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VIA ELECTRONIC MAIL AND OVERNIGHT MAIL

December 7, 2011

Mr. David E. Danner Executive Director and 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-111048 and UG-111049

Dear Mr. Danner:

Enclosed please find the original and eighteen (18) copies of the PREFILED RESPONSE TESTIMONY AND EXHIBITS OF KEVIN C. HIGGINS on behalf of THE KROGER CO. filed in the above-referenced matter. Please note that we also filed the above via electronic mail on same date.

By copy of this letter, all parties listed on the Certificate of Service have been electronically served. Please place this document of file.

Very Truly Yours,

Kurt J. Boehm, Esq. BOEHM, KURTZ & LOWRY

MLKkew Enclosures cc: Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the parties listed on the attached Master Service List by regular U.S. mail and electronic mail (when available) this 7th day of December, 2011.

Kurt J. Boehm, Esq.

MASTER SERVICE LIST

As of: 12/7/2011

Docket: 111048

Original MSL Date: 6/14/2011

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EXHIBIT NO. ____(KCH-3T) DOCKET NO. UE-111048/UG-111049 2011 PSE GENERAL RATE CASE WITNESS: KEVIN C. HIGGINS

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

Docket No. UE-111048 Docket No. UG-111049

PUGET SOUND ENERGY, INC.,

Respondent.

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

December 3, 2011

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1		RESPONSE TESTIMONY OF KEVIN C. HIGGINS
2		
3	Intro	<u>oduction</u>
4	Q.	Please state your name and business address.
5	А.	Kevin C. Higgins, 215 South State Street, Suite 200, Salt Lake City, Utah,
6		84111.
7	Q.	By whom are you employed and in what capacity?
8	А.	I am a Principal in the firm of Energy Strategies, LLC. Energy Strategies
9		is a private consulting firm specializing in economic and policy analysis
10		applicable to energy production, transportation, and consumption.
11	Q.	On whose behalf are you testifying in the electric portion of this proceeding,
12		UE-111048?
13	А.	My testimony is being sponsored by The Kroger Co. ("Kroger") on behalf
14		of its Fred Meyer Stores and Quality Food Centers divisions. Kroger is one of the
15		largest retail grocers in the United States, and operates approximately 120
16		facilities in the state of Washington, approximately 65 of which are located in the
17		territory served by Puget Sound Energy ("PSE"). These facilities purchase more
18		than 140 million kWh annually from PSE, and are served on Electric Rate
19		Schedules 24, 25, 26, and 40.
20	Q.	Please describe your professional experience and qualifications.
21	А.	My academic background is in economics, and I have completed all
22		coursework and field examinations toward the Ph.D. in Economics at the
23		University of Utah. In addition, I have served on the adjunct faculties of both the

1		University of Utah and Westminster College, where I taught undergraduate and
2		graduate courses in economics. I joined Energy Strategies in 1995, where I assist
3		private and public sector clients in the areas of energy-related economic and
4		policy analysis, including evaluation of electric and gas utility rate matters.
5		Prior to joining Energy Strategies, I held policy positions in state and local
6		government. From 1983 to 1990, I was economist, then assistant director, for the
7		Utah Energy Office, where I helped develop and implement state energy policy.
8		From 1991 to 1994, I was chief of staff to the chairman of the Salt Lake County
9		Commission, where I was responsible for development and implementation of a
10		broad spectrum of public policy at the local government level.
11	Q.	Have you previously testified before this Commission?
12	A.	Yes. I testified in the PSE 2009, 2007, 2006, 2004, and 2001 general rate
13		cases and participated in the settlement discussions that resulted in partial
14		settlement agreements pertaining to rate spread and rate design issues in those
15		proceedings. I also testified in the 2009 proceeding that addressed the treatment
16		of revenues from PSE's sales of Renewable Energy Credits ("RECs").
17	Q.	Have you testified before utility regulatory commissions in other states?
18	A.	Yes. I have testified in approximately 135 proceedings on the subjects of
19		utility rates and regulatory policy before state utility regulators in Alaska,
20		Arizona, Arkansas, Colorado, Georgia, Idaho, Illinois, Indiana, Kansas,
21		Kentucky, Michigan, Minnesota, Missouri, Montana, Nevada, New Mexico, New
22		York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina,
23		Texas, Utah, Virginia, West Virginia, and Wyoming.

1 **Overview and Recommendations**

0. What is the purpose of your testimony in this proceeding? 2 3 A. My testimony addresses the following topics: (1) the recognition of revenues from PSE's sale of RECs in this case; (2) rate spread for PSE's electric 4 5 service; (3) eligibility for Schedule 40 when customers make investments in 6 energy efficiency; and (4) PSE's proposed Conservation Savings Adjustment rate. 0. 7 Please summarize your conclusions and recommendations. (1) I have two recommendations concerning the treatment of REC 8 9 revenues. First, REC proceeds should be amortized in rates based on the approved annual amortization factor applied to the sum of: (a) the estimated 10 balance of the REC regulatory liability at the start of the rate year (May 2012), 11 and (b) the amount of REC proceeds projected to occur in the rate year (May 12 2012 to April 2013). Second, I recommend that the five-year amortization period 13 14 adopted in Docket UE-070725 be shortened to three years. Adoption of this recommendation will result in a reduction in PSE's revenue requirement of 15 approximately \$27.7 million, exclusive of the benefits to customers from the net 16 17 reduction in rate base attributable to the average balance of the REC regulatory liability over the rate year. 18 19 (2) I recommend that PSE's rate spread proposal be adopted, with two exceptions: rates for Schedule 25 should be set at 50% percent of the uniform 20 increase rather than 75% as proposed by PSE; and rates for Schedule 26 should be 21

set at 75% percent of the uniform increase rather than 100% as proposed by PSE.

