony submitted July 15, 2008. Rebuttal testimony submitted August 8, 2008.

"Portland General Electric General Rate Case Filing," Public Utility Commission of **Oregon**, Docket No. UE-197. Direct testimony submitted July 9, 2008. Surrebuttal testimony submitted September 15, 2008.

"In the Matter of PacifiCorp, dba Pacific Power, 2009 Transition Adjustment Mechanism, Schedule 200, Cost-Based Supply Service," Public Utility Commission of **Oregon**, Docket No. UE-199. Reply testimony submitted June 23, 2008. Joint testimony in support of stipulation submitted September 4, 2008.

"2008 Puget Sound Energy General Rate Case," **Washington** Utilities and Transportation Commission, Docket Nos. UE-072300 and UG-072301. Response testimony submitted May 30, 2008. Cross-Answer testimony submitted July 3, 2008. Joint testimony in support of partial stipulations submitted July 3, 2008 (gas rate spread/rate design), August 12, 2008 (electric rate spread/rate design), and August 28, 2008 (revenue requirements). Cross examined September 3, 2008.

"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 8-1-2.5-1Et 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. Testimony withdrawn pursuant to stipulation.

"Cinergy Corp., Duke Energy Ohio, Inc., Cinergy Power Investments, Inc., Generating Facilities LLCs," **Federal Energy Regulatory Commission**, Docket No. EC-08-78-000. Affidavit filed May 14, 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), March 14, 2008 (rate design), and June 12, 2008 (settlement agreement). Cross examined July 14, 2008.

"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), April 21, 2008 (revenue requirement), and August 18, 2008 (cost of service, rate spread, rate design). Rebuttal testimony submitted September 22, 2008 (cost of service, rate spread, rate design). Surrebuttal testimony submitted May 12, 2008 (rate of return) and October 7, 2008 (cost of service, rate spread, rate design). Cross examined February 8, 2008 (test period), May 21, 2008 (rate of return), and October 15, 2008 (cost of service, rate spread, rate design).

"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), April 7, 2008 (revenue requirement), and July 21, 2008 (cost of service,

rate design). Rebuttal testimony submitted September 3, 2008 (cost of service, rate design). Surrebuttal testimony submitted May 23, 2008 (revenue requirement) and September 24, 2008 (cost of service, rate design). 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

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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 18, 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 and February 7, 2007.

"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.

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"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.

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"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. 20000-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 levelized 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 levelized contracts) and December 16-17, 1986 (avoided costs).

OTHER RELATED ACTIVITY

Participant, Wyoming Load Growth Collaborative, March 2008 to present.

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.