22

1	(3) I recommend that an amendment be made to the Schedule 40
2	eligibility provisions stating that a customer may remain on Schedule 40 if the
3	customer experiences a decline in usage below the minimum threshold of 2 MWa,
4	if the customer can demonstrate that the decline in usage below the threshold is
5	directly attributable to investments in energy efficiency at the customer's
6	Schedule 40 facilities.
7	(4) I recommend that PSE's proposed Conservation Savings Adjustment
8	rate be rejected. However, given the choice between full revenue decoupling and
9	a lost-revenue approach, I believe a lost revenue approach is preferable, so long as
10	certain protections to customers are included. However, before subjecting
11	customers to the Conservation Savings Adjustment rate, PSE should be required
12	to investigate means through which its potential loss of fixed-cost recovery can be
13	mitigated through rate design, including increasing its demand charges to better
14	align with recovery of fixed costs.
15	If a lost revenue recovery mechanism is adopted by the Commission,
16	several modifications should be made. First, a significant portion of costs that
17	are recovered through demand charges, e.g., 75%, should be removed from PSE's
18	calculation of per-kWh fixed-cost recovery that is subject to erosion through
19	energy efficiency.
20	Second, PSE neglects to consider the effects of overall load growth on
21	fixed cost recovery. If a "lost margins" approach is adopted by the Commission,
22	then "lost margins" should be netted against "found margins." Specifically, I
23	recommend that the kilowatt-hours used for measuring going-forward lost

1		revenue recovery be limited to the lesser of energy efficiency improvements
2		attributable to PSE programs or actual net reductions in retail kilowatt-hours sold
3		relative to the retail kilowatt-hours used in setting base rates.
4		Third, the time period proposed by PSE is overreaching. If a fixed-cost
5		recovery program is adopted, it should be limited to truing up any net loss of fixed
6		cost recovery attributable to actual program results starting in the rate-effective
7		year.
8		As my recommendations are concentrated on a limited number of issues,
9		absence of comment on my part regarding a particular issue does not signify
10		support (or opposition) toward the Company's filing with respect to the non-
11		discussed issue.
12		
13	<u>Adju</u>	stment to Revenue Requirement for REC Sales
14	Q.	Generally, what role does the sale of RECs play in utility ratemaking?
15	A.	The renewable energy attributes associated with the generation output of
16		certain renewable generation facilities such as wind, solar, geothermal, and small
17		hydro plants have come to be measured in units known as Renewable Energy
18		Credits or RECs. RECs are actively traded in a developing bilateral market. The
19		primary purchasers of RECs are parties, such as utilities, that are required to
20		utilize specified proportions of renewable energy in serving retail customers
21		pursuant to state statutes and regulations. Because REC sales by utilities are
22		typically made using assets that are paid for by customers, the revenues from REC

sales are appropriately treated as a revenue credit against the revenue requirement
 recovered from customers in rates.

Q. Has this Commission addressed the appropriate ratemaking treatment of REC sales by PSE?

5 A. Yes. The appropriate ratemaking treatment of REC sales by PSE was 6 addressed by the Commission in Docket UE-070725, in which I participated as a witness for Kroger. In Order 03 issued May 20, 2010, the Commission allowed a 7 one-time payment of \$3.3 million to PSE (to recover a portion of a receivable on 8 9 PSE's books associated with a disputed energy sale to California) and an additional one-time payment \$4.6 million for low-income energy efficiency 10 programs, while determining that all remaining REC revenues should be reserved 11 The general thrust of the Commission's determination was 12 for retail customers. that, but for resolving certain one-time claims, 100 percent of REC revenues 13 14 should accrue to the benefit of customers. Specifically, the Commission found that all REC proceeds received by PSE after November 30, 2009 would be 15 booked to a regulatory liability account and returned to customers using a ten-year 16 17 amortization recommended by Staff. [Order 03 at ¶ 96] Order 03 was amended by the Commission in Order 06, issued October 18 19 26, 2010, in response to a petition from three parties to the case (which did not 20 include Kroger) recommending that a portion of REC proceeds received after

November 30, 2009 be used to offset the surplus amount of Production Tax Credit
("PTC") that had been credited to customers through PSE's PTC Tracker. The
Commission approved this amendment, along with a provision specifying that

1		after the PTC balance is reduced to zero, the remainder of the REC proceeds
2		received by PSE after November 30, 2009, would be treated as a regulatory
3		liability and be used to reduce PSE's rate base for ratemaking purposes; the
4		Commission further amended Order 03 to allow the regulatory liability to be
5		amortized over five years, rather than the ten-year amortization set forth in Order
6		03. [Order 06 at ¶ 9, 15]
7		Order 06 goes on to require that:
8 9 10 11 12 13 14		In future general or power cost only rate case filings, and after completion of the REC/PTC offset period, the Company will offset the REC liability against rate base and amortize the balance of RECs at the beginning of a given rate year over five years as a credit to cost of service. The rate base impact of the REC liability will be calculated using the same methodology used for regulatory assets related to production. [Order 06 at ¶ 17]
15	Q.	In its direct filing in this case, has PSE proposed to recognize a credit against
15 16	Q.	In its direct filing in this case, has PSE proposed to recognize a credit against it revenue requirement for amortization of REC proceeds?
15 16 17	Q. A.	In its direct filing in this case, has PSE proposed to recognize a credit against it revenue requirement for amortization of REC proceeds? No. PSE witness John H. Story touches briefly on this issue in his direct
15 16 17 18	Q. A.	In its direct filing in this case, has PSE proposed to recognize a credit against it revenue requirement for amortization of REC proceeds? No. PSE witness John H. Story touches briefly on this issue in his direct testimony, stating:
 15 16 17 18 19 20 21 22 23 24 	Q. A.	In its direct filing in this case, has PSE proposed to recognize a credit against it revenue requirement for amortization of REC proceeds? No. PSE witness John H. Story touches briefly on this issue in his direct testimony, stating: RECs have not been included as a regulatory liability at the time of this filing as the REC/PTC offset period is not expected to end until the beginning of 2012. During the course of this proceeding, as the rate year balance of the REC liability becomes more certain, PSE will include the known and measurable AMA balance in electric production rate base as appropriate. [p. 37]
 15 16 17 18 19 20 21 22 23 24 25 	Q. A.	 In its direct filing in this case, has PSE proposed to recognize a credit against it revenue requirement for amortization of REC proceeds? No. PSE witness John H. Story touches briefly on this issue in his direct testimony, stating: RECs have not been included as a regulatory liability at the time of this filing as the REC/PTC offset period is not expected to end until the beginning of 2012. During the course of this proceeding, as the rate year balance of the REC liability becomes more certain, PSE will include the known and measurable AMA balance in electric production rate base as appropriate. [p. 37]
 15 16 17 18 19 20 21 22 23 24 25 26 	Q. A.	In its direct filing in this case, has PSE proposed to recognize a credit against it revenue requirement for amortization of REC proceeds? No. PSE witness John H. Story touches briefly on this issue in his direct testimony, stating: RECs have not been included as a regulatory liability at the time of this filing as the REC/PTC offset period is not expected to end until the beginning of 2012. During the course of this proceeding, as the rate year balance of the REC liability becomes more certain, PSE will include the known and measurable AMA balance in electric production rate base as appropriate. [p. 37] From this statement, it appears that PSE is preparing to calculate the offset against rate base that will be attributable to the REC liability, but the Company
 15 16 17 18 19 20 21 22 23 24 25 26 27 	Q.	In its direct filing in this case, has PSE proposed to recognize a credit against it revenue requirement for amortization of REC proceeds? No. PSE witness John H. Story touches briefly on this issue in his direct testimony, stating: RECs have not been included as a regulatory liability at the time of this filing as the REC/PTC offset period is not expected to end until the beginning of 2012. During the course of this proceeding, as the rate year balance of the REC liability becomes more certain, PSE will include the known and measurable AMA balance in electric production rate base as appropriate. [p. 37] From this statement, it appears that PSE is preparing to calculate the offset against rate base that will be attributable to the REC liability, but the Company gives no indication that there will be any material amortization flowed through to

1

2

Q. Do you have any recommendations for the Commission regarding the appropriate amortization of REC proceeds in this case?

3 A. Yes. I have two recommendations. First, REC proceeds should be amortized in rates based on the approved annual amortization factor applied to the 4 sum of: (a) the estimated balance of the REC regulatory liability at the start of the 5 6 rate year (May 2012), and (b) the amount of REC proceeds projected to occur in the rate year (May 2012 to April 2013). Second, I recommend that the five-year 7 amortization period adopted in Docket UE-070725 be shortened to three years. 8 9 Q. Do you have a simple example of how this would work? Yes. Assume the REC liability at the start of the rate year is \$18 million 10 Α. and the projected REC revenues for the ensuing twelve months is \$60 million. In 11 this example, the REC revenues recognized in rates would be 33.3% x (\$18 12 million + \$60 million) or \$26 million. This benefit to customers would be in 13 14 addition to any benefits associated with the offset to rate base attributable to the average balance of the REC liability during the rate year. 15 Why should the annual amortization factor be applied to the amount of REC 16 Q. 17 proceeds *projected to occur in the rate year* and not just applied to the balance of RECs at the beginning of the rate year? 18 19 A. Limiting the recognition of the amortization of REC revenues in rates to the balance of RECs at the beginning of the rate year would unduly deprive 20 today's customers of the benefits produced by the REC-producing assets that 21 22 customers pay for in rates. There is simply no good public policy reason to delay

1		recognition of this benefit in rates by failing to include a portion of projected rate-
2		year REC sales in the determination of the rate year revenue requirement.
3		As it is, treating the REC benefit as a regulatory liability that is amortized
4		over several years - instead flowing through 100% of the REC benefit each year -
5		is an extremely conservative approach compared to how REC proceeds are treated
6		in other major REC-exporting jurisdictions in the West. Moreover, recognizing
7		the projected REC proceeds in the rate year is consistent with PSE's proposed
8		recovery of power costs.
9	Q.	Are you personally familiar with the ratemaking treatment of REC revenues
10		in other major REC-exporting jurisdictions?
11	А.	Yes. I have been directly involved as a witness in proceedings to
12		determine the ratemaking treatment of RECs in Utah, Wyoming, and Colorado.
13	Q.	Do any of these other jurisdictions require that REC revenues be amortized
14		over a multiyear period?
15	А.	No. In 2010, PacifiCorp sold over \$100 million in RECs. Both Utah and
16		Wyoming flow through 100% of their respective jurisdictional shares of
17		PacifiCorp's annual REC proceeds. In both Utah and Wyoming, the annual REC
18		credit in rates is based on projected test period REC revenues, with a provision for
19		a subsequent true-up to actual.
20		Public Service Company of Colorado is also a major exported of RECs,
21		with \$46 million in REC margins earned between November 2009 and March
22		2011. In Colorado, the split of REC benefits between utility and customers is

1		currently being considered in an open docket, but no party has proposed that the
2		customers' share of REC proceeds be amortized over a multiyear period.
3	Q.	Why should the amortization period for REC revenues be reduced from five
4		years to three?
5	A.	As I described above, the use of any multiyear period for amortizing the
6		benefit of RECs in rates is extremely conservative. The only reason for
7		amortizing RECs over a multiyear period at all is to hedge against the risk that
8		year-to-year REC revenues could be subject to some volatility. An amortization
9		scheme can mitigate against volatility by smoothing out the recovery level. A
10		three-year amortization period is more than sufficient for this purpose: it balances
11		the need for speedy recognition of the REC benefit in customer rates with the
12		desirability of rate stability. A five-year amortization period is quite simply
13		excessive in that it unduly delays recognition of REC benefits in rates.
14	Q.	Shouldn't the fact that RECs are produced by long-lived assets lend support
15		to the argument that RECs should be amortized over a longer time period?
16	A.	No, not at all. The assets that produce RECs are indeed long-lived, but
17		the production of RECs themselves is repeated continuously: each year brings
18		forth a new crop of RECs. The argument that RECs credited in rates must be
19		drawn out over a long time period because the assets used to produce them are
20		long-lived is akin to arguing that revenue credits in rates for off-system sales
21		margins should be spread out over several years because the assets used to make
22		the sales are long-lived. This reasoning simply does not hold up to scrutiny.

Prefiled Response Testimony of Kevin C. Higgins

Exhibit No.__(KCH-2T) Page 10 of 25

1	Q.	Have you calculated an estimated revenue requirement impact from
2		amortizing REC revenues in rates in accordance with your
3		recommendation?
4	A.	Yes. This adjustment is presented in Kroger Exhibit No(KCH-4). I
5		calculated this estimate using 2011 REC sales of \$59.5 million as a proxy for the
6		sales level in the rate year, and an estimated starting balance of \$19.8 million in
7		May 2012. This adjustment would reduce PSE's revenue requirement by \$27.7
8		million. This estimate of the benefit does not take account of any benefits to
9		customers from the net reduction in rate base attributable to the average balance
10		of the REC regulatory liability over the rate year.
11		
12	<u>Rate</u>	Spread
13	Q.	What general guidelines should be employed in spreading any change in
14		rates?
15	А.	In determining rate spread, or revenue apportionment, it is important to
16		align rates with cost causation, to the greatest extent practicable. Properly aligning
17		rates with the costs caused by each customer group is essential for ensuring
18		fairness, as it minimizes cross subsidies among customers. It also sends proper
19		price signals, which improves efficiency in resource utilization.
20		At the same time, it can be appropriate to mitigate the impact of moving
21		immediately to cost-based rates for customer groups that would experience
22		significant rate increases from doing so by employing the ratemaking principle of
23		gradualism. When employing this principle, it is important to adopt a long-term

1		strategy of moving in the direction of cost causation, and to avoid practices that
2		result in permanent cross-subsidies from other customers.
3	Q.	What general approach to electric rate spread does PSE recommend?
4		As described by PSE witness Piliaris, PSE is proposing to move rates in
5		the direction of cost-of-service. Mr. Piliaris suggests that classes should receive
6		rate increases within a range of 75 percent to 125 percent of a uniform percentage
7		increase based on each class's parity percentage. Each class's parity percentage,
8		along with PSE's proposed percentage of uniform increase and recommended rate
9		increase, is summarized in Table KCH-1, below.
10		

1 Table KCH-1										
2		Summary of PSE Rate Spread Proposal								
3 4				Current	Percent of	PSE	PSE			
5				Parity	Uniform	Proposed	Percent			
6		<u>Voltage Level</u>	<u>Schedule</u>	Percent	Increase	Increase	Increase			
7		Residential	7	98%	100%	\$86,701	8.0%			
8		a 1 11 1								
9		Secondary Voltage	24	1020/	1000/	¢10.000	0.00/			
10		Demand $\leq 50 \text{ kW}$	24	103%	100%	\$19,000	8.0%			
11		Demand $> 50 \text{ kW}$ but $\leq 350 \text{ kW}$	25/29	106%	/5%	\$15,520	6.0%			
12		Demand $> 350 \text{ kW}$	26	104%	100%	\$12,772	8.0%			
13		Total Secondary Voltage				\$47,959	1.2%			
14										
15		Primary Voltage	21/25		1000/	¢9.209	0.00/			
10		General Service/ Imigation	51/55		100%	\$8,398 \$1,015	8.0%			
1/		Tatal Drimorn Valtage	43	1020/	100%	\$1,015	8.0%			
18		Total Primary Voltage		103%	100%	\$9,415	8.0%			
20		Compus Poto	40	0.404		\$2 257	6 504			
20		Campus Kate	40	94%		\$5,557	0.3%			
21		Total High Voltage	16/10	00%	100%	\$2.016	8.0%			
22		Total High Voltage	40/49	9970	10070	\$2,910	0.070			
23		Choice/ Retail Wheeling	118/110	88%	125%	\$704	10.0%			
2 4 25		Choice/ Retain wheeling	440/449	8870	12370	\$704	10.070			
25		Lighting	50-59	95%	100%	\$1 359	8.0%			
20		Lighting	30-37	<i>JJN</i>	10070	ψ1,557	0.070			
28		Total Jurisdictional Retail Sales				\$152 407	77%			
29						<i><i>q</i>102,107</i>	1.170			
30		Firm Resale/Special Contract		73%		\$591	48.6%			
31										
32		Total Sales				\$152,999	7.7%			
33						. ,				
34	Q.	What is your assessment of I	PSE's prop	osed approa	ach to rate	spread?				
35	A.	In my opinion, Mr. Pil	liaris's propo	osal is gener	ally reasona	able, but I				
36		believe it can be improved wi	th two modi	fications. A	ccording to	Mr. Piliaris	s's			
37		proposal, rate schedules with	parity percer	ntages betwe	een 95% an	d 105% wo	uld			
38		receive a uniform percentage	increase. Th	ne one rate s	chedule wi	th a parity				
39		percentage greater than 105%	(Schedule 2	5) would re	ceive a rate	increase th	at is			
40		75% of the uniform increase.	Similarly, th	ne rate scheo	dule with a	parity perce	entage			

less than 95% (Schedule 448/449) would receive a rate increase that is 125% of
 this uniform increase.

3	As shown in Table KCH-1, Schedule 25 has a parity percentage of 106%.
4	At PSE's proposed overall revenue increase, the Company's spread proposal
5	would result in an increase to this rate schedule that is only 2.0 percentage points
6	below the uniform increase; at a smaller revenue requirement, this differential
7	would be even smaller. This will leave Schedule 25 in the upper end of the parity
8	range. I believe a more concerted effort to bring this rate schedule closer to cost
9	is warranted. Consequently, I am recommending that the rate increase for
10	Schedule 25 be set at 50% of the uniform increase.
11	Schedule 26 has a parity percentage of 104%, at the upper end of Mr.
12	Piliaris's suggested range of uniform increase. I believe that Mr. Piliaris's rate
13	spread proposal can be improved if the Schedule 26 increase were set at 75% of
14	the uniform increase. This modification would recognize that Schedule 26 is
15	producing revenues that are materially above parity, and better align its rates with
16	cost of service.
17	These two modifications to the PSE rate spread are shown in Kroger
18	Exhibit No(KCH-5) using the revenue requirement proposed by PSE. The
19	results are summarized in Table KCH-2, below.
20	

Table KCH-2

2		Kroger Proposed Rate	e Spread @	PSE Propos	sed Revenu	ie Increase	
3 4 5				Current Parity	Percent of Uniform	Proposed	Percent
6		<u>Voltage Level</u>	Schedule	Percent	Increase	Increase	Increase
/ 0		Residential	/	98%	100%	\$91,857	8.5%
9		Secondary Voltage					
10		Demand $\leq 50 \text{ kW}$	24	103%	100%	\$20.835	8.5%
11		Demand $> 50 \text{ kW}$ but $\leq 350 \text{ kW}$	25/29	106%	50%	\$10,962	4.2%
12		Demand $> 350 \text{ kW}$	26	104%	75%	\$10,149	6.4%
13		Total Secondary Voltage				\$41,947	6.3%
14							
15		Primary Voltage					
16		General Service/ Irrigation	31/35		100%	\$8,897	8.5%
17		Interruptible Total Elec. Schools	43		100%	\$1,076	8.5%
18		Total Primary Voltage		103%	100%	\$9,973	8.5%
19		Commune Data	40	0.40/		¢2 257	6 50/
20		Campus Rate	40	94%		\$5,557	0.3%
$\frac{21}{22}$		Total High Voltage	16/19	99%	100%	\$3,090	8 5%
22		Total High Voltage	+0/+2	<i>))/</i> 0	10070	ψ3,070	0.570
24 25		Choice/ Retail Wheeling	448/449	88%	125%	\$745	10.6%
26 27		Lighting	50-59	95%	100%	\$1,439	8.5%
28 29		Total Jurisdictional Retail Sales				\$152,407	7.7%
30 31		Firm Resale/Special Contract		73%		\$591	48.6%
32		Total Sales				\$152,999	7.7%
33 34							
35	<u>Sche</u>	dule 40 Eligibility and Investn	<u>ients in Ene</u>	rgy Efficier	<u>icy</u>		
36	Q.	What are the size eligibility	criteria for	Schedule 40	0?		
37	А.	To be transferred to Se	chedule 40, a	a customer n	nust have 3	MWa of lo	ad
38		for six of the twelve months of	of a test year	used in a ge	neral rate c	ase. To ren	nain
39		on Schedule 40, a customer m	nust maintain	an average	of 2 MWa	over the ent	tire
40		test year. Schedule 40 provid	des that custo	omers that d	o not retain	this amoun	t of
41		load will be removed from the	e rate schedu	le.			

Kroger Proposed Rate Spread @ PSE Proposed Revenue Increase

Prefiled Response Testimony of Kevin C. Higgins

1

1	Q.	Does Kroger take service under Schedule 40?
2	A.	Yes. Kroger is currently served under Schedule 40 for two of its facilities.
3	Q.	Do you have any concerns regarding the criteria for remaining on Schedule
4		40?
5	А.	Yes. Customers who take actions to improve their energy efficiency and
6		whose Schedule 40 usage declines below the threshold of 2 MWa as a direct
7		result of those efforts, should not be penalized through higher rates by forced
8		removal from Schedule 40.
9		The State of Washington has adopted policies encouraging improvements
10		in energy efficiency. Specifically, RCW 19.285.020 provides the following
11		declaration of policy:
12 13 14 15 16 17 18 19 20 21		Increasing energy conservation and the use of appropriately sited renewable energy facilities build on the strong foundation of low-cost renewable hydroelectric generation in Washington state and will promote energy independence in the state and the Pacific Northwest region. Making the most of our plentiful local resources will stabilize electricity prices for Washington residents, provide economic benefits for Washington counties and farmers, create high-quality jobs in Washington, provide opportunities for training apprentice workers in the renewable energy field, protect clean air and water, and position Washington state as a national leader in clean energy technologies.
22		It is not reasonable for customers who take actions in furtherance of this
23		state policy to be penalized through significantly higher rates. This situation
24		specifically applies to Kroger, which faces an increase of over \$100,000 per year
25		in rates as a result of its pending removal from Schedule 40 that is solely
26		attributable to Kroger's vigorous pursuit of energy efficiency in its Schedule 40
27		facilities. This type of penalty is unjust and perverse, and should be prevented by
28		a modification to the tariff that allows a customer to remain on Schedule 40 if the

1		customer can demonstrate that the reduction in its usage below the Schedule 40
2		minimum threshold is directly attributable to its investment in energy efficiency.
3	Q.	Please describe Kroger's experience with its Schedule 40 facilities.
4	А	Kroger is committed to implementing cost-effective energy efficiency
5		investments in its facilities nationwide, including its facilities in the State of
6		Washington. In support of these efforts, Kroger maintains a corporate energy
7		department that provides equipment specification, energy "best practices," and
8		technical services.
9		Among the facilities to benefit from Kroger's energy efficiency efforts are
10		its facilities on Schedule 40. Kroger's engineering team has documented that
11		between 2005 and 2007, three major efficiency investments reduced the energy
12		consumption at Kroger's larger Schedule 40 facility by 6.6 million kWh per year.
13		While increased operations at the facility have offset some of these savings, the
14		net result is that Kroger's Schedule 40 usage has declined by about 5.1 million
15		kWh per year, which translates into a net reduction in Schedule 40 demand from
16		2.45 MWa in 2005 to 1.79 MWa in 2010, just below the Schedule 40 threshold, as
17		shown in Figure KCH-1, below.

18



1	A.	Yes. While there are size requirements for many rate schedules, good
2		rate design provides for smooth transitions when customers cross from one rate
3		schedule to another. That is not the case with Schedule 40, which is a unique
4		"campus rate" that directly assigns site-specific distribution costs to customers.
5		As a result, the rate impact of being forced off of Schedule 40 is much more
6		punitive than a normal rate schedule transition. This circumstance warrants a
7		specific provision that ensures that customers who take socially beneficial actions
8		in furtherance of state policy are not penalized for doing so. Such a penalty
9		makes no sense whatsoever.
10	Q.	What is your recommendation to the Commission on this issue?
11	A.	I recommend that the eligibility criteria for Schedule 40 be modified to
12		specify that a customer whose Schedule 40 usage falls below 2 MWa shall remain
13		on Schedule 40 if the customer can document that the reduction in its demand
14		below the minimum threshold is directly attributable to energy efficiency
15		investments undertaken by the customer during the time the customer has been on
16		Schedule 40.
17		
18	<u>Cons</u>	ervation Savings Adjustment Rate
19	Q.	What has PSE proposed with respect to a Conservation Savings Adjustment
20		rate?
21	A.	As described in the direct testimony of Mr. Piliaris, PSE is proposing the
22		adoption of a Conservation Savings Adjustment rate, which is structured as a
23		form of "lost revenue" recovery. To implement this mechanism, PSE estimates

1		the per-kWh fixed cost recovery in rates for broad classes of customers, and
2		proposes that this unit cost be applied to the energy savings attributed to PSE's
3		energy conservation programs. Customers would then be charged for the "loss"
4		of this fixed cost recovery multiplied by the savings attributed to PSE's energy
5		conservation programs. The initial estimate of this charge to customers is based
6		on PSE's estimated accumulated energy savings starting in 2010 and extending
7		through the end of 2011.
8	Q.	Have you reviewed the Commission's policy statement on decoupling issued
9		in Docket U-100522?
10	А.	Yes, I have.
11	Q.	Do interpret PSE's proposal to be a full decoupling mechanism as discussed
12		by the Commission in that docket?
13	А.	No, it is not.
14	Q.	Do you recommend the adoption of a full decoupling mechanism in this
15		proceeding?
16	А.	No, I do not. At the most fundamental level, decoupling is as much a
17		"revenue assurance" mechanism as it is a "conservation enabling" mechanism.
18		As such, it is sure to capture a much wider range of effects than just customer
19		responses to utility-sponsored energy efficiency programs. For example,
20		decoupling provides unwarranted insulation to the utility from the effects of price
21		elasticity. Generally, all sellers of goods face a risk that price increases will
22		reduce sales. But, with decoupling, if customers respond to utility rate hikes by
23		reducing their electricity, fixed charges are increased to compensate the utility for

any resultant reduction in per-customer usage. Such an increase reflects an undue
 transfer of risk from utilities to customers.

Further, to the extent that customers reduce usage in response to economic conditions or otherwise practice self-funded energy conservation, these behaviors will be captured in the decoupling adjustment and unduly increase rates to customers.

Moreover, maintaining a constant "revenue per customer" or "fixed-cost 7 recovery per customer" – as typically incorporated into a decoupling regime – is 8 9 not an appropriate rate design objective for classes of customers that have few 10 customers, have heterogeneous populations, and/or whose class composition shows a wide range of usage levels, such as occurs with larger non-residential 11 customers. The fixed-cost recovery per customer of these classes will be very 12 sensitive to the *composition* of these customers. In short, given the tremendous 13 14 diversity among non-residential customers, attempting to attribute to utilitysponsored energy conservation projects changes in "average fixed-cost recovery 15 per customer" of non-residential customers is meaningless. The concept of an 16 17 "average" non-residential customer for this purpose is without merit as a ratemaking mechanism. 18 19 Changes in the overall economy are far more likely to influence fixed-cost

21 programs. Application of decoupling to these customers would result in undue

recovery per customer for non-residential customers than energy conservation

changes in rates in response to factors that are unrelated to energy conservation.

22

20

1		This would be particularly unfortunate since the primary objectives of decoupling
2		can be accomplished for these customers through rate design, as I discuss below.
3	Q.	Given your recommendation not to adopt full revenue decoupling in this
4		proceeding, are you supportive of PSE's proposal?
5	A.	No. As a general proposition, I recommend against adoption of such
6		single-issue ratemaking mechanisms. However, given the choice between full
7		revenue decoupling and a lost-revenue approach, I believe a lost revenue
8		approach is preferable, so long as certain protections to customers are included.
9		Unfortunately, PSE's proposal lacks many of the necessary protections. PSE also
10		fails to consider the mitigation against lost fixed-cost recovery that can be
11		achieved through rate design, particularly for non-residential customers.
12	Q.	How can loss of fixed-cost recovery be mitigated through rate design?
12 13	Q. A.	How can loss of fixed-cost recovery be mitigated through rate design? The premise for the Conservation Savings Adjustment (as well as
12 13 14	Q. A.	How can loss of fixed-cost recovery be mitigated through rate design? The premise for the Conservation Savings Adjustment (as well as decoupling) is to insulate the utility from the loss of fixed-cost recovery when
12 13 14 15	Q. A.	How can loss of fixed-cost recovery be mitigated through rate design? The premise for the Conservation Savings Adjustment (as well as decoupling) is to insulate the utility from the loss of fixed-cost recovery when customers conserve energy by participating in utility-sponsored energy efficiency
12 13 14 15 16	Q. A.	How can loss of fixed-cost recovery be mitigated through rate design? The premise for the Conservation Savings Adjustment (as well as decoupling) is to insulate the utility from the loss of fixed-cost recovery when customers conserve energy by participating in utility-sponsored energy efficiency programs. This erosion of fixed-cost recovery may occur because a portion of
12 13 14 15 16 17	Q. A.	How can loss of fixed-cost recovery be mitigated through rate design? The premise for the Conservation Savings Adjustment (as well as decoupling) is to insulate the utility from the loss of fixed-cost recovery when customers conserve energy by participating in utility-sponsored energy efficiency programs. This erosion of fixed-cost recovery may occur because a portion of fixed cost is recovered through the volumetric energy charge. Thus, if energy
12 13 14 15 16 17 18	Q. A.	How can loss of fixed-cost recovery be mitigated through rate design? The premise for the Conservation Savings Adjustment (as well as decoupling) is to insulate the utility from the loss of fixed-cost recovery when customers conserve energy by participating in utility-sponsored energy efficiency programs. This erosion of fixed-cost recovery may occur because a portion of fixed cost is recovered through the volumetric energy charge. Thus, if energy consumption declines, all other things being equal, fixed cost recovery from
12 13 14 15 16 17 18 19	Q. A.	How can loss of fixed-cost recovery be mitigated through rate design? The premise for the Conservation Savings Adjustment (as well as decoupling) is to insulate the utility from the loss of fixed-cost recovery when customers conserve energy by participating in utility-sponsored energy efficiency programs. This erosion of fixed-cost recovery may occur because a portion of fixed cost is recovered through the volumetric energy charge. Thus, if energy consumption declines, all other things being equal, fixed cost recovery from conserving customers on these rate schedules declines.
12 13 14 15 16 17 18 19 20	Q. A.	How can loss of fixed-cost recovery be mitigated through rate design? The premise for the Conservation Savings Adjustment (as well as decoupling) is to insulate the utility from the loss of fixed-cost recovery when customers conserve energy by participating in utility-sponsored energy efficiency programs. This erosion of fixed-cost recovery may occur because a portion of fixed cost is recovered through the volumetric energy charge. Thus, if energy consumption declines, all other things being equal, fixed cost recovery from conserving customers on these rate schedules declines. However, the loss of fixed cost recovery can be significantly reduced
12 13 14 15 16 17 18 19 20 21	Q. A.	How can loss of fixed-cost recovery be mitigated through rate design? The premise for the Conservation Savings Adjustment (as well as decoupling) is to insulate the utility from the loss of fixed-cost recovery when customers conserve energy by participating in utility-sponsored energy efficiency programs. This erosion of fixed-cost recovery may occur because a portion of fixed cost is recovered through the volumetric energy charge. Thus, if energy consumption declines, all other things being equal, fixed cost recovery from conserving customers on these rate schedules declines. However, the loss of fixed cost recovery can be significantly reduced through the adoption of demand charges for non-residential customers that are

based on a customer's monthly <u>peak</u> usage, rather than <u>average</u> usage, their recovery tends to be more stable than recovery of energy charges. Unfortunately, PSE's demand charges are not particularly well-aligned with recovery of PSE's fixed costs. I make this statement based on my

experience in PSE cases over the past decade. I believe this misalignment has its
origins in the use of the Peak Credit method for determining production cost of
service, a methodology that significantly under-weights the proportion of costs
classified as capacity or "demand-related" relative to more commonly-used
methods in the United States. The weightings used in this classification have
implications for rate design, resulting in demand-charges that are relatively low in
comparison to the Company's energy charges.

Before subjecting customers to the Conservation Savings Adjustment rate, PSE should be required to investigate means through which its potential loss of fixed-cost recovery can be mitigated through rate design, including increasing its demand charges to better align with recovery of fixed costs.

16 Q. Notwithstanding your recommendations, if a lost revenue recovery

17 mechanism is adopted by the Commission, what modifications should be

18 made to PSE's proposal?

1

2

3

4

A. Several modifications should be made. First, the Company's calculation
of per-kWh "lost" fixed-cost recovery includes costs that are recovered through
demand charges, which as I have stated, tend to be more stable than costs
recovered through energy charges. Consequently, a significant portion of costs
that are recovered through demand charges, e.g., 75%, should be removed from

PSE's calculation of per-kWh fixed-cost recovery that is subject to erosion from
 energy efficiency.

3 Second, PSE's proposal focuses on the sales impact of energy efficiency in isolation and neglects to consider the effects of overall load growth on fixed 4 cost recovery. In practice, the implementation of energy efficiency programs 5 6 does not imply that a utility will be unable to fully recover its fixed costs. In general, when load grows above the level of the billing determinants used in 7 setting rates, the fixed-cost recovery that occurs as a function of volumetric sales 8 9 increases. This inures to the benefit of the utility. In traditional ratemaking, 10 utilities are <u>not</u> required to return this incremental fixed-cost recovery to customers. This incremental fixed-cost recovery can be thought of as "found" 11 margins. If a "lost margins" approach is adopted by the Commission, then "lost 12 margins" should be netted against "found margins." Specifically, I recommend 13 14 that the kilowatt-hours used for measuring going-forward lost revenue recovery be limited to the lesser of energy efficiency improvements attributable to PSE 15 programs or actual net reductions in retail kilowatt-hours sold relative to the retail 16 17 kilowatt-hours used in setting base rates.

Third, the time period proposed by PSE is overreaching. A lost recovery mechanism is intended to be a vehicle that is used *in-between* rate cases. In contrast, PSE builds "lost revenues" directly into its rate case based on program activity going back to the beginning of 2010. If a fixed-cost recovery program is adopted, it should be limited to truing up any net loss of fixed cost recovery attributable to actual program results starting in the rate-effective year.

Prefiled Response Testimony of Kevin C. Higgins

Exhibit No.__(KCH-2T) Page 24 of 25

1 Q. Does this conclude your response testimony?

2 A. Yes, it does.

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

Docket No. UE-111048 Docket No. UG-111049

PUGET SOUND ENERGY, INC.,

Respondent.

STATE OF UTAH

COUNTY OF SALT LAKE

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

He is a Principal with Energy Strategies, L.L.C., in Salt Lake City, Utah; 1.

AFFIDAVIT OF KEVIN C. HIGGINS

2. He is the witnesses who sponsors the testimony entitled "Prefiled Response

Testimony of Kevin C. Higgins";

3. 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.

The Calif

Subscribed and sworn to or affirmed before me this 6th day of December, 2011, by Kevin C. Higgins.

aika X Lolin

My Commission Expires: $\frac{2}{\gamma/2e_i}$ 5

Notary Public



Kroger Recommended Approach to Reflect Pro Forma REC Revenues in PSE's Rate Year (Amounts shown are for Illustrative Purposes Only)

Line <u>No.</u> 1	Adjustment to Revenues:	FERC <u>Acct</u>	Pro Forma <u>Adjustment</u>	Source
2	Other Electric Revenues	456	\$26,463,320	= Ln. 5

Derivation of Pro Forma REC Revenues

		Amount	
3	Annual REC Revenues Collected (\$)	\$79,389,959	Illustrative Amount ¹
4	Recommended REC Amortization Period (Yrs)	3	Kroger Recommendation
5	Test Year REC Pro Forma REC Revenues (\$)	\$26,463,320	$=$ Ln. 3 \div Ln. 4
6	Federal Income Tax Expense @ 35%	\$9,262,162	= 35% x Ln. 5
7	Net Operating Income Change	\$17,201,158	= Ln. 5 - Ln. 6
	Estimated Revenue Requirement Impact		
8	Net Operating Income Change	\$17,201,158	= Ln. 7
9	PSE Conversion Factor	0.6207490	PSE Exhibit No (JHS-7), p. 3 of 3.
10	Estimated Income Statement Revenue Requirement Impact	\$27,710,327	$=$ Ln. 8 \div Ln. 9

1. Data Source: Illustrative amount derived from 2010 REC revenue information provided in UE-101581/UE-070725 REC/PTC Offset Filing , Oct 2011 monthly update from Tom Deboer (filed November 30, 2011).

Note: This illustrative approach does not include the<u>net</u> regulatory liability that would be included in PSE's allowed rate base nor the associated rate base revenue requirement impact.

Kroger Recommended Spread at PSE's Revised Requested Revenue Increase Twelve Months ended December 2010

Line No.	Voltage Level	Schedule	kWh	Proforma Revenue	Percent of Total w/o Schedule 40, Firm Resale & Special Contract	Percent of Uniform Increase	Proposed Revenue Increase (%)	Pro	posed Revenue Increase (\$)		Proposed Revenue
			А	В	D	Е	F		$G = B \times F$		H = B + G
1	Residential	7	10,732,747,750 \$	1,083,315,596	56.27%	100%	8.48%	\$	91,856,975	\$	1,175,172,570
2	Secondary Voltage										
4	Demand $\leq -50 \text{ kW}$	24	2 594 865 426 \$	245 723 262	12 76%	100%	8 / 8%	\$	20 835 475	\$	266 558 738
5	Demand $\geq 50 \text{ kW}$ but $\leq -350 \text{ kW}$	25/29	2,932,110,481 \$	258 565 574	13 43%	50%	4 24%	\$	10 962 203	\$	269 527 777
6	Demand $> 350 \text{ kW}$	26 / 26P	1 991 174 729 \$	159 589 468	8 29%	75%	6 36%	\$	10 148 986	\$	169 738 454
7	Seasonal Irrigation & Drainage Pumping	29	Included with S	Sch. 25	0.2970	50%	4.24%	\$	-	\$	-
8	Total Secondary Voltage	25/25/26/29	7,518,150,636 \$	663,878,305			6.32%	\$	41,946,664	\$	705,824,969
9											
10 11	Primary Voltage General Service / Irrigation	31 / 35	1,322,986,305 \$	104,925,648	5.45%	100%	8.48%	\$	8,896,902	\$	113,822,550
12	Seasonal Irrigation & Drainage Pumping	35	Included with	Sch. 35		100%	8.48%	\$	-	\$	-
13	Interruptible Total Electric Schools	43	148,958,013 \$	12,686,207	0.66%	100%	8.48%	\$	1,075,694	\$	13,761,901
14	Total Primary Voltage	31/35/43	1,471,944,318 \$	117,611,855			8.48%	\$	9,972,596	\$	127,584,451
15	Commus Data	40	755 105 509 \$	52 012 002			6 150/	¢	2 256 647	¢	55 260 640
10	Campus Rate	40	/55,105,598 \$	52,015,002			0.43%	ф	5,550,047	\$	33,309,049
18	Total High Voltage	46/49	576.524.279 \$	36,438,105	1.89%	100%	8.48%	\$	3.089.676	\$	39.527.780
19				,				Ŧ	0,007,010	Ŧ	.,,,,
20	Choice / Retail Wheeling	448 / 449	1,954,913,504 \$	7,033,519	0.37%	125%	10.60%	\$	745,487	\$	7,779,006
21											
22	Lighting	50-59	81,494,849 \$	16,975,574	0.88%	100%	8.48%	\$	1,439,400	\$	18,414,974
23 24	Total Jurisdictional Retail Sales	_	23,090,880,935 \$	1,977,265,955			7.71%	\$	152,407,445	\$	2,129,673,400
25											
26	Small Firm Resale		See Firm Resale/Spe	cial Contract			48.57%				
27	Special Contract		See Firm Resale/Spe	cial Contract			48.57%				
28	Firm Resale / Special Contract	_	7,332,574 \$	1,217,755			48.57%	\$	591,462	\$	1,809,217
29	m - 10 1		22.000.212.500 ¢	1 070 402 710	100.000/		7 720/	¢	152 000 007	¢	2 121 402 (17
30	Total Sales	=	23,098,213,509 \$	1,978,483,710	100.00%		7.73%	\$	152,998,907	\$	2,131,482,617
31											
33	Total Proposed Increase						\$ 152,998,907				
34	Average Increase Including Schedule 40, Firm	n Resale + Special	Contract				7.733%	ó			
35	Average Increase Excluding Schedule 40, Fir	m Resale + Special	Contract				7.742%	ó			
36	Adjustment to Average Increase for Unequal	Allocation of Incre	ase				1.095243375	5			
37	Average Increase Excluding Schedule 40, Fire	m Resale + Special	Contract adjusted for Un	equal Allocation o	f Increase		8.479%	D			

Source: Piliaris Supplemental Exhibit JAP-23, p. 1, Rate Spread